

DEC 17 2010



U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

Serial No. 18-163  
NSS&L/MLC R0  
Docket Nos. 50-336/423  
License Nos. DPR-65  
NPF-49

**DOMINION ENERGY NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNITS 2 AND 3**  
**CHANGES TO ENHANCED SURVEILLANCE PROGRAM MONITORING FREQUENCY**  
**FOR LOSS OF FILL-OIL IN TRANSMITTERS MANUFACTURED BY ROSEMOUNT**

On December 22, 1992, the Nuclear Regulatory Commission (NRC) issued NRC Bulletin 90-01, Supplement 1, "Loss of Fill-Oil in Transmitters Manufactured by Rosemount," to update licensees on actions taken by the NRC in response to a series of Rosemount Model 1153 and Model 1154 transmitter failures caused by a loss of fill-oil. The NRC requested licensees to review the information for applicability to their stations and modify, as appropriate, their actions to address this issue. In letter dated March 4, 1993, Northeast Nuclear Energy Company (NNECO), the former owner of Millstone Power Station Units 2 and 3 (MPS2 and MPS3), responded to NRC Bulletin 90-01, Supplement 1. In this response, NNECO identified the Rosemount transmitters installed at MPS2 and MPS3 and the applicable surveillance method and surveillance frequency for each transmitter. Based on use of the enhanced surveillance monitoring program (described in the original NRC Bulletin 90-01, dated March 9, 1990), the specific applications for the transmitters, and the available backup indications, NNECO concluded that replacement of the transmitters provided no measurable gain with respect to nuclear safety.

NRC Bulletin 90-01, Supplement 1, states that for those Rosemount transmitters installed in high pressure ( $> 1500$  psi) systems that have met the Rosemount psi-month threshold criterion, the monitoring frequency may be extended to at least once every refueling frequency (but not exceeding 24 months), provided the monitoring interval is justified based upon transmitter performance and the NRC is provided a copy of the licensee justification to extend the monitoring frequency. For Rosemount transmitters installed in medium pressure ( $> 500$  psi and  $\leq 1500$  psi) systems that have met the Rosemount psi-month threshold criterion, the monitoring frequency may be discontinued at the licensee's discretion.

A review was recently performed by Dominion Energy Nuclear Connecticut, Inc. (DENC) to determine the status of the installed Rosemount transmitters at MPS2 and MPS3, and to evaluate changes to the monitoring frequency for those Rosemount transmitters that have reached the appropriate psi-month threshold criterion. The current status of the Rosemount transmitters identified in the March 4, 1993 response to the NRC is provided in the attachment to this letter (see "Current Status" column). The table shows that the Rosemount transmitters have either 1) met their psi-month threshold criterion, 2) been replaced, or 3) their system is no longer in use (out of service).

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For the Rosemount transmitters still installed in high pressure ( $> 1500$  psi) systems (i.e., NRC Bulletin 90-01, Supplement 1, Requested Actions 1a and 1b), the monitoring frequency will be extended to a refueling frequency (see "New Surveillance Frequency" column in the attached table) since the transmitters have reached the appropriate psi-month threshold criterion recommended by Rosemount. The extension of this frequency is justified based on years of satisfactory surveillance performance of the transmitters which provides sufficient evidence of their reliability and ability to perform their specific safety function. DENC will continue to monitor these transmitters using the enhanced surveillance monitoring program at a refueling frequency for the life of the transmitter.

For the Rosemount transmitters still installed in medium pressure ( $> 500$  psi and  $\leq 1500$  psi) systems (i.e., NRC Bulletin 90-01, Supplement 1, Requested Actions 1c and 1d), monitoring is no longer required since the transmitters have reached the appropriate psi-month threshold criterion recommended by Rosemount. Monitoring for these transmitters will be discontinued.

If you have any questions or require additional information, please contact Mr. Jeffry Langan at (860) 444-5544.

Sincerely,



J. R. Daugherty  
Site Vice President – Millstone

Attachment: Rosemount Transmitter Status Update

Commitments made in this letter: None

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**ATTACHMENT**

**ROSEMOUNT TRANSMITTER STATUS UPDATE**

**MILLSTONE POWER STATION, UNITS 2 AND 3  
DOMINION ENERGY NUCLEAR CONNECTICUT, INC.**

**Millstone Station Rosemount Transmitters\***

Transmitter	Function	Static Pressure	Original Surveillance Frequency	Surveillance Method	90-01 Category	Current Status	New Surveillance Frequency	NRC Notification Required?
3CHS-FT121	Charging Flow	2250	3 Times/60 days	CM*, RC	1b	TCM	Refueling	Yes
3CHS-FT142	RCP Seal H2O	2250	3 Times/60 days	CM*, RC	1b	TCM	Refueling	Yes
3CHS-FT143	RCP Seal H2O	2250	3 Times/60 days	CM*, RC	1b	Replaced	NLR	No
3CHS-FT144	RCP Seal H2O	2250	3 Times/60 days	CM*, RC	1b	Replaced	NLR	No
3CHS-FT145	RCP Seal H2O	2250	3 Times/60 days	CM*, RC	1b	TCM	Refueling	Yes
3FWS*LT551	SG LL Trip (RPS)	1000	3 Times/60 days	CM	1c	Replaced	NLR	No
3FWS*LT552	SG LL Trip (RPS)	1000	3 Times/60 days	CM	1c	Replaced	NLR	No
3FWS*LT553	SG LL Trip (RPS)	1000	3 Times/60 days	CM	1c	Replaced	NLR	No
3FWS*LT554	SG LL Trip (RPS)	1000	3 Times/60 days	CM	1c	Replaced	NLR	No
3HVC*PT73A	Air Storage	3000	Refueling	RC	1b	TCM System OOS	NLR	No
3HVC*PT73B	Air Storage	3000	Refueling	RC	1b	TCM System OOS	NLR	No
3MSS*PT514	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT515	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT516	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT524	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	Replaced	NLR	No
3MSS*PT525	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT526	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT534	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	Replaced	NLR	No
3MSS*PT535	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT536	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT544	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT545	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT546	SG LP Trip (RPS)	1000	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT505	Turb 1 <sup>st</sup> Stage	650	3 Times/60 days	CM	1c	TCM	NLR	No
3MSS*PT506	Turb 1 <sup>st</sup> Stage	650	3 Times/60 days	CM	1c	TCM	NLR	No
3RCS*FT414	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT415	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes

\* Table does not include low pressure (<100 psi) transmitters identified in NNECO letter B14381, dated March 4, 1993 since monitoring was not required.

(1) NRC notified of refueling calibration frequency in NNECO letter B14359, dated February 2, 1993.

**Millstone Station Rosemount Transmitters\***

Transmitter	Function	Static Pressure	Original Surveillance Frequency	Surveillance Method	90-01 Category	Current Status	New Surveillance Frequency	NRC Notification Required?
3RCS*FT416	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT424	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	Replaced	NLR	No
3RCS*FT425	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT426	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT434	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT435	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT436	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT444	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT445	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*FT446	RCS Flow Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*LT460	Pzr Hi Lvl Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*LT461	Pzr Hi Lvl Trip (RPS)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*PT403	RCS WR Pressure	2250	3 Times/60 days	CM	1b	Replaced	NLR	No
3RCS*PT403A	RCS WR Pressure	2250	Refueling	RC	1b	Replaced	NLR	No
3RCS*PT457	Pzr Press (RPS/ESF)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*PT458	Pzr Press (RPS/ESF)	2250	3 Times/60 days	CM	1a	TCM	Refueling	Yes
3RCS*PT49	RCS Ext Range	2250	Refueling	RC, CC	1b	TCM	Refueling	Yes
3RCS*PT50	RCS Ext Range	2250	Refueling	RC, CC	1b	TCM	Refueling	Yes
3SIH-FT917	Chg Pmp Discharge	2250	Refueling	RC	1b	TCM	Refueling	No <sup>(1)</sup>
3SIL-PT961	SI Tank – A Press	650	Refueling	RC	1d	Replaced	NLR	No
3SIL-PT963	SI Tank – B Press	650	Refueling	RC	1d	TCM	NLR	No
3SIL-PT965	SI Tank – C Press	650	Refueling	RC	1d	TCM	NLR	No
3SIL-PT967	SI Tank – D Press	650	Refueling	RC	1d	TCM	NLR	No
LT-110X	Pzr Level	2250	3 Times/60 days	OFIS, RC	1a	Replaced	NLR	No
LT-110Y	Pzr Level	2250	3 Times/60 days	OFIS, RC	1a	Replaced	NLR	No

\* Table does not include low pressure (<100 psi) transmitters identified in NNECO letter B14381, dated March 4, 1993 since monitoring was not required.

(1) NRC notified of refueling calibration frequency in NNECO letter B14359, dated February 2, 1993.

Table Key

(CC) Channel Checks performed by the Operations Department are conducted periodically. These checks compare the outputs to redundant channels and any loss of oil failures will be readily detected.

(CM) Computerized monitoring system is implemented to track both drift and drift rate. Data will be obtained and analyzed at a frequency of at least three times every 60 days with a 25% tolerance in modes 1 & 2.

(CM\*) These five transmitters are monitored by the computer monitoring program, however no redundancy is provided and therefore drift cannot be monitored. The variance of the signal will be monitored by the program at the specified frequency.

(NLR) No Longer Required

(NR) These transmitters with low operating pressures (<500psi) were formally included in an enhanced surveillance program. Under NRCB 90-01 Supplement 1 the enhanced surveillance program is no longer necessary. *(Note: these are not included in the updated table shown above).*

(OFIS) Millstone Unit 2 has two Rosemount transmitters installed (LT-110x and LT110y) used to monitor pressurizer level. These transmitters will be monitored at a minimum frequency of 3 times/60 days using Offsite Facility Information System (OFIS). Utilizing data from OFIS, a loss of oil from these transmitters will be detected prior to actual failure.

(OOS) Out of Service

(RC) Normal refueling calibration, in accordance with Rosemount recommendations for loss of oil fill situations, with cumulative drift monitored and recorded. This applies only to those transmitters not monitored for drift by the computer monitoring program.

(Refueling) Calibration to be done at least every refueling cycle but not to exceed 24 months.

(TCM) Threshold Criteria Met