

TMI-12-048  
April 2, 2012

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: Supplemental Information to the License Amendment Request to Revise Steam Generator Program Inspection Frequencies and Tube Sample Selection

Reference: Letter from Michael D. Jesse (Exelon Generation Company, LLC), to U. S. Nuclear Regulatory Commission, "License Amendment Request to Revise Steam Generator Program Inspection Frequencies and Tube Sample Selection," dated March 26, 2012

Exelon Generation Company, LLC (Exelon) is submitting supplemental information to the referenced License Amendment Request (LAR). The supplemental information adopts the No Significant Hazards Consideration Determination and the Environmental Consideration provided in TSTF-510, Revision 2 (as discussed in the *Federal Register* Notice of Availability of TSTF-510 dated October 27, 2011) for incorporation into the referenced LAR, in lieu of simply referencing these sections in the referenced LAR. The supplemental information provided in the attachment to this letter replaces the original No Significant Hazards Consideration Determination and Environmental Consideration of the referenced LAR.

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

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 2nd day of April 2012.

Respectfully



Michael D. Jesse  
Director - Licensing and Regulatory Affairs  
Exelon Generation Company, LLC

Attachment: Supplemental Information to the Evaluation of Proposed Changes

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**

**Supplemental Information to the  
Evaluation of Proposed Changes**

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

4.3 No Significant Hazards Consideration Determination

Three Mile Island Nuclear Station, Unit 1 (TMI, Unit 1) requests adoption of an approved change to the standard technical specifications (STS) into the plant specific technical specifications (TS), to revise the Limiting Condition for Operation (LCO) 3.1.1.2 and Surveillance Requirement (SR) 4.19.2, "Steam Generator (SG) Tube Integrity," Specification 6.19, "Steam Generator (SG) Program," and Specification 6.9.6, "Steam Generator Tube Inspection Report," to address inspection periods and other administrative changes and clarifications.

As required by 10 CFR 50.91(a), an analysis of the issue of no significant hazards consideration is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed change revises the Steam Generator (SG) Program to modify the frequency of verification of SG tube integrity and SG tube sample selection. A steam generator tube rupture (SGTR) event is one of the design basis accidents that are analyzed as part of a plant's licensing basis. The proposed SG tube inspection frequency and sample selection criteria will continue to ensure that the SG tubes are inspected such that the probability of a SGTR is not increased. The consequences of a SGTR are bounded by the conservative assumptions in the design basis accident analysis. The proposed change will not cause the consequences of a SGTR to exceed those assumptions. The proposed change to reporting requirements and clarifications of the existing requirements have no affect on the probability or consequences of SGTR. Therefore, it is concluded that the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

The proposed changes to the Steam Generator Program will not introduce any adverse changes to the plant design basis or postulated accidents resulting from potential tube degradation. The proposed change does not affect the design of the SGs or their method of operation. In addition, the proposed change does not impact any other plant system or component. Therefore, the proposed change does not create the possibility of a new or different type of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No

The SG tubes in pressurized water reactors are an integral part of the reactor coolant pressure boundary and, as such, are relied upon to maintain the primary system's pressure and inventory. As part of the reactor coolant pressure boundary, the SG tubes

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**Attachment**  
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are unique in that they are also relied upon as a heat transfer surface between the primary and secondary systems such that residual heat can be removed from the primary system. In addition, the SG tubes also isolate the radioactive fission products in the primary coolant from the secondary system. In summary, the safety function of a SG is maintained by ensuring the integrity of its tubes. Steam generator tube integrity is a function of the design, environment, and the physical condition of the tube. The proposed change does not affect tube design or operating environment. The proposed change will continue to require monitoring of the physical condition of the SG tubes such that there will not be a reduction in the margin of safety compared to the current requirements. Therefore, it is concluded that the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, TMI, Unit 1 concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

#### 5.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed change would change a requirement with respect to installation or use of a facility component located within the restricted areas, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.