



September 3, 2008

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
One White Flint North
11555 Rockville Pike
Rockville, MD 20852-2738

Serial No. 08-0251B
NLOS/GAW R0
Docket Nos. 50-336
50-423
License Nos. DPR-65
NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNITS 2 AND 3
SUPPLEMENTAL INFORMATION RELATED TO REQUEST FOR ADDITIONAL
INFORMATION REGARDING REACTOR COOLANT SYSTEM LEAKAGE
DETECTION SYSTEMS LICENSE AMENDMENT REQUEST (LBDCRS 07-MP2-
012 AND 07-MP3-032) (TAC NOS. MD6640 AND MD6641)

On August 15, 2007, Dominion Nuclear Connecticut, Inc. (DNC) submitted a request to the Nuclear Regulatory Commission (NRC) for an amendment to Technical Specification (TS) 3.3.3.1, "Radiation Monitoring," and TS 3.4.6.1, "Reactor Coolant System Leakage Detection Systems" for Millstone Power Station Units 2 and 3 (MPS2 and MPS3) (Serial No. 07-0449) that would require only one containment radioactivity monitor (particulate channel) and the containment sump level monitoring system to be operable in Modes 1, 2, 3, and 4. Following review of the license amendment request, the NRC issued a request for additional information (RAI). DNC responded to this request in letters dated May 27, 2008 (Serial No. 08-0251) and July 24, 2008 (Serial No. 08-0251A).

On August 21, 2008, a conference call was held between the NRC and DNC to further discuss DNC's response to RAI Question 4. As a result, it was determined that references to existing surveillance requirements (SR) (SR 4.4.6.2.1 for MPS2 and SR 4.4.6.2.1.d for MPS3) as proposed for TS 3.4.6.1 Actions a, b, and c, are not necessary. The attachments to this letter contain additional supplemental information related to RAI Question 4 and the revised marked-up TS pages deleting reference to the existing surveillance requirements.

The information provided in this letter does not affect the conclusion of the significant hazards consideration discussion provided in the August 15, 2007, DNC letter (Serial No. 07-0449).

cc: U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406-1415

C. J. Sanders
Project Manager
U.S. Nuclear Regulatory Commission
One White Flint North, Mail Stop 08-B3
11555 Rockville Pike
Rockville, MD 20852-2738

NRC Senior Resident Inspector
Millstone Power Station

Director
Bureau of Air Management
Monitoring and Radiation Division
CT Department of Environmental Protection
79 Elm St.
Hartford, CT 06106-5127

ATTACHMENT 1

LICENSE AMENDMENT REQUESTS (LBDCRS 07-MP2-012 and 07-MP3-032)

RCS LEAKAGE DETECTION SYSTEMS RAI

QUESTION 4 SUPPLEMENTAL INFORMATION

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

RCS Leakage Detection RAI
Question 4 Supplemental Information

As discussed in the conference call on this topic between the Nuclear Regulatory Commission (NRC) and Dominion Nuclear Connecticut, Inc. (DNC) on August 21, 2008, DNC is providing additional supplemental information to Question 4 related to the NRC's request for additional information (RAI) dated May 13, 2008.

Question 4

Explain how the proposed action statements affect the redundancy and minimal functionality of leak detection instrumentation necessary to support the leak-before-break analysis.

Discussion

In letters dated August 15, 2007 and July 24, 2008 (Serial Nos. 07-0449 and 08-0251A, respectively), DNC proposed changes to TS 3.4.6.1 Actions a and b, and also proposed a new TS 3.4.6.1 Action c, for both MPS2 and MPS3. Specifically, DNC proposed that when any or both of the TS-required reactor coolant system (RCS) leakage detection monitoring systems are inoperable, an RCS water inventory balance would be performed (at specified frequencies) in accordance with existing surveillance requirements (SR) (i.e., SR 4.4.6.2.1 for MPS2 and SR 4.4.6.2.1.d for MPS3).

In a teleconference call on August 21, 2008, the NRC staff raised questions regarding DNC's response to RAI Question 4 provided in letter dated July 24, 2008 (Serial No. 08-0251A). Based on these discussions, it was determined that reference to these existing SRs is not necessary. Hence, DNC is proposing to remove the references to SR 4.4.6.2.1 (for MPS2) and SR 4.4.6.2.1.d (for MPS3) within the proposed TS 3.4.6.1 Actions a, b, and c.

DNC Response

DNC is proposing the following changes to Technical Specification (TS) 3.4.6.1 Actions a, b, and c.

MPS2

Proposed TS 3.4.6.1 Actions a, b, and c

- a. With both of the containment atmosphere particulate radioactivity monitoring channels inoperable, operation may continue for up to 30 days provided:

1. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity at least once per 24 hours, or
2. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in COLD SHUTDOWN within the next 36 hours.

- b. With the containment sump level monitoring system inoperable, operation may continue for up to 30 days provided:

1. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in COLD SHUTDOWN within the next 36 hours.

- c. With both the containment atmosphere particulate radioactivity monitoring channels inoperable and the containment sump level monitoring system inoperable, operation may continue for up to 72 hours provided:

1. Immediate action is initiated to restore either a containment atmosphere particulate radioactivity monitoring channel or the containment sump level monitoring system to OPERABLE status, and
2. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity within 6 hours and at least once per 6 hours thereafter, and
3. A Reactor Coolant System water inventory balance is performed within 6 hours and at least once per 6 hours thereafter.

Otherwise, be in COLD SHUTDOWN within the next 36 hours.

MPS3

Proposed TS 3.4.6.1 Actions a, b, and c

- a. With the Containment Atmosphere Particulate Radioactivity Monitor inoperable, operations may continue for up to 30 days provided:
1. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity at least once per 24 hours, or

2. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- b. With the Containment Drain Sump Monitoring System inoperable, operation may continue for up to 30 days provided:
 1. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- c. With the Containment Atmosphere Particulate Radioactivity Monitor inoperable and the Containment Drain Sump Monitoring System inoperable, operation may continue for up to 72 hours provided:
 1. Immediate action is initiated to restore either the Containment Atmosphere Particulate Radioactivity Monitor or the Containment Drain Sump Monitoring System to OPERABLE status, and
 2. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity within 6 hours and at least once per 6 hours thereafter, and
 3. A Reactor Coolant System water inventory balance is performed within 6 hours and at least once per 6 hours thereafter.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

ATTACHMENT 2

LICENSE AMENDMENT REQUEST (LBDCR 07-MP2-012)
RCS LEAKAGE DETECTION SYSTEMS
REVISED MARKED-UP TECHNICAL SPECIFICATION PAGES

**DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2**

August 1, 1975

REACTOR COOLANT SYSTEM

3/4.4.6 REACTOR COOLANT SYSTEM LEAKAGE

LEAKAGE DETECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.6.1 The following Reactor Coolant System leakage detection systems shall be OPERABLE:

- a. One of two channels A containment atmosphere particulate radioactivity monitoring system, and
- b. The containment sump level monitoring system, and
- c. A containment atmosphere gaseous radioactivity monitoring system.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Insert A →

- a. With one of the above radioactivity monitoring leakage detection systems inoperable, operations may continue for up to 30 days provided:
 - 1. The other two above required leakage detection systems are OPERABLE, and
 - 2. Appropriate grab samples are obtained and analyzed at least once per 24 hours;
 otherwise, be in COLD SHUTDOWN within the next 36 hours.
- b. With the containment sump level monitoring system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in COLD SHUTDOWN within the next 36 hours.

SURVEILLANCE REQUIREMENTS

4.4.6.1 The leakage detection systems shall be demonstrated OPERABLE by:

- a. Containment atmosphere gaseous and particulate monitoring systems performance of CHANNEL CHECK, CHANNEL CALIBRATION and CHANNEL FUNCTIONAL TBST at the frequencies specified in Table 4.3-3, and
- b. Containment sump level monitoring system performance of CHANNEL CALIBRATION TEST at least once per 18 months.

Millstone Power Station Unit 2
Technical Specification 3.4.6.1
Leakage Detection Systems
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Insert A

- a. With both of the containment atmosphere particulate radioactivity monitoring channels inoperable, operation may continue for up to 30 days provided:

1. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity at least once per 24 hours, or
2. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in COLD SHUTDOWN within the next 36 hours.

- b. With the containment sump level monitoring system inoperable, operation may continue for up to 30 days provided:

1. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in COLD SHUTDOWN within the next 36 hours.

- c. With both the containment atmosphere particulate radioactivity monitoring channels inoperable and the containment sump level monitoring system inoperable, operation may continue for up to 72 hours provided:

1. Immediate action is initiated to restore either a containment atmosphere particulate radioactivity monitoring channel or the containment sump level monitoring system to OPERABLE status, and
2. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity within 6 hours and at least once per 6 hours thereafter, and
3. A Reactor Coolant System water inventory balance is performed within 6 hours and at least once per 6 hours thereafter.

Otherwise, be in COLD SHUTDOWN within the next 36 hours.

ATTACHMENT 3

LICENSE AMENDMENT REQUEST (LBDCR 07-MP3-032)

RCS LEAKAGE DETECTION SYSTEMS

REVISED MARKED-UP TECHNICAL SPECIFICATION PAGES

**DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 3**

March 16, 2006

REACTOR COOLANT SYSTEM

3/4.4.6 REACTOR COOLANT SYSTEM LEAKAGE

LEAKAGE DETECTION SYSTEMS

LIMITING CONDITION FOR OPERATION

3.4.6.1 The following Reactor Coolant System Leakage Detection Systems shall be OPERABLE:

- a. ~~Either~~ The Containment Atmosphere ~~Gaseous or~~ Particulate Radioactivity Monitoring System, and
- b. The Containment Drain Sump ~~Level or Pumped Capacity~~ Monitoring System

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- Insert B →
- a. With both the Containment Atmosphere Gaseous and Particulate Radioactivity Monitors inoperable, operation may continue for up to 30 days provided the Containment Drain Sump Level or Pumped Capacity Monitoring System is OPERABLE and gaseous grab samples of the containment atmosphere are obtained at least once per 12 hours and analyzed for gross noble gas activity within the subsequent 2 hours; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
 - b. With the Containment Drain Sump Level or Pumped Capacity Monitoring System inoperable, operation may continue for up to 30 days provided either the Containment Atmosphere Gaseous or Particulate Radioactivity Monitoring System is OPERABLE; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.4.6.1 The Leakage Detection Systems shall be demonstrated OPERABLE by:

- a. Containment Atmosphere ~~Gaseous and~~ Particulate Radioactivity Monitoring System performance of CHANNEL CHECK, CHANNEL CALIBRATION, and ANALOG CHANNEL OPERATIONAL TEST at the frequencies specified in Table 4.3-3, and
- b. Containment Drain Sump ~~Level and Pumped Capacity~~ Monitoring System performance of CHANNEL CALIBRATION at least once per 24 months.

Millstone Power Station Unit 3
Technical Specification 3.4.6.1
Leakage Detection Systems
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Insert B

- a. With the Containment Atmosphere Particulate Radioactivity Monitor inoperable, operations may continue for up to 30 days provided:
1. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity at least once per 24 hours, or
 2. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- b. With the Containment Drain Sump Monitoring System inoperable, operation may continue for up to 30 days provided:
1. A Reactor Coolant System water inventory balance is performed at least once per 24 hours during steady state operation.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- c. With the Containment Atmosphere Particulate Radioactivity Monitor inoperable and the Containment Drain Sump Monitoring System inoperable, operation may continue for up to 72 hours provided:
1. Immediate action is initiated to restore either the Containment Atmosphere Particulate Radioactivity Monitor or the Containment Drain Sump Monitoring System to OPERABLE status, and
 2. Appropriate grab samples of the containment atmosphere are obtained and analyzed for particulate radioactivity within 6 hours and at least once per 6 hours thereafter, and
 3. A Reactor Coolant System water inventory balance is performed within 6 hours and at least once per 6 hours thereafter.

Otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.