From: Thadani, Mohan

**Sent:** Monday, May 19, 2014 9:59 AM

To: Wanda D Craft (Generation - 6) (wanda.d.craft@dom.com)

Cc: Purciarello, Gerard

**Subject:** LAR RE: Ultimate Heat Sink.

Wanda:

By letter dated May 3, 2013, Dominion Nuclear Connecticut, Inc. requested an amendment to revise the Millstone Power Station, Unit 3 Technical Specification 3/4 .7.5, "Ultimate Heat Sink," to increase the current ultimate heat sink (UHS) water temperature limit from 75 °F to 80°F.

The NRC staff has reviewed the request and identified that the license's request for change to Surveillance Requirement SR 4.7.5 does not include the most current revision to SR 4.7.5.

The NRC staff requests that the licensee provide a response to the following RAI within 30 days from the date of this request.

Best regards,

# Mohan & Ehadani

Senior Project Manager
Millstone, Ginna, and Constellation Fleet
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation
(301) 415-1476 Mohan.Thadani@nrc.gov



# MILLSTONE POWER STATION, UNIT 3 LICENSE AMENDMENT REQUEST PROPOSED TECHNICAL SPECIFICATIONS AMENDMENT SURVEILLANCE REQUIREMENT 3/4.7.5, ULTIMATE HEAT SINK DOCKET NOS. 50-423

# <u>RAI 1</u>

The license amendment request (LAR) of May 3, 2013 requests a change to Surveillance Requirement (SR) 4.7.5, which does not now include the most current revision of SR 4.7.5

The licensee is requested to provide the proposed change to SR 4.7.5 using the current revision.

## RAI 2

In the LAR for LCO 3.7.5 and SR 4.7.5, the licensee changed the parameter to be monitored from "average water temperature" to "water temperature."

The licensee is requested to explain the technical reasons and justify changing the parameter to be monitored as explained above.

## RAI 3

In the licensee's letter, dated January 15, 2014, as a response to request for additional information (RAI) 4, regarding the ESF air conditioning unit (3HVQ ACUS1A, 1B, 2A, and 2B) condensers, the licensee explained the seemingly low service water flow rate of 25 gpm and 33.2 gpm by allowing the service water (SW)  $\Delta T$  across the heat exchangers to increase to transfer the heat for condensing the R-22 Freon. With a SW inlet temperature of 80°F, the vendor data sheet has a  $\Delta T$  of 15.7°F, while the licensee's calculated  $\Delta T$ 's are 29.5°F and 24.4°F. The licensee justified the seemingly low SW flow rate by allowing higher SW  $\Delta T$ s. The licensee did not address the effect of the corresponding higher SW temperatures across the condensers on the condensing effects of the R-22, but called the results "reasonable."

Provide definitive statements, as appropriate, regarding the operability of the ESF air conditioning units to perform their safety functions and remove design heat loads under accident conditions with an 80°F SW inlet temperature and the high SW  $\Delta$ Ts and low flow rates described in your RAI response. Describe any adverse effect on the R-22 condensing function with the higher SW  $\Delta$ T and the ability of the ESF units to perform their safety functions.