

RA-13-120

December 12, 2013

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

Oyster Creek Nuclear Generating Station
Renewed Facility Operating License No. DPR-16
NRC Docket No. 50-219

Subject: Application to Revise Technical Specifications to Adopt TSTF-522, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month," using the Consolidated Line Item Improvement Process

- References:
1. TSTF-522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month," dated March 30, 2010
 2. Notice of Availability of the "Model Safety Evaluation for Plant-Specific Adoption of Technical Specification Task Force Traveler TSTF-522, Revision 0, 'Revise Ventilation System Surveillance Requirements to Operate for 10 Hours per Month,' Using the Consolidated Line Item Improvement Process" dated September 20, 2012

In accordance with the provisions of 10 CFR 50.90, Exelon Generation Company, LLC (EGC) is submitting a request for an amendment to the Technical Specifications (TS) for Oyster Creek Nuclear Generating Station (Oyster Creek).

The proposed amendment would modify a TS requirement to operate a ventilation system with charcoal filters for 10 hours each month in accordance with Technical Specification Task Force (TSTF) Traveler TSTF-522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month."

Attachment 1 provides a description and assessment of the proposed changes, the requested confirmation of applicability, and plant-specific verifications. Attachment 2 provides the existing TS pages marked up to show the proposed changes. Attachment 3 provides existing TS Bases pages marked up to show the proposed changes, for information only.

These proposed changes have been reviewed and approved by Oyster Creek's Plant Operations Review Committee and by the Nuclear Safety Review Board in accordance with the requirements of the EGC Quality Assurance Program.

EGC requests approval of the proposed license amendment by December 12, 2014, with the amendment being implemented within 60 days of issuance.

There are no regulatory commitments contained in this letter.

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In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), EGC is notifying the State of New Jersey 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 E. Croft at (610) 765-5726.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 12th day of December 2013.

Respectfully,



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

Attachments: 1. Description and Assessment
 2. Proposed Technical Specification Changes (Mark-Up)
 3. Proposed Technical Specification Bases Changes (Mark-Up),
 For Information Only

cc: USNRC Region I, Regional Administrator
 USNRC Project Manager, Oyster Creek Nuclear Generating Station
 USNRC Senior Resident Inspector, Oyster Creek Nuclear Generating Station
 Director, Bureau of Nuclear Engineering, New Jersey Department of
 Environmental Protection
 Mayor of Lacey Township, Forked River, NJ

Attachment 1

Description and Assessment

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1.0 DESCRIPTION

The proposed change revises a Surveillance Requirement (SR) which currently requires operating a ventilation system for a minimum of 10 hours at a frequency controlled in accordance with the Surveillance Frequency Control Program (SFCP). The SR is revised to require operation of the system for a minimum of 15 continuous minutes at a frequency controlled in accordance with the SFCP.

The proposed amendment is consistent with the model application in Technical Specification Task Force (TSTF) Traveler TSTF-522, Revision 0, "Revise Ventilation System Surveillance Requirements to Operate for 10 hours per Month" (TSTF-522).

2.0 ASSESSMENT

2.1 Applicability of Published Safety Evaluation

Exelon Generation Company, LLC (EGC) has reviewed the model safety evaluation dated September 20, 2012 as part of the Federal Register Notice for Comment. This review included a review of the U.S. Nuclear Regulatory Commission's (NRC's) evaluation, as well as the information provided in TSTF-522. As described in the subsequent paragraphs, EGC has concluded that the justifications presented in the TSTF-522 proposal and the model safety evaluation prepared by the NRC are applicable to Oyster Creek Nuclear Generating Station (Oyster Creek) and justify this amendment for the incorporation of the changes to the Oyster Creek Technical Specifications (TSs).

The model safety evaluation discusses the applicable regulatory requirements and guidance, including the 10 CFR 50, Appendix A, General Design Criteria (GDC). Oyster Creek is not licensed to the 10 CFR 50, Appendix A, GDC. Oyster Creek's Updated Final Safety Analysis Report (UFSAR), Section 3.1, "Conformance with NRC General Design Criteria," provides an assessment against the GDC in effect on July 7, 1971; while there is not a direct correlation between the current GDC and the GDC from 1971, a review has determined that the plant-specific requirements are sufficiently similar to the 10 CFR 50, Appendix A, GDC as related to the proposed change. Therefore, the proposed change is applicable to Oyster Creek.

2.2 Optional Changes and Variations

EGC is not proposing any significant variations or deviations from the TS changes described in TSTF-522 or the applicable parts of the NRC's model safety evaluation dated September 20, 2012.

EGC is noting the following minor variations:

- The Oyster Creek TSs utilize different numbering and titles than the Standard Technical Specifications (STSs) on which TSTF-522 was based. Specifically, STS Section 3.6.4.3, "Standby Gas Treatment (SGT) System," corresponds to Oyster Creek Specification 4.5.H, "Standby Gas Treatment System." This difference is administrative and does not affect the applicability of TSTF-522 to the Oyster Creek TSs.

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Description and Assessment

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- Oyster Creek Specification 4.5.H, "Standby Gas Treatment System," does not require "continuous" operation for the duration of the SR. However, this requirement is stated in the STSs wording. Therefore, this requirement is being added to the Oyster Creek TSs to conform to the STSs wording. This change does not affect the applicability of TSTF-522 to the Oyster Creek TSs.
- Oyster Creek TS 4.17, "Control Room Heating, Ventilating, and Air-Conditioning System," does not have an equivalent SR to STS Section 3.7.4, "[Main Control Room Environmental Control (MCREC)] System," to operate each ventilation subsystem for a specified period (i.e., 10 hours). Therefore, Oyster Creek is not pursuing the corresponding change for TS 4.17. This does not affect the applicability of TSTF-522 to the Oyster Creek TSs.

As noted in the NRC's model safety evaluation, some plants have adopted TSTF-425, "Relocate Surveillance Frequencies to Licensee Control - RITSTF Initiative 5b," which relocated fixed SR frequencies to a licensee-controlled program, the SFCP. Oyster Creek's TSs were previously revised to adopt the SFCP. Thus, the proposed changes are consistent with Oyster Creek's current licensing basis, the NRC's model safety evaluation, and therefore, do not constitute a deviation from TSTF-522, but merely an allowable variation.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

Exelon Generation Company, LLC (EGC) requests adoption of an approved change to the Standard Technical Specifications (STSs) to revise Specification 4.5.H, "Standby Gas Treatment System," to revise the Surveillance Requirement (SR) to operate the corresponding system for a minimum of 10 hours at a frequency controlled in accordance with the Surveillance Frequency Control Program (SFCP). The SR is revised to require operation of the system for a minimum of 15 continuous minutes at a frequency controlled in accordance with the SFCP.

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 SR to operate the Standby Gas Treatment System for a minimum of 10 hours at a frequency controlled in accordance with the SFCP with a requirement to operate the system for a minimum of 15 continuous minutes at a frequency controlled in accordance with the SFCP.

This system is not an accident initiator and therefore, this change does not involve a significant increase in the probability of an accident. The proposed change is consistent with current regulatory guidance for this system and will continue to assure that this system performs its design function which may include mitigating accidents. Thus, the change does not involve a significant increase in the consequences of an accident.

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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 SR to operate the Standby Gas Treatment System for a minimum of 10 hours at a frequency controlled in accordance with the SFCP with a requirement to operate the system for a minimum of 15 continuous minutes at a frequency controlled in accordance with the SFCP.

The change proposed for this ventilation system 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 SR to operate the Standby Gas Treatment System for a minimum of 10 hours at a frequency controlled in accordance with the SFCP with a requirement to operate the system for a minimum of 15 continuous minutes at a frequency controlled in accordance with the SFCP. 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, EGC 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
Proposed Technical Specifications Changes (Mark-Up)

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REVISED TECHNICAL SPECIFICATIONS PAGE

(2) Results of laboratory carbon sample analysis show $\geq 95\%$ radioactive methyl iodide removal efficiency when tested in accordance with ASTM D 3803-1989 (30°C, 95% relative humidity, at least 45.72 feet per minute charcoal bed face velocity).

b. At the frequency specified in the Surveillance Frequency Control Program by demonstrating:

(1) That the pressure drop across a HEPA filter is equal to or less than the maximum allowable pressure drop indicated in Figure 4.5.1.

(2) The inlet heater is capable of at least 10.9 KW input.

(3) Operation with a total flow within 10% of design flow.

c. At the frequency specified in the Surveillance Frequency Control Program by operating each circuit for a minimum of ~~10 hours~~.

of 15 continuous minutes.

d. Anytime the HEPA filter bank or the charcoal absorbers have been partially or completely replaced, the test per 4.5.H.1.a (as applicable) will be performed prior to returning the system to OPERABLE STATUS.

e. Automatic initiation of each circuit at the frequency specified in the Surveillance Frequency Control Program.

I. Inerting Surveillance

When an inert atmosphere is required in the primary containment, the oxygen concentration in the primary containment shall be checked at the frequency specified in the Surveillance Frequency Control Program.

J. Drywell Coating Surveillance

Carbon steel test panels coated with Firebar D shall be placed inside the drywell near the reactor core midplane level. They shall be removed for visual observation and weight loss measurements during the first, second, fourth and eighth refueling outages.

K. Instrument Line Flow Check Valves Surveillance

The capability of a representative sample of instrument line flow check valves to isolate shall be tested at the frequency specified in the Surveillance Frequency Control Program. In addition, each time an instrument line is returned to service after any condition which could have produced a pressure flow disturbance in that line, the open position of the flow check valve in that line shall be verified. Such conditions include:

ATTACHMENT 3
Proposed Technical Specification Bases Changes (Mark-Up),
For Information Only

Oyster Creek Nuclear Generating Station
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REVISED TECHNICAL SPECIFICATION BASES PAGE

At the frequency specified in the Surveillance Frequency Control Program, four suppression chamber-drywell vacuum breakers will be inspected to assure components have not deteriorated. Since valve internals are designed for a 40-year lifetime, an inspection program which cycles through all valves in about 1/10th of the design lifetime is extremely conservative. The alarm systems for the vacuum breakers will be calibrated at the frequency specified in the Surveillance Frequency Control Program.

Initiating reactor building isolation and operation of the standby gas treatment system to maintain a 1/4 inch of water vacuum, tests the operation of the reactor building isolation valves, leakage tightness of the reactor building and performance of the standby gas treatment system. Checking the initiating sensors and associated trip channels demonstrates the capability for automatic actuation. Performing the reactor building in leakage test prior to refueling demonstrates secondary containment capability prior to extensive fuel handling operations associated with the outage. In addition, when the secondary containment boundary has been moved from the trunnion room door to the penetrations inside the trunnion room in support of outage-related activities, performing standby gas treatment system testing is necessary to ensure integrity of the relocated secondary containment boundary in the temporarily modified configuration. Verifying the efficiency and operation of charcoal filters at the frequency specified in the Surveillance Frequency Control Program gives sufficient confidence of standby gas treatment system performance capability. A charcoal filter efficiency of 99% for halogen removal is adequate.

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The in-place testing of charcoal filters is performed using halogenated hydrocarbon refrigerant which is injected into the system upstream of the charcoal filters. Measurement of the refrigerant concentration upstream and downstream of the charcoal filters is made using a gas chromatograph. The ratio of the inlet and outlet concentrations gives an overall indication of the leak tightness of the system. Although this is basically a leak test, since the filters have charcoal of known efficiency and holding capacity for elemental iodine and/or methyl iodide, the test also gives an indication of the relative efficiency of the installed system. The test procedure is an adaptation of test procedures developed at the Savannah River Laboratory which were described in the Ninth AEC Cleaning Conference.*

High efficiency particulate filters are installed before and after the charcoal filters to minimize potential releases of particulates to the environment and to prevent clogging of the iodine filters. An efficiency of 99% is adequate to retain particulates that may be released to the reactor building following an accident. This will be demonstrated by testing with DOP at testing medium.

The 95% methyl iodide removal efficiency is based on the formula in GL 99-02 for allowable penetration [(100% - 90% credited in DBA analysis) divided by a safety factor of 2]. If the allowable penetration is $\leq 5\%$, the required removal efficiency is $\geq 95\%$. If laboratory tests for the adsorber material in one circuit of the Standby Gas Treatment System are unacceptable, all adsorber material in that circuit shall be replaced with adsorbent qualified according to Regulatory Guide 1.52. Any HEPA filters found defective shall be replaced with those qualified with Regulatory Position C.3.d of Regulatory Guide 1.52.

* D.R. Muhabier. "In Place Nondestructive Leak Test for Iodine Adsorbers." Proceedings of the Ninth AEC Air Cleaning Conference. USAEC Report CONF-660904, 1966

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Operation with the heaters on for a minimum of 15 continuous minutes at the frequency specified in the Surveillance Frequency Control Program demonstrates OPERABILITY of the system.