

AmerGen

A PECO Energy/British Energy Company

AmerGen Energy Company, LLC
Three Mile Island Unit 1

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May 04, 2000

5928-00-20141

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

Dear Sir or Madam:

**SUBJECT: THREE MILE ISLAND, UNIT 1 (TMI Unit 1)
OPERATING LICENSE NO. DPR-50
DOCKET NO. 50-289
LICENSE AMENDMENT REQUEST NO. 297 - CONTROL
BUILDING VENTILATION SYSTEM DAMPERS**

In accordance with 10CFR50.4(b)(1), enclosed is License Amendment Request No. 297.

The purpose of this License Amendment Request is to revise the existing TMI Unit 1 Technical Specification surveillance requirement, Section 4.12.1.3, for the control building automatic isolation and recirculation dampers to remove specification of the individual damper component tag numbers. This proposed revision is considered an administrative change since it only removes an unnecessary level of detail and is consistent with NRC Revised Standard Technical Specifications (NUREG-1430, Rev. 1).

Using the standards in 10CFR50.92, AmerGen has concluded that these proposed changes do not constitute a significant hazards consideration, as described in the enclosed analysis performed in accordance with 10CFR50.91(a)(1). Also, enclosed is the Certificate of Service for this request certifying service to the chief executives of the township and county in which the facility is located, as well as the designated official of the Commonwealth of Pennsylvania, Bureau of Radiation Protection.

Approval of this license amendment is requested by June 30, 2000, since this change also supports planned control room ventilation system damper modifications to enhance TMI Unit 1 control room habitability performance.

Very truly yours,



John B. Cotton
Vice President, TMI Unit 1

JBC/djd

Enclosures: (1) Safety Evaluation and No Significant Hazards Consideration
(2) Affected TMI Unit 1 Technical Specification Pages
(3) Certificate of Service

cc: H. J. Miller, Administrator, USNRC Region I
T. G. Colburn, Senior Project Manager, TMI Unit 1
W. L. Schmidt, Senior Resident Inspector, TMI Unit 1
File No. 00065

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ENCLOSURE 1

TMI Unit 1 License Amendment Request No. 297

Safety Evaluation and No Significant Hazards Consideration

I. License Amendment Request No. 297

AmerGen Energy Company, LLC (AmerGen) requests that the following changed replacement pages be inserted into the existing Technical Specifications:

Revised Technical Specification pages: 4-55, 4-55a

These pages are attached as Enclosure 2.

II. Reason for Change

The purpose of this License Amendment Request is to revise the existing TMI Unit 1 Technical Specification surveillance requirement, Section 4.12.1.3, for the control building automatic isolation and recirculation dampers to remove specification of the individual damper component tag numbers. The proposed revision is an administrative change since it only removes an unnecessary level of detail and is consistent with NRC Revised Standard Technical Specifications (NUREG-1430, Rev. 1).

The proposed change also administratively supports planned control room ventilation system damper modifications to provide improved system performance for control room habitability requirements. The planned modifications will reconfigure several of the specified components such that the currently identified component tag numbers would not accurately reflect the required automatic functions. Therefore, the proposed amendment will preclude the need for future Technical Specification revisions to reflect changes to component tag numbers.

III. Safety Evaluation Justifying Change

TMI Unit 1 Technical Specification 4.12.1.3 currently provides a surveillance requirement to demonstrate automatic initiation of control building isolation and recirculation dampers AH-D28, 37, 39, and 36 at least once per refueling interval. The proposed change only removes specification of the individual damper component tag numbers within Technical Specification 4.12.1.3 and substitutes generic specification of the required control building isolation and recirculation dampers. This surveillance requirement was added to the TMI Unit 1 Technical Specifications in Amendment No. 55, dated June 3, 1980. The purpose of this amendment was to ensure adequate surveillance and operability requirements for the emergency control room air treatment system and components. The NRC Safety Evaluation Report supporting Amendment No. 55 does not describe individual component tag numbers. The Technical Specification basis for the existing surveillance requirement is being maintained, and reference to the TMI Unit 1 UFSAR sections describing the required dampers is added to the existing basis statement. The required control building dampers for isolation and recirculation are currently identified and described in TMI Unit 1 Updated Final Safety Analysis Report (UFSAR) Sections 7.4.5 and 9.8.1. The proposed change removes an unnecessary level of detail from the Technical Specifications, and is consistent with the NRC Revised Standard Technical Specification (NUREG-1430, Rev. 1) which does not typically specify individual component tag numbers. The control building ventilation system isolation and recirculation damper component functions and individual tag numbers will be controlled within the TMI Unit 1 UFSAR. The proposed change does not affect the existing surveillance frequency or the operability requirements for required dampers.

Based on the above, it has been determined that the proposed change is administrative and has no adverse effect on nuclear safety or safe plant operation.

IV. Environmental Consideration

This change to the TMI Unit 1 Technical Specification surveillance requirements for the emergency control room air treatment system involves no change in the amount or type of any effluent that may be released offsite, and that there is no increase in individual or cumulative occupational radiation exposure. This change has no effect on the 10 CFR 100 limits for the TMI Unit 1 exclusion area boundary. As such, operation of TMI Unit 1 with the proposed change does not involve an unreviewed environmental safety question.

V. No Significant Hazards Consideration

AmerGen has determined that this License Amendment Request poses no significant hazards as defined by 10CFR50.92.

1. Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability of occurrence or the consequences of an accident previously evaluated. The proposed amendment is an administrative change which removes an unnecessary level of detail from the Technical Specifications, and is consistent with NRC Revised Standard Technical Specifications (NUREG-1430, Rev. 1). The TMI Unit 1 UFSAR currently identifies and describes the control building isolation and recirculation dampers required for emergency operation and their design function. TMI Unit 1 control room habitability requirements are not affected. The proposed amendment does not affect the existing surveillance frequency or the operability requirements for the required dampers. Therefore, the proposed amendment has no effect on the probability of occurrence or the consequences of an accident previously evaluated.
2. Operation of the facility in accordance with the proposed amendment would not create the possibility of a new or different kind of accident from any previously evaluated. The proposed amendment is an administrative change which removes an unnecessary level of detail from the Technical Specifications, and is consistent with NRC Revised Standard Technical Specifications (NUREG-1430, Rev. 1). TMI Unit 1 control room habitability requirements are not affected. Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any previously evaluated.
3. Operation of the facility in accordance with the proposed amendment would not involve a significant reduction in a margin of safety. The proposed amendment is an administrative change which removes an unnecessary level of detail from the Technical Specifications, and is consistent with NRC Revised Standard Technical Specifications (NUREG-1430, Rev. 1). The existing Technical Specification surveillance frequency and operability requirements for required isolation and recirculation dampers are maintained. Therefore, the proposed amendment does not reduce any margin of safety.

VI. Implementation

It is requested that the amendment authorizing this change become effective immediately upon issuance to be implemented within thirty (30) days.

ENCLOSURE 2

Affected TMI Unit 1 Technical Specification Pages

4.12 AIR TREATMENT SYSTEM

4.12.1 EMERGENCY CONTROL ROOM AIR TREATMENT SYSTEM

Applicability

Applies to the emergency control room air treatment system and associated components.

Objective

To verify that this system and associated components will be able to perform its design functions.

Specification

- 4.12.1.1 At least every refueling interval, the pressure drop across the combined HEPA filters and charcoal adsorber banks of AH-F3A and 3B shall be demonstrated to be less than 6 inches of water at system design flow rate ($\pm 10\%$).
- 4.12.1.2
- a. The tests and sample analysis required by Specification 3.15.1.2 shall be performed initially and at least once per year for standby service or after every 720 hours of system operation and following significant painting, steam, fire or chemical release in any ventilation zone communicating with the system that could contaminate the HEPA filters or charcoal adsorbers.
 - b. DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing which could affect the HEPA filter bank bypass leakage.
 - c. Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank or after any structural maintenance on the system housing which could effect the charcoal adsorber bank bypass leakage.
 - d. Each AH-E18A and B (AH-F3A and B) fan/filter circuit shall be operating at least 10 hours every month.
- 4.12.1.3 At least once per refueling interval, automatic initiation of the required Control Building dampers for isolation and recirculation dampers shall be demonstrated as operable.
- 4.12.1.4 An air distribution test shall be performed on the HEPA filter bank initially, and after any maintenance or testing that could affect the air distribution within the system. The air distribution across the HEPA filter bank shall be uniform within $\pm 20\%$. The test shall be performed at 40,000 cfm ($\pm 10\%$) flow rate.

Bases

Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once per refueling cycle to show system performance capability.

The frequency of tests and sample analysis are necessary to show that the HEPA filters and charcoal adsorbers can perform as evaluated. Tests of the charcoal adsorbers with halogenated hydrocarbon shall be performed in accordance with approved test procedures. Replacement adsorbent should be qualified according to Regulatory Guide 1.52 March 1978. The charcoal adsorber efficiency test procedures should allow for the removal of one adsorber tray, emptying of one bed from the tray, mixing the adsorbent thoroughly and obtaining at least two samples. Each sample should be at least two inches in diameter and a length equal to the thickness of the bed. If test results are unacceptable all adsorbent in the system shall be replaced. Tests of the HEPA filters with DOP aerosol shall also be performed in accordance with approved test procedures. Any HEPA filters found defective should be replaced with filters qualified according to Regulatory Guide 1.52 March 1978.

Operation of the system for 10 hours every month will demonstrate operability of the filters and adsorber system and remove excessive moisture built up on the adsorber.

If significant painting, steam, fire or chemical release occurs such that the HEPA filter or charcoal adsorber could become contaminated from the fumes, chemicals or foreign materials, the same tests and sample analysis shall be performed as required for operational use. The determination of significance shall be made by the Vice President-TMI Unit 1.

Demonstration of the automatic initiation of the recirculation mode of operation is necessary to assure system performance capability. **Dampers required for control building isolation and recirculation are specified in UFSAR Sections 7.4.5 and 9.8.1.**

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Applicability

Applies to the emergency control room air treatment system and associated components.

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To verify that this system and associated components will be able to perform its design functions.

Specification

- 4.12.1.1 At least every refueling interval, the pressure drop across the combined HEPA filters and charcoal adsorber banks of AH-F3A and 3B shall be demonstrated to be less than 6 inches of water at system design flow rate ($\pm 10\%$).
- 4.12.1.2
- The tests and sample analysis required by Specification 3.15.1.2 shall be performed initially and at least once per year for standby service or after every 720 hours of system operation and following significant painting, steam, fire or chemical release in any ventilation zone communicating with the system that could contaminate the HEPA filters or charcoal adsorbers.
 - DOP testing shall be performed after each complete or partial replacement of the HEPA filter bank or after any structural maintenance on the system housing which could affect the HEPA filter bank bypass leakage.
 - Halogenated hydrocarbon testing shall be performed after each complete or partial replacement of the charcoal adsorber bank or after any structural maintenance on the system housing which could effect the charcoal adsorber bank bypass leakage.
 - Each AH-E18A and B (AH-F3A and B) fan/filter circuit shall be operating at least 10 hours every month.
- 4.12.1.3 Required At least once per refueling interval, automatic initiation of the Control Building Isolation and recirculation ^{dampers for} dampers AH-D28, 37, 39, and 36 shall be demonstrated as operable.
- 4.12.1.4 An air distribution test shall be performed on the HEPA filter bank initially, and after any maintenance or testing that could affect the air distribution within the system. The air distribution across the HEPA filter bank shall be uniform within $\pm 20\%$. The test shall be performed at 40,000 cfm ($\pm 10\%$) flow rate.

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Pressure drop across the combined HEPA filters and charcoal adsorbers of less than 6 inches of water at the system design flow rate will indicate that the filters and adsorbers are not clogged by excessive amounts of foreign matter. Pressure drop should be determined at least once per refueling cycle to show system performance capability.

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ENCLOSURE 3

Certificate of Service for TMI Unit 1

License Amendment Request No. 297

