

# AmerGen

A PECO Energy/British Energy Company

AmerGen Energy Company, LLC  
Three Mile Island Unit 1

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September 8, 2000  
5928-00-20280

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Dear Sir or Madam:

SUBJECT: THREE MILE ISLAND NUCLEAR STATION, UNIT 1  
OPERATING LICENSE NO. DPR-50  
DOCKET NO. 50-289  
LICENSE CHANGE APPLICATION (LCA) NO. 287, Supplement 1

In accordance with 10 CFR 50.4(b)(1), enclosed is a supplement to TMI Unit 1 Licensing Change Application (LCA) No. 287, Revision 1. The purpose of LCA No. 287 is to provide additional requirements for ensuring operability of the Makeup Tank (MUT). The purpose of this supplement is to respond to NRC request in a conference call on August 23, 2000 regarding the adequacy of the daily check of the MUT pressure instrument as described in the AmerGen submittal of LCA No. 287, Revision 1 on June 21, 2000 and discussed with the NRC over the telephone on March 9, 2000 and May 5, 2000. In particular, this letter supplements the AmerGen response to NRC Question No. 5 in Enclosure 1B of the June 21, 2000 submittal.

AmerGen recognizes that it would be appropriate to apply a more conservative acceptance criteria for the MUT pressure instrument daily channel check than other instrument checks in T.S. Table 4.1-1. Therefore, AmerGen commits to ensuring that the acceptance criteria for the daily check of the MUT pressure instrument will be maintained within the error used to develop the plant operating limit. Thus we will be able to detect an out of tolerance condition of the MUT pressure instrument in all credible scenarios.

Since the limits curves provided in T.S. Figure 3.3-1 do not include instrument error or alarm setpoints or other administrative limits, the figure submitted with LCA No. 287, Revision 1 is unaffected. Maintaining the channel check acceptance criteria within the error analysis assumptions will be accomplished by ensuring fidelity between the acceptance criteria, the error analysis, and the physical instrumentation (for example, with a given set of pressure-sensing devices, the acceptance criteria would be set below the error analysis tolerance, or alternatively for the same set of pressure-sensing devices, the error analysis tolerance would be set to bound the selected acceptance criteria, or different pressure-sensing devices could be selected provided that their characteristics were bounded by the error analysis tolerance and the acceptance criteria). Enclosure 1 provides a hand markup of the T.S. 4.1 Bases for the channel check surveillance on page 4-2, which is being revised to reflect this commitment.

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AmerGen concludes that this supplement does not constitute a change to the No Significant Hazards Consideration analysis provided in LCA No. 287, Revision 1. Please let us know when the amendment package is ready to be issued and a complete set of the conforming revised T.S. and Bases pages will be sent to the NRC.

Pursuant to 10 CFR 50.91 (b)(1), a copy of this letter is being provided to the designated official of the Commonwealth of Pennsylvania, Bureau of Radiation Protection, as well as the chief executives of the township and county in which the facility is located.

Please contact Bob Knight of TMI Licensing at (717) 948-8554 if you have any questions regarding this submittal.

Very truly yours,

A handwritten signature in black ink, appearing to read "Mark E. Warner" with a stylized flourish at the end.

Mark E. Warner  
Vice President, TMI Unit 1

MEW/mrk

Enclosure

cc: USNRC Regional Administrator, Region I  
USNRC TMI Senior Resident Inspector  
USNRC TMI Unit 1 Senior Project Manager  
Chairman, Board of Supervisors of Londonderry Township  
Chairman, Board of County Commissioners of Dauphin County  
Director, Bureau of Radiation Protection, PA Department of Environmental Resources  
File No. 97062



Enclosure

Hand Markup of the TMI Unit 1 Technical Specifications Revised Bases  
for License Change Application No. 287, Supplement 1

# CONTROLLED COPY

## 4.1 OPERATIONAL SAFETY REVIEW

### Applicability

Applies to items directly related to safety limits and limiting conditions for operation.

### Objective

To specify the minimum frequency and type of surveillance to be applied to unit equipment and conditions.

### Specification

- 4.1.1 The minimum frequency and type of surveillance required for reactor protection system, engineered safety feature protection system, and heat sink protection system instrumentation when the reactor is critical shall be as stated in Table 4.1-1.
- 4.1.2 Equipment and sampling test shall be performed as detailed in Tables 4.1-2 and 4.1-3.
- 4.1.3 Each post-accident monitoring instrumentation channel shall be demonstrated OPERABLE by the performance of the check, test and calibration at the frequencies shown in Table 4.1-4.
- 4.1.4 Each remote shutdown system function shown in Table 3.5-4 shall be demonstrated OPERABLE by the performance of the following check, test, and calibration:
  - a) Perform CHANNEL CHECK for each required instrumentation channel that is normally energized every 31 days.
  - b) Verify each required control circuit and transfer switch is capable of performing the intended function every refueling interval.
  - c) Perform CHANNEL CALIBRATION for each required instrumentation channel every refueling interval (excludes source range flux).

The acceptance criteria for the daily check of the Makeup Tank pressure instrument will be maintained within the error used to develop the plant operating limit.

### Bases

### Check

Failures such as blown instrument fuses, defective indicators, or faulted amplifiers which result in "upscale" or "downscale" indication can be easily recognized by simple observation of the functioning of an instrument or system. Furthermore, such failures are, in many cases, revealed by alarm or annunciator action. Comparison of output and/or state of independent channels measuring the same variable supplements this type of built-in surveillance. Based on experience in operation of both conventional and nuclear systems, when the unit is in operation, the minimum checking frequency stated is deemed adequate for reactor system instrumentation.