

From: Guzman, Richard
Sent: Thursday, March 16, 2017 7:56 AM
To: Villar, Enrique:(GenCo-Nuc)
Subject: Calvert Cliffs 1 and 2 - Request for Additional Information (RAI): License Amendment Request - Control Room Emergency Ventilation System (MF8406/MF8407)

Enrique,

By letter dated September 22, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML16266A086), as supplemented on November 10, 2016 (ADAMS Accession No. ML16315A112), Exelon Generation Company, LLC (the licensee) requested an amendment to the Operating License for Calvert Cliffs Nuclear Power Plant, Units 1 and 2. The proposed amendment would modify technical specifications (TSs) 3.3.8 "Control Room Recirculation Signal (CRRS)" and TS 3.7.8 "Control Room Emergency Ventilation System (CREVS)". The U.S. Nuclear Regulatory Commission (NRC) staff has reviewed the licensee's submittal and has determined that the below additional information is needed in order to complete the review. The RAI was discussed with your staff in a clarification call on March 15, 2017, and it was agreed that your response would be provided within 30 days of this e-mail transmittal which will be added to ADAMS as a publicly available document.

Thanks,

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Rich Guzman  
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**REQUEST FOR ADDITIONAL INFORMATION**  
**LICENSE AMENDMENT REQUEST**  
**CONTROL ROOM EMERGENCY VENTILATION SYSTEM**  
**CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2**  
**CAC NOS. MF8406 AND MF8407**  
**DOCKET NOS. 50-317 AND 50-318**

In a license amendment request (LAR) dated September 22, 2016 (ADAMS Accession No. ML16266A086), as supplemented by letter dated November 10, 2016 (ADAMS Accession No. ML16315A112), Exelon Generation Company, LLC (Exelon or the licensee) requested an amendment to the Calvert Cliffs Nuclear Power Plant, Units 1 and 2, Technical Specifications (TSs) 3.3.8 "Control Room Recirculation Signal (CRRS)" and TS 3.7.8 "Control Room Emergency Ventilation System (CREVS)". In order to complete its review, the NRC staff requests the following additional information:

**RAI-1**

The LAR stated that the CREV system was modified by adding leak tight hatches that cover the outside intake and exhaust openings and that the installation of the hatches altered the Control Room envelope (CRE) which resulted in the CREV system operating in full recirculation mode

during normal and accident conditions. The licensee is proposing to remove TS 3.7.8 Conditions "A" and "C" in its entirety and to retain TS 3.7.8 Condition "B" and renumber it as Condition "A". Current TS Conditions A and C address the inoperability of the outside air intake and exhaust dampers of the CREV. Current TS Action "B" relates to the inoperability of the Toilet area exhaust isolation valve. The retention of Condition "B" indicates that the operating toilet exhaust fan will result in a continuous drawn-in leakage into the CRE during normal conditions. Please explain this apparent inconsistency between the statements in the LAR and the TSs.

## **RAI-2**

The supplemental letter dated November 10, 2016, states that with the hatches installed and the system in permanent recirculation mode, the outside air intake and exhaust dampers no longer perform a safety function. Calvert Cliffs Updated Final Safety Analysis Report (UFSAR) Section 9.8.2.3, "Auxiliary Building Ventilating Systems," subsection "Control Room," contains the following statements:

In the event that both the non-safety related chiller and the safety-related condensers are rendered inoperable by a tornado, a post-tornado mode of cooling the Control Room and cable spreading rooms is available. In this mode of cooling, the fresh air dampers are fully opened, the recirculation dampers are fully closed, and the exhaust damper is fully opened to allow Control Room and cable spreading room cooling using outside air only.

[...]

With the isolation dampers closed, smoke can be evacuated from the isolated zone by means of an auxiliary fan. This fan is selectively connected to the return duct of any zone by operating motorized dampers in the auxiliary duct system. Air from the outside is allowed to enter the supply duct of the isolated zone by operating motorized dampers and manually opening the roof mounted hatch and damper. The operating panel for the motorized dampers and smoke removal fan is located just outside the Control Room entrance in the heater bay area.

Are any of the dampers and hatches discussed in the UFSAR the same dampers and the associated hatches discussed in the LAR? If they are, please explain how the removal of the dampers from the TSs will impact the functional capability of the dampers as described in the UFSAR.

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