

10 CFR 50.90

TMI-15-064
May 7, 2015

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

Three Mile Island Nuclear Station, Unit 1
Renewed Facility Operating License No. DPR-50
NRC Docket No. 50-289

Subject: Supplement to the Application to Revise Technical Specifications to Adopt TSTF-523, "Generic Letter 2008-01, Managing Gas Accumulation," Revision 2, using the Consolidated Line Item Improvement Process

References: 1. Letter from D. P. Helker (Exelon Generation Company, LLC) to U.S. NRC, "Application to Revise Technical Specifications to Adopt TSTF-523, 'Generic Letter 2008-01, Managing Gas Accumulation,' Revision 2, using the Consolidated Line Item Improvement Process," dated July 10, 2014

Pursuant to 10 CFR 50.90, Exelon Generation Company, LLC (EGC) is submitting a Supplement to the July 10, 2014, (Reference 1) request for an amendment to the Technical Specifications (TS) for Three Mile Island Nuclear Station (TMI), Unit 1.

The proposed Surveillance Requirement (SR) for TS 4.5.2.2 was labelled incorrectly in the original submittal (Reference 1). This Supplement corrects the administrative error and reorders the proposed SR in the correct sequence.

The proposed SR for the Low Pressure Injection TS has been reordered to be TS 4.5.2.2.d. Attachment 1 provides revised TS Pages 4-41 and 4-42. No other revisions have been made to the proposed changes in the July 10, 2014, submittal.

Exelon has determined that the information provided in response to this request for additional information does not impact the conclusions of the No Significant Hazards Consideration or Environmental Consideration as stated in Reference 1.

There are no regulatory commitments contained in this submittal.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is notifying the Commonwealth of Pennsylvania of this application for license amendment by transmitting a copy of this letter and its attachments to the designated State Official.

Should you have any questions concerning this letter, please contact Wendy Croft at (610) 765-5726.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 7th day of May 2015.

Respectfully,

A handwritten signature in black ink, appearing to read "James Barstow". The signature is fluid and cursive, with the first name "James" written in a larger, more prominent script than the last name "Barstow".

James Barstow
Director - Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachment: Revised Technical Specification Pages (Mark-Up)

cc: USNRC Region I, Regional Administrator
USNRC Project Manager, TMI, Unit 1
USNRC Senior Resident Inspector, TMI, Unit 1
Director, Bureau of Radiation Protection, PA Department of Environmental
Resources
Chairman, Board of County Commissioners, Dauphin County, PA
Chairman, Board of Supervisors, Londonderry Township, PA
R. R. Janati, Commonwealth of Pennsylvania

ATTACHMENT

Revised Technical Specification Pages (Mark-Up)

Three Mile Island Nuclear Station, Unit 1

Renewed Facility Operating License No. DPR-50

Revised Technical Specification and Bases Pages

Page 4-41

Page 4-42

4.5.2 EMERGENCY CORE COOLING SYSTEM

Applicability: Applies to periodic testing requirement for emergency core cooling systems.

Objective: To verify that the emergency core cooling systems are operable.

Specification

4.5.2.1 High Pressure Injection

- a. At the frequency specified in the Surveillance Frequency Control Program and following maintenance or modification that affects system flow characteristics, system pumps and system high point vents shall be vented, and a system test shall be conducted to demonstrate that the system is operable.
- b. The test will be considered satisfactory if the valves (MU-V-14A/B & 16A/B/C/D) have completed their travel and the make-up pumps are running as evidenced by system flow. Minimum acceptable injection flow must be greater than or equal to 431 gpm per HPI pump when pump discharge pressure is 600 psig or greater (the pressure between the pump and flow limiting device) and when the RCS pressure is equal to or less than 600 psig.
- c. Testing which requires HPI flow thru MU-V16A/B/C/D shall be conducted only under either of the following conditions:
 - 1) Indicated RCS temperature shall be greater than 313°F.
 - 2) Head of the Reactor Vessel shall be removed.

d. At the frequency specified in the Surveillance Frequency Control Program, verify High Pressure Injection locations susceptible to gas accumulation are sufficiently filled with water.

4.5.2.2 Low Pressure Injection

- a. At the frequency specified in the Surveillance Frequency Control Program and following maintenance or modification that affects system flow characteristics, system pumps and high point vents shall be vented, and a system test shall be conducted to demonstrate that the system is operable. The auxiliaries required for low pressure injection are all included in the emergency loading sequence test specified in 4.5.1.
- b. The test will be considered satisfactory if the decay heat pumps have been successfully started and the decay heat injection valves and the decay heat supply valves have completed their travel as evidenced by the control board component operating lights. Flow shall be verified to be equal to or greater than the flow assumed in the Safety Analysis for the single corresponding RCS pressure used in the test.

d. At the frequency specified in the Surveillance Frequency Control Program, verify Low Pressure Injection locations susceptible to gas accumulation are sufficiently filled with water.

- c. When the Decay Heat System is required to be operable, the correct position of DH-V-19A/B shall be verified by observation within four hours of each valve stroking operation or valve maintenance which affects the position indicator.

4.5.2.3 Core Flooding

- a. At the frequency specified in the Surveillance Frequency Control Program, a system test shall be conducted to demonstrate proper operation of the system. Verification shall be made that the check and isolation valves in the core cooling flooding tank discharge lines operate properly.
- b. The test will be considered satisfactory if control board indication of core flooding tank level verifies that all valves have opened.

4.5.2.4 Component Tests

- a. At the frequency specified in the Surveillance Frequency Control Program, the components required for emergency core cooling will be tested.
- b. The test will be considered satisfactory if the pumps and fans have been successfully started and the valves have completed their travel as evidenced by the control board component operating lights, and a second means of verification, such as: the station computer, verification of pressure/flow, or control board indicating lights initiated by separate limit switch contacts.

Bases

The emergency core cooling systems (Reference 1) are the principal reactor safety features in the event of a loss of coolant accident. The removal of heat from the core provided by these systems is designed to limit core damage.

The low pressure injection pumps are tested singularly for operability by opening the borated water storage tank outlet valves and the bypass valves in the borated water storage tank fill line. This allows water to be pumped from the borated water storage tank through each of the injection lines and back to the tank.

The minimum acceptable HPI/LPI flow assures proper flow and flow split between injection legs.

With the reactor shutdown, the valves in each core flooding line are checked for operability by reducing the reactor coolant system pressure until the indicated level in the core flood tanks verify that the check and isolation valves have opened.

Reference

(1) UFSAR, Section 6.1 - "Emergency Core Cooling System"

c. At the frequency specified in the Surveillance Frequency Control Program, verify Core Flooding locations susceptible to gas accumulation are sufficiently filled with water.

Insert 1