

Dominion Nuclear Connecticut, Inc.  
Millstone Power Station  
Rope Ferry Road  
Waterford, CT 06385



**Dominion™**

**NOV 5 2003**

Docket No. 50-423  
B18997

RE: 10 CFR 50.90

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

Millstone Power Station, Unit No. 3  
Response to a Request for Additional Information  
License Basis Document Change Request 3-5-02  
Limiting Safety System Settings and Instrumentation (TAC NO. MB6166)

In an August 7, 2002,<sup>(1)</sup> license amendment request, Dominion Nuclear Connecticut, Inc. (DNC) proposed changes to the Millstone Unit No. 3 Technical Specifications relating to the facility's limiting safety system settings and instrumentation technical specifications.

On August 5, 2003, and September 24, 2003, conference calls were held with the Nuclear Regulatory Commission (NRC) to discuss the issues surrounding the DNC proposal related to actions to be taken in response to loss of multiple channels of 4 KV bus undervoltage instrumentation, i.e., the proposed ACTION 27 to Technical Specification 3.3.2, Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation," Functional Unit 8, "Loss of Power." Based on the discussion, DNC agreed to modify the proposed action in response to loss of multiple channels of 4 KV bus undervoltage. To that end, Attachment 1 provides discussion on the modified action statement. Attachment 2 provides the markup of the original retyped pages associated with Technical Specification 3.3.2. Attachment 3 provides the newly revised, retyped page of Technical Specification 3.3.2.

The change provided in this submittal will not affect the conclusions of the Safety Summary and Significant Hazards Consideration Discussion provided in the DNC August 7, 2002, submittal.

There are no regulatory commitments contained within this letter.

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<sup>(1)</sup> J. A. Price to U.S. NRC, "Millstone Nuclear Power Station, Unit No. 3, License Basis Document Change Request (LBDCR) 3-5-02, Limiting Safety System Settings and Instrumentation," August 7, 2002.

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If you should have any questions regarding this submittal, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

DOMINION NUCLEAR CONNECTICUT, INC.

  
\_\_\_\_\_  
J. Alan Price  
Site Vice President - Millstone

Sworn to and subscribed before me

this 5 day of NOVEMBER, 2003

Diane M. Phillipio  
Notary Public

My Commission expires \_\_\_\_\_  
**DIANE M. PHILLIPO**  
**NOTARY PUBLIC**  
**MY COMMISSION EXPIRES 12/31/2005**

Attachments (3)

cc: H. J. Miller, Region I Administrator  
V. Nerses, NRC Senior Project Manager, Millstone Unit No. 3  
Millstone Senior Resident Inspector

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

Docket No. 50-423  
B18997

**Attachment 1**

**Millstone Power Station, Unit No. 3**

**Response to a Request for Additional Information  
License Basis Document Change Request 3-5-02  
Limiting Safety Systems Setting and Instrumentation (TAC NO. MB6166)**

**Response to a Request for Additional Information  
License Basis Document Change Request 3-5-02  
Limiting Safety Systems Settings and Instrumentation**

On August 5, 2003, and September 24 2003, conference calls were held with the Nuclear Regulatory Commission (NRC) to discuss the issues surrounding the Dominion Nuclear Connecticut, Inc. (DNC) proposal related to actions to be taken in response to loss of multiple channels of 4 KV bus undervoltage, i.e., the proposed ACTION 27 to Technical Specification 3.3.2, Table 3.3-3, "Engineered Safety Features Actuation System Instrumentation," Functional Unit 8, "Loss of Power." Based on these discussions, DNC agreed to modify ACTION 27.

The proposed modified ACTION 27 will state:

**ACTION 27**

- a. With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:
  1. The inoperable channel is placed in the tripped condition within 6 hours, and
  2. The Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.2.1.
  
- b. With the number of OPERABLE Channels one less than the Minimum Channels required to be OPERABLE:
  1. Place one channel in bypass and other channel in trip condition within one hour and Restore one channel to OPERABLE status in 48 hours,  
OR
  2. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

**Discussion:**

Each of the redundant 4.16 KV Class 1E bus at Millstone Unit No. 3 is equipped with two sets of four redundant and independent undervoltage relays. The first set of four relays is set to provide a two-out-of-four undervoltage signal upon loss of bus voltage. The second set of four relays is set to provide a two-out-of-four undervoltage signal on a sustained undervoltage (degraded voltage).

ACTION Statement 27a applies if one channel less than total number of channels is inoperable for one or both functions (loss of voltage or grid degraded voltage). Since

two channels per train are required to start a Diesel Generator, one channel can be placed in the tripped condition resulting in a one-out-of-three logic remaining for mitigation of a degraded voltage or a loss of voltage event. This ACTION is identical with the current Technical Specification Table 3.3-3, Action 20 (no changes are proposed).

ACTION 27b is proposed if two channels are inoperable for one or both functions (loss of voltage or degraded voltage) per bus. The ACTION stipulates that one channel be placed in bypass and other channel in tripped condition within one hour. In this situation, even though two channels are inoperable, with one channel bypassed and one tripped, the protection system is in one-out-of-two logic, which is adequate to ensure that no random failure will prevent system operation. This ACTION also allows 48 hours to repair the bypassed or inoperable channel before the plant is required to shut down to MODE 3 (HOT STANDBY). The time allowed to repair one channel is reasonable to repair the channel while ensuring that the risk involved in operating in that condition is acceptable. The 48 hour restoration time is based upon industry operating experience, which has demonstrated that a random failure of an additional channel is rare event during any given 48 hour period. After one channel is restored to OPERABLE status, the provisions of ACTION 27a still apply to the remaining inoperable channel.

Attachment 2

Millstone Power Station, Unit No. 3

License Basis Document Change Request 3-5-02  
Limiting Safety System Settings and Instrumentation  
Mark Up of the Original Retyped Page

**License Basis Document Change Request 3-5-02  
Limiting Safety System Settings and Instrumentation  
Marked Up Page**

The following Technical Specification page has been proposed to be changed:

Technical Specification Section Number	Title(s) of Section(s)	Page and Revision Numbers
Table 3.3-3	Engineered Safety Features Actuation System Instrumentation	3/4 3-22 Amend 203

TABLE 3.3-3 (Continued)

ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION

<u>FUNCTIONAL UNIT</u>	<u>TOTAL NO. OF CHANNELS</u>	<u>CHANNELS TO TRIP</u>	<u>MINIMUM CHANNELS OPERABLE</u>	<u>APPLICABLE MODES</u>	<u>ACTION</u>
6. Auxiliary Feedwater (Continued)					
f. Containment Depressurization Actuation (CDA) Start Motor-Driven Pumps	See Item 2. above for all CDA functions and requirements.				
7. Control Building Isolation					
a. Manual Actuation	2	1	2	*	19
b. Manual Safety Injection Actuation	2	1	2	1, 2, 3, 4	19
c. Automatic Actuation Logic and Actuation Relays	2	1	2	1, 2, 3, 4	14
d. Containment Pressure-- High-1	3	2	2	1, 2, 3	16
e. Control Building Inlet Ventilation Radiation	2/intake	1	2/intake	*	18
8. Loss of Power					
a. 4 kV Bus Under-voltage-Loss of Voltage	4/bus	2/bus	3/bus	1, 2, 3, 4	27
b. 4 kV Bus Undervoltage-Grid Degraded Voltage	4/bus	2/bus	3/bus	1, 2, 3, 4	27

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3/4 3-22

Amendment No. 74, 87, 203,

FOR INFORMATION ONLY



TABLE 3.3-3 (Continued)  
ACTION STATEMENTS (Continued)

- ACTION 20 - With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:
- a. The inoperable channel is placed in the tripped condition within 6 hours, and
  - b. the Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.2.1.
- ACTION 21 - With less than the Minimum Number of Channels OPERABLE, within 1 hour determine by observation of the associated permissive annunciator window(s) that the interlock is in its required state for the existing plant condition, or apply Specification 3.0.3.
- ACTION 22 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 6 hours or be in at least HOT STANDBY within the next 6 hours and in at least HOT SHUTDOWN within the following 6 hours; however, one channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.
- ACTION 23 - With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours.
- ACTION 24 - With the number of OPERABLE channels one less than the Total Number of Channels, restore the inoperable channel to OPERABLE status within 48 hours or declare the associated valve inoperable and take the ACTION required by Specification 3.7.1.5.
- ACTION 25 - With the number of OPERABLE channels one less than the Minimum Channels OPERABLE requirement, restore the inoperable channel to OPERABLE status within 6 hours or be in at least HOT STANDBY within the next 6 hours; however, one channel may be bypassed for up to 4 hours for surveillance testing per Specification 4.3.2.1 provided the other channel is OPERABLE.
- ACTION 26 - With less than the Minimum Channels OPERABLE requirement, the containment purge and exhaust valves shall be maintained closed. Fuel movement and CORE ALTERATIONS may continue. The containment radiation monitoring channels required for containment area purge and exhaust isolation are not required to be OPERABLE during the performance of Type A containment leakage rate tests.

TABLE 3.3-3 (Continued)  
ACTION STATEMENTS (Continued)

ACTION 27 - a. With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:

1. The inoperable channel is placed in the tripped condition within 6 hours, and
2. the Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.2.1.

b. With the number of OPERABLE channels one ~~or more~~ <sup>2 Delete</sup> less than the Minimum Channels required OPERABLE:

1. Restore all but one channel to OPERABLE status within 1 hour, or
2. declare the associated Emergency Diesel Generator inoperable and enter the applicable action statement(s) of Technical Specification 3.8.1.1, "A.C. Sources - Operating."

1. Place one channel in bypass and other channel in trip condition within one hour and Restore one channel to OPERABLE status in 48 hours,

OR

2. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

Attachment 3

Millstone Power Station, Unit No. 3

License Basis Document Change Request 3-5-02  
Limiting Safety System Settings and Instrumentation  
Retyped Page

TABLE 3.3-3 (Continued)  
ACTION STATEMENTS (Continued)

- ACTION 27 - a. With the number of OPERABLE channels one less than the Total Number of Channels, STARTUP and/or POWER OPERATION may proceed provided the following conditions are satisfied:
1. The inoperable channel is placed in the tripped condition within 6 hours, and
  2. the Minimum Channels OPERABLE requirement is met; however, the inoperable channel may be bypassed for up to 4 hours for surveillance testing of other channels per Specification 4.3.2.1.
- b. With the number of OPERABLE channels one less than the Minimum Channels required OPERABLE:
1. Place one channel in bypass and other channel in trip condition within one hour and Restore one channel to OPERABLE status in 48 hours,
- OR
2. Be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.