

NMP2L2641

May 31, 2017

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

Nine Mile Point Nuclear Station, Unit 2  
Renewed Facility Operating License No. NPF-69  
NRC Docket No. 50-410

Subject: License Amendment Request – Revise Technical Specifications to Adopt TSTF-522, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month," Revision 0

In accordance with 10 CFR 50.90, "Application for amendment of license, construction permit, or early site permit," Exelon Generation Company, LLC (Exelon) is submitting a request for an amendment to the Technical Specifications (TS), Appendix A, of Renewed Facility Operating License No. NPF-69 for Nine Mile Point Nuclear Station, Unit 2 (NMP2).

The proposed amendment would modify the NMP2 TS requirements to operate ventilation systems with charcoal filters for 10 hours each month in accordance with TSTF-522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month." Specifically, the proposed amendment would revise the run time for Surveillance Requirements (SR) 3.6.4.3.1 for Technical Specification (TS) 3.6.4.3, "Standby Gas Treatment (SGT) System," and SR 3.7.2.1 for TS 3.7.2, "Control Room Envelope Filtration (CREF) System." The run time for SR 3.6.4.3.1 would be reduced from a continuous 10 hours to a continuous 15 minutes and the run time for SR 3.7.2.1 would be reduced from 1 hour to 15 minutes.

Attachment 1 provides a description and assessment of the proposed changes, the requested confirmation of applicability, and plant-specific verifications. Attachment 2 provides the Proposed TS Marked-Up Pages. Attachment 3 provides the Proposed Technical Specifications Bases Marked-Up Pages for information only.

The proposed changes have been reviewed by the NMP Plant Operations Review Committee in accordance with the requirements of the Exelon Quality Assurance Program.

Exelon requests approval of the proposed amendment by May 31, 2018. Once approved, the amendment shall be implemented within 60 days.

There are no regulatory commitments contained in this request.

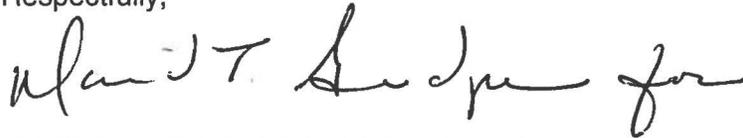
Exelon has concluded that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), Exelon is transmitting a copy of this application and its attachments to the designated State Officials.

Should you have any questions concerning this submittal, please contact Ron Reynolds at (610) 765-5247.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 31<sup>st</sup> day of May 2017.

Respectfully,



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

Attachments:

- 1) Evaluation of Proposed Changes
- 2) Proposed Technical Specification Marked-Up Pages
- 3) Proposed Technical Specification Bases Marked-Up Pages

cc: USNRC Region I, Regional Administrator	w/attachments
USNRC Senior Resident Inspector, NMP	w/attachments
USNRC Project Manager, NMP	w/attachments
A. L. Peterson, NYSERDA	w/attachments

**ATTACHMENT 1**

**License Amendment Request**

**Nine Mile Point Nuclear Station Unit 2**

**Docket No. 50-410**

**EVALUATION OF PROPOSED CHANGES**

**CONTENTS**

**SUBJECT: Revise Technical Specifications to Adopt TSTF-522, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month," Revision 0**

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## **1.0 DESCRIPTION**

The proposed change revises the Surveillance Requirements which currently require operating ventilation systems with the heaters operating for a continuous 10 hour period every 31 days. The Surveillance Requirements are revised to require operation of the systems for 15 continuous minutes every 31 days.

The proposed amendment is consistent with TSTF-522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month."

## **2.0 ASSESSMENT**

### **2.1 Applicability of Published Safety Evaluation**

Exelon has reviewed the model safety evaluation dated September 20, 2012, as part of the Federal Register Notice of Availability. This review included a review of the NRC staff's evaluation, as well as the information provided in TSTF-522. Exelon has concluded that the justifications presented in the TSTF-522 proposal and the model safety evaluation prepared by the NRC staff are applicable to Nine Mile Point Nuclear Station Unit 2 (NMP2) and justify this amendment for the incorporation of the changes to the NMP2 Technical Specifications (TS).

### **2.2 Optional Changes and Variations**

NMP2 TS utilize different numbering and titles than the Standard Technical Specifications on which TSTF-522 was based. Specifically, NMP2 TS Section 3.7.2, "Control Room Envelope Filtration (CREF) System" relates to the TSTF-522 Section 3.7.3, "Control Room Fresh Air (CRFA) System." In addition, the frequency of 31 days will be incorporated into the Surveillance Frequency Control Program and the Frequency in the TS will state, "In accordance with the Surveillance Frequency Control Program" for SR 3.6.4.3.1 and SR 3.7.2.1. These differences are administrative and do not affect the applicability of TSTF-522 to the NMP2 TS.

## **3.0 REGULATORY ANALYSIS**

### **3.1 No Significant Hazards Consideration Determination**

Nine Mile Point Nuclear Station Unit 2 (NMP2) requests adoption of an approved change to the standard technical specifications (STS) and plant specific technical specifications (TS), to revise Technical Specification (TS) 3.6.4.3, "Standby Gas Treatment (SGT) System," and TS 3.7.2, "Control Room Envelope Filtration (CREF) System," to revise the Surveillance Requirement to operate the SGT System and CREF System with the electric heaters operating for a continuous 10-hour period every 31 days. The Surveillance Requirement is revised to require operation of the systems for 15 continuous minutes every 31 days.

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 replaces an existing Surveillance Requirement to operate the SGT System and CREF Systems equipped with electric heaters for a continuous 10-hour period every 31 days with a requirement to operate the systems for 15 continuous minutes with heaters operating, if needed.

These systems are not accident initiators, and therefore, these changes do not involve a significant increase in the probability of an accident. The proposed system and filter testing changes are consistent with current regulatory guidance for these systems and will continue to assure that these systems perform their design function which may include mitigating accidents. Thus, the change does not involve a significant increase in the consequences of an accident.

Therefore, it is concluded that this 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 change replaces an existing Surveillance Requirement to operate the SGT System and CREF Systems equipped with electric heaters for a continuous 10-hour period every 31 days with a requirement to operate the systems for 15 continuous minutes with heaters operating, if needed.

The change proposed for these ventilation systems does not change any system operations or maintenance activities. Testing requirements will be revised and will continue to demonstrate that the Limiting Conditions for Operation are met and the system components are capable of performing their intended safety functions. The change does not create new failure modes or mechanisms and no new accident precursors are generated.

Therefore, it is concluded that this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

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

Response: No.

The proposed change replaces an existing Surveillance Requirement to operate the SGT System and CREF Systems equipped with electric heaters for a continuous 10-hour period every 31 days with a requirement to operate the systems for 15 continuous minutes with heaters operating, if needed.

The design basis for the ventilation systems' heaters is to heat the incoming air which reduces the relative humidity. The heater testing change proposed will continue to demonstrate that the heaters are capable of heating the air and will perform their design function. The proposed change is consistent with regulatory guidance.

Therefore, it is concluded that this change does not involve a significant reduction in a margin of safety. Based on the above, Exelon 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.

#### **4.0 ENVIRONMENTAL EVALUATION**

The proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, 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.

**ATTACHMENT 2**

**License Amendment Request**

**Nine Mile Point Nuclear Station Unit 2  
Docket No. 50-410**

**Revise Technical Specifications to Adopt TSTF-522,  
"Revise Ventilation System Surveillance Requirements to  
Operate for 10 hours per Month," Revision 0**

**Proposed Technical Specification Marked-Up Pages**

**TS Pages**

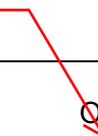
3.6.4.3-3

3.7.2-3

ACTIONS

CONDITION	REQUIRED ACTION	COMPLETION TIME
E. (continued)	<u>AND</u> E.3 Initiate action to suspend OPDRVs.	Immediately

SURVEILLANCE REQUIREMENTS

	SURVEILLANCE	FREQUENCY
	<div style="border: 1px solid red; display: inline-block; padding: 2px;">15</div>  Operate each SGT subsystem for $\geq$ <del>10</del> continuous hours with heaters operating. <div style="border: 1px solid red; display: inline-block; padding: 2px; margin-left: 100px;">minutes</div> 	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.2	Perform required SGT filter testing in accordance with the Ventilation Filter Testing Program (VFTP).	In accordance with the VFTP
SR 3.6.4.3.3	Verify each SGT subsystem actuates on an actual or simulated initiation signal.	In accordance with the Surveillance Frequency Control Program
SR 3.6.4.3.4	Verify each SGT decay heat removal air inlet valve can be opened.	In accordance with the Surveillance Frequency Control Program

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>F. Two CREF subsystems inoperable with safety function not maintained during movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs.</p> <p><u>OR</u></p> <p>One or more CREF subsystems inoperable due to inoperable CRE boundary during movement of recently irradiated fuel assemblies in the secondary containment or during OPDRVs.</p>	<p>-----NOTE----- LCO 3.0.3 is not applicable. -----</p> <p>F.1 Suspend movement of recently irradiated fuel assemblies in the secondary containment.</p> <p><u>AND</u></p> <p>F.2 Initiate action to suspend OPDRVs.</p>	<p>Immediately</p> <p>Immediately</p>

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
<p>SR 3.7.2.1 Operate each CREF subsystem for <math>\geq</math> <del>1</del> continuous <del>hour</del>.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>
<p>SR 3.7.2.2 Perform required CREF System filter testing in accordance with the Ventilation Filter Testing Program (VFTP).</p>	<p>In accordance with the VFTP</p>
<p>SR 3.7.2.3 Verify each CREF subsystem actuates on an actual or simulated initiation signal.</p>	<p>In accordance with the Surveillance Frequency Control Program</p>

15

minutes

(continued)

**ATTACHMENT 3**

**License Amendment Request**

**Nine Mile Point Nuclear Station Unit 2  
Docket No. 50-410**

**Revise Technical Specifications to Adopt TSTF-522,  
"Revise Ventilation System Surveillance Requirements to  
Operate for 10 hours per Month," Revision 0**

**Proposed Technical Specification Bases Marked-Up Pages  
(for information only)**

**Bases Pages**

B 3.6.4.3-5

B 3.7.2-8

BASES (continued)

15

minutes

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SURVEILLANCE  
REQUIREMENTS

SR 3.6.4.3.1

Operating (from the control room using the manual initiation switch) each SGT subsystem for  $\geq 10$  continuous hours ensures that both subsystems are OPERABLE and that all associated controls are functioning properly. It also ensures that blockage, fan or motor failure, or excessive vibration can be detected for corrective action. ~~Operation with the heaters on (automatic heater cycling to maintain temperature) for  $\geq 10$  continuous hours periodically eliminates moisture on the adsorbers and HEPA filters.~~ The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.6.4.3.2

This SR verifies that the required SGT filter testing is performed in accordance with the Ventilation Filter Testing Program (VFTP). The SGT System filter tests are in accordance with Regulatory Guide 1.52 (Ref. 6). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, minimum system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specified test frequencies and additional information are discussed in detail in the VFTP.

SR 3.6.4.3.3

This SR requires verification that each SGT subsystem starts upon receipt of an actual or simulated initiation signal. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

(continued)

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BASES

ACTIONS  
(continued)

If applicable, movement of recently irradiated fuel assemblies in the secondary containment must be suspended immediately. Suspension of these activities shall not preclude completion of movement of a component to a safe position. If applicable, actions must be initiated immediately to suspend OPDRVs to minimize the probability of a vessel draindown and subsequent potential for fission product release. Actions must continue until the OPDRVs are suspended.

SURVEILLANCE  
REQUIREMENTS

SR 3.7.2.1

Operating (from the control room) each CREF subsystem for ~~≥ 4~~ continuous ~~hour~~ ensures that both subsystems are OPERABLE and that all associated controls are functioning properly. It also ensures that blockage, filter booster or air conditioning unit fan or motor failure, or excessive vibration can be detected for corrective action. In addition, it is not necessary to operate all components of a single subsystem simultaneously for the ~~1 hour~~ period. It is acceptable to operate the fan portion of the air conditioning unit(s) of one subsystem with the CROASFT of the other subsystem, such that the CROASFTs and fan portion of the air conditioning units are each operated for ~~1~~ continuous ~~hour~~. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

SR 3.7.2.2

This SR verifies that the required CROASFT testing is performed in accordance with Specification 5.5.7, "Ventilation Filter Testing Program (VFTP)." The CROASFT filter tests are in accordance with Regulatory Guide 1.52 (Ref. 8). The VFTP includes testing HEPA filter performance, charcoal adsorber efficiency, system flow rate, and the physical properties of the activated charcoal (general use and following specific operations). Specific test Frequencies and additional information are discussed in detail in the VFTP.

SR 3.7.2.3

This SR verifies that each CREF subsystem starts and operates on an actual or simulated initiation signal. This SR also includes ensuring the air conditioning units (fan portion only) start on a low flow signal after the appropriate time delay. The LOGIC SYSTEM FUNCTIONAL TEST in LCO 3.3.7.1, "Control Room Envelope Filtration (CREF) System Instrumentation," overlaps this SR to provide complete testing of the safety function. The Surveillance Frequency is controlled under the Surveillance Frequency Control Program.

(continued)