

December 12, 2003

Mr. John L. Skolds, Chairman  
and Chief Executive Officer  
AmerGen Energy Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 1, RE: DELETE  
REQUIREMENTS FOR AUXILIARY AND FUEL HANDLING AIR TREATMENT  
SYSTEM (TAC NO. MB6695)

Dear Mr. Skolds:

The Commission has issued the enclosed Amendment No. 248 to Facility Operating License No. DPR-50 for the Three Mile Island Nuclear Station, Unit 1, in response to your application dated November 8, 2002.

The amendment revises the Technical Specifications to delete the requirements for the auxiliary and fuel handling building air treatment system.

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/*

Donna M. Skay, 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. 248 to DPR-50  
2. Safety Evaluation

cc w/encls: See next page

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\*SE provided. No substantive changes.

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AMERGEN ENERGY COMPANY, LLC

DOCKET NO. 50-289

THREE MILE ISLAND NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 248  
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 November 8, 2002, 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. 248, 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.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Richard J. Laufer, 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: December 12, 2003

ATTACHMENT TO LICENSE AMENDMENT NO. 248

FACILITY OPERATING LICENSE NO. DPR-50

DOCKET NO. 50-289

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

ii  
iv  
3-62c  
3-62d  
4-55d  
4-55e

Insert

ii  
iv  
3-62c  
3-62d  
4-55d  
4-55e

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 248 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 application dated November 8, 2002, AmerGen Energy Company, LLC (the licensee), requested changes to the Technical Specifications (TSs) for Three Mile Island Nuclear Station, Unit 1 (TMI-1). The proposed changes would revise TSs 3.15.3 and 4.12.3 to delete the requirements for the auxiliary and fuel handling building air treatment system.

## 2.0 REGULATORY EVALUATION

Title 10 of the *Code of Federal Regulations*, Part 50, Section 50.36 (10 CFR 50.36) provides requirements for the inclusion of a Limiting Condition for Operation (LCO) in the TSs for operational constraints which are used as an input in a design-basis accident based on the following four criteria:

- (A) **Criterion 1:** Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.
- (B) **Criterion 2:** A process variable, design feature, or operating restriction that is 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.
- (C) **Criterion 3:** A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.
- (D) **Criterion 4:** A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

Section 50.36(c)(3) addresses the need for surveillance requirements. Surveillance requirements are requirements related to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.



### 3.0 TECHNICAL EVALUATION

The purpose of this TS change request is to revise the TMI-1 TSs by deleting Section 3.15.3 which defines the operability requirements for the auxiliary and fuel handling building air treatment system and by deleting Section 4.12.3 which defines the surveillance requirements of the auxiliary and fuel handling building air treatment system. This ventilation system is not a safety-related system and is not required to prevent or mitigate the consequences of any design-basis accident. The request also includes a minor editorial change to the TS Table of Contents.

#### 3.1 Deletion of Auxiliary and Fuel Handling Building Air Treatment System TS Requirements

The licensee has requested an amendment to delete the TMI-1 TS Sections 3.15.3 and 4.12.3, "Auxiliary and Fuel Handling Building Air Treatment System" and their corresponding bases. This air treatment system was originally required to be operable to mitigate the effects of off-site dose releases from three different accident scenarios:

- (1) the maximum hypothetical accident (MHA),
- (2) the waste gas tank rupture (WGTR) accident, and
- (3) a fuel handling accident (FHA) inside the fuel handling building.

The licensee states in the request that "as a result of a past modification that installed a separate fuel handling building engineered safety feature (ESF) air treatment system and previously approved reanalysis of the bounding conditions for the MHA and the WGTR scenarios, the [auxiliary and fuel handling building ventilation system] (AFHBVS) is not safety related nor required for accident mitigation.

Recent revisions to Technical Specification 3.15.3 Bases, submitted under Technical Specification Change Request (TSCR) No.274, dated February 2, 1999 and approved by the Commission under License Amendment No. 215, dated August 24, 1999, has clarified the AFHBVS design requirements and accident analysis considerations. This proposed Technical Specification change does not involve any modification to plant systems, structures or components."

The licensee summarized the request by stating, "due to the installation of a separate Fuel Handling Building ESF ventilation system to mitigate the affects [sic] of an irradiated fuel handling accident inside the Fuel Handling Building and a reanalysis of the dose consequences from the Maximum Hypothetical Accident and the Waste Gas Tank Rupture Accident, the original design requirements and accident mitigation functions of the AFHBVS are no longer applicable to the approved TMI Unit 1 licensing basis. Therefore, Technical Specifications 3.15.3 and 4.12.3, which specify the minimum availability, efficiency, and surveillance testing of the AFHBVS are to be deleted."

The staff reviewed the MHA, WGTR, and FHA accident analyses and concurs that the AFHBVS is not required by any design-basis analysis for accident mitigation. In consideration of the requirements of 10 CFR 50.36, Criterion 1 is not applicable since the change does not affect instrumentation used to detect degradation of a reactor coolant pressure boundary. Criterion 2 is not applicable since it does not affect a process variable, design feature, or operating restriction that is 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. Criterion 3 is not applicable since the change does not impact a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design-basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Criterion 4 is not applicable since it is not a structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety. Thus, the requirements of 10 CFR 50.36 do not require that the LCO's specified in Section 3.15.3 be defined in the TSs.

Section 50.36(3) addresses the need for surveillance requirements. Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met. Since the AFHBVS does not support any safety-related functions, the staff concludes that the surveillance requirements defined in Section 4.12.3 are not required.

The AFHBVS is normally operating during refueling. Upon detection of a high radiation signal, the system isolates. Fan stop and damper interlocks are tested monthly as part of the area radiation monitor RM-G9 surveillance requirements and quarterly as part of the fuel handling building exhaust air radiation monitor RM-A4 surveillance. The staff concurs that this testing provides assurance that the system will isolate upon initiation of a design-basis accident.

The staff finds that the deletion of the AFHBVS from the TSs is consistent with the Commission's regulations and does not adversely impact public health and safety, and is, therefore, acceptable.

### 3.2 TS Table of Contents Change

The licensee is also requesting to change the TS Table of Contents (page iv) to list the existing Section 4.12.4, "Fuel Handling Building ESF Air Treatment System." This section presently exists in the TMI-1 TSs but is not listed in the Table of Contents. This change is an editorial change only.

The staff concurs that this editorial change is acceptable.

## 4.0 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.

## 5.0 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 and changes the 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 (67 FR 78517). 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 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: E. B. Forrest

Date: December 12, 2003