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

Washington, DC 20555

**U.S. Nuclear Regulatory Commission** 

Attention: Document Control Desk



JUN 9 2006

Serial No. 06-477 MPS Lic/GJC R0 Docket No. 50-336 License No. DPR-65

# DOMINION NUCLEAR CONNECTICUT, INC. MILLSTONE POWER STATION UNIT 2 LICENSEE EVENT REPORT 2006-004-00, FAILURE TO ENTER THE TECHNICAL SPECIFICATION ACTION STATEMENT FOR INOPERABLE REACTOR PROTECTION SYSTEM TRIPS

This letter forwards Licensee Event Report (LER) 2006-004-00, documenting a historical incident that was determined to be reportable at Millstone Power Station Unit 2, on April 13, 2006. This LER is being submitted pursuant to 10 CFR 50.73(a)(2)(i)(B), as operation in a condition prohibited by the Technical Specifications.

If you have any questions or require additional information, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

Vice President - Millstone

IE22

Attachments: 1

Commitments made in this letter: None.

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

> Mr. V. Nerses Senior Project Manager U.S. Nuclear Regulatory Commission One White Flint North 11555 Rockville Pike Mail Stop 8C2 Rockville, MD 20852-2738

Mr. S. M. Schneider NRC Senior Resident Inspector Millstone Power Station Attachment 1

Licensee Event Report 2006-004-00, Failure to Enter the Technical Specification Action Statement for Inoperable Reactor Protection System Trips

> Millstone Power Station Unit 2 Dominion Nuclear Connecticut, Inc. (DNC)

|   |  |                               |                                       |  |  |                                   |   |                                      |                                |   |                              |                         | -                               |                                      |                       |  |
|---|--|-------------------------------|---------------------------------------|--|--|-----------------------------------|---|--------------------------------------|--------------------------------|---|------------------------------|-------------------------|---------------------------------|--------------------------------------|-----------------------|--|
| NRC FORM 366 U.S. NUCLEAR REGULATORY  |  |                               |                                       |  | APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2007 |                                   |   |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
| (6-2004) COMMISSION   |  |                               |                                       |  |  |                                   | Estimated burden per response to comply with this mandatory information collection request: 50 hours.<br>Reported lessons learned are incorporated into the licensing process and fed back to industry. Send  |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
| LICENSEE EVENT REPORT (LER)   |  |                               |                                       |  |  |                                   | comments regarding burden estimate to the Hecords and FURA/Privacy Service Branch (1-5 F52), U.S.<br>Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to<br>infoccillects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs. NEOB-  |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
| (See reverse for required number of digits/characters for each block)   |  |                               |                                       |  |  | <)                                | Reported lessons learned are incorporated into the licensing process and fed back to industry. Send<br>comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S.<br>Nuclear Regulatory Commission, Washington, DC 20555-0001, or by intermet e-mail to<br>infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-<br>10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to<br>impose information collection does not display a currently valid OMB control number, the NRC may not<br>conduct or sponsor, and a person is not required to respond to, the information collection. |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
| 1. FACILITY NAME  |  |                               |                                       |  |  |                                   | 2. DOCKET NUMBER  |                                      |                                |   |                              | 3. PAGE                 |                                 |                                      |                       |  |
| Millstone Power Station - Unit 2  |  |                               |                                       |  |  | 05000336                          |   |                                      |                                |   | 1 OF 3                       |                         |                                 |                                      |                       |  |
| 4. TITLE  |  |                               |                                       | diantian Anti  |  | <b>0</b> 4-4                      |   |                                      | - 1-1-                         |   |                              |                         |                                 | Trine                                |                       |  |
| Failure to Enter the Technical Specification Action Statement for Inoperable Reactor Protection System Trips<br>5. EVENT DATE 6. LER NUMBER 7. REPORT DATE 8. OTHER FACILITIES INVOLVED   |  |                               |                                       |  |  |                                   |   |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
| 5. EV   | 5. EVENT DATE                          |                               |                                       | 6. LER NUMBER  |  |                                   | EPOR  |                                      |                                |   |                              | DOCKET NUMBER           |                                 |                                      |                       |  |
| МО  | DAY                                    | YEAR                          | YEAR                                  | SEQUENTIAL<br>NUMBER                                   | REV<br>NO.                                       | мо                                | DAY   | YEAR                                 |                                |   |                              | 05000                   |                                 |                                      |                       |  |
| 04  | 13                                     | 2006                          | 200                                   | 6 - 004 - 00   | 0  | 06                                | 09  | 2006                                 | FA                             | CILITY NAME                                 |                              | DOCKET NUMBER<br>05000  |                                 |                                      |                       |  |
| 9. OPERATING  |  | 1                             | 11. THIS REPORT IS SUBMI              |  |  |                                   |   |                                      |                                |   |                              |                         | 0 CFR §: (Check all that apply) |                                      |                       |  |
|   |  |                               |                                       | 20.2201(b) 20.2  |  |                                   | )3(a)(3)(ii)  |                                      | <u> </u>                       | 50.73(a)(2)(ii                              |                              |                         | _                               | )(2)(ix)(A)                          |                       |  |
| 10. POWER LE  | VEL                                    | 100                           |                                       | 20.2201(d)   |  | 20.2203                           | <u></u>   |                                      |                                | 50.73(a)(2)(ii                              |                              |                         | <u> </u>                        | )(2)(x)                              |                       |  |
|   |  |                               |                                       |  | 1  | 0.36(c)(1)(i)(A)                  |   |                                      | 50.73(a)(2)(i<br>50.73(a)(2)(v |   |                              | 3.71(a<br>3.71(a        |                                 |                                      |                       |  |
|   |  |                               | 20.2203(a)(2)(i)<br>20.2203(a)(2)(ii) |  |  | 50.36(c)(1)(ii)(A)<br>50.36(c)(2) |   |                                      |                                | 50.73(a)(2)(v                               |                              |                         | THEF                            |                                      |                       |  |
|   |  |                               | 20.2203(a)(2)(iii)                    |  |  | 50.46(a                           |   | )                                    |                                | 50.73(a)(2)(v                               |                              |                         |                                 | bstract b                            | elow or               |  |
|   |  |                               | 20.2203(a)(2)(iv)                     |  |  | 50.73(a                           | )(2)(i)   | (A)                                  |                                |   |                              |                         |                                 | m 366A                               |                       |  |
|   |  | a shi ta                      |                                       |  |  | 50.73(a                           | )(2)(i)   | (B)                                  |                                | 50.73(a)(2)(v                               | /ii)                         | din.                    | arta e<br>Sa                    | t kok                                |                       |  |
|   |  |                               | 20.2203(a)(2)(vi)                     |  |  | 50.73(a                           | 50.73(a)(2)(!)(C)   |                                      |                                | 50.73(a)(2)(viii)(A)                        |                              |                         |                                 |                                      |                       |  |
|   |  | 20.2203(a)(3)(i)              |                                       |  | 50.73(a)(2)(ii)(A)                               |                                   |   |                                      | 50.73(a)(2)(viii)(B)           |   |                              |                         |                                 |                                      |                       |  |
|   |  |                               |                                       | 12. L  | ICE  | NSEE CO                           | ONTA  | CT FOR TH                            | IS L                           | .ER   |                              |                         |                                 |                                      |                       |  |
| NAME  |  | _                             |                                       |  |  |                                   |   |                                      | i -                            | LEPHONE NUM                                 | •                            | ude Are                 | ea Cod                          | e)                                   |                       |  |
| David W. Do   | odson, Su                              | perviso                       | or Nucle                              | ear Station L  | ice.   | nsing                             |   |                                      | 86                             | 60-447-1791                                 |                              |                         |                                 |                                      |                       |  |
|   |  | 13. COM                       | PLETE C                               | ONE LINE FOF   | EA   | сн сом                            | PONE  | ENT FAILUF                           | RED                            | DESCRIBED IN                                | N THIS R                     | EPOR                    | T                               |                                      |                       |  |
| CAUSE SYSTEM  |  | CON                           | PONENT                                |  |  | PORTABLI                          | E   | CAUSE                                |                                | SYSTEM COMPON                               |                              | NENT                    | IENT MANU-<br>FA CTURER         |                                      | REPORTABLE<br>TO EPIX |  |
|   |  |                               |                                       |  |  |                                   | -1  |                                      |                                |   |                              |                         |                                 | OTONEN                               |                       |  |
|   |  |                               |                                       |  |  |                                   | 1   |                                      |                                |   |                              | 1                       |                                 |                                      |                       |  |
|   |  |                               |                                       | L REPORT EX  |  |                                   |   | r                                    |                                | 15. EXPE                                    | CTED                         | MO                      | NTH                             | DAY                                  | YEAR                  |  |
|   | yes, compl                             | ete EXPI                      | ECTED S                               | UBMISSION  | DATE   | Ξ).                               | $\square$   | NO                                   | SUBMISSION<br>DATE             |   |                              |                         |                                 |                                      |                       |  |
| 16. ABSTRACT  | (Limit to 1                            | 400 spac                      | ces, I.e., a                          | approximately  | 15 si  | ngle-spa                          | cod ty  | pewritten lir                        | ies)                           |   |                              |                         |                                 |                                      |                       |  |
| Specifica<br>protective<br>Range N  | tion Limit<br>e (RPS) in<br>uclear Ins | ing Cor<br>hstrume<br>strumer | ndition f<br>entation<br>ntation (    | pection acti<br>or Operatio<br>channels a<br>WRNI) cha | n (T<br>.nd I<br>nne                             | S LCO<br>bypass<br>ls were        | ) 3.3<br>es of<br>rem   | 1.1, which<br>table 3.3<br>oved from | :h r<br>-1 :<br>n s:           | equires that<br>shall be OP<br>ervice at po | t, "as a<br>ERABL<br>wer wit | minii<br>.E." I<br>hout | mum<br>Histo<br>decla           | , the rea<br>rically, \<br>aring the | actor<br>Vide<br>Ə    |  |
| associated channel of Thermal Margin/Low Power (TM/LP), Reactor Coolant System (RCS) Low – Flow, and Reactor<br>Power Level – High inoperable. With the WRNI input inoperable, the associated automatic bypass reset function for<br>the affected channel is also inoperable. |  |                               |                                       |  |  |                                   |   |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
| It was identified that this condition occurred multiple times over the last three years, and for a duration that exceeded the allowed outage time and shutdown time of the associated TSAS.   |  |                               |                                       |  |  |                                   |   |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
| On this basis the condition is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B), as operation in a condition prohibited by the Technical Specifications.   |  |                               |                                       |  |  |                                   |   |                                      |                                |   |                              |                         |                                 |                                      |                       |  |
|   |  |                               |                                       | a weaknes<br>Bypass Ren                                |  |                                   |   |                                      | ow                             | ledge of the                                | relatio                      | nship                   | o betv                          | ween th                              | e                     |  |

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There were no safety consequences associated with this event.

#### NRC FORM 366A U.S. NUCLEAR REGULATORY COMMISSION (1-2001)LICENSEE EVENT REPORT (LER) 1. FACILITY NAME 2. DOCKET 6. LER NUMBER 3. PAGE SEQUENTIAL REVISION YEAR Millstone Power Station - Unit 2 05000336 2 OF 3 NUMBER NUMBER 2006 - 004 -00 NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17) 1. Background For MPS Unit 2, the Reactor Protection System (RPS) [JC] consists of 4 separate channels each containing a bistable trip unit for the following parameters: Reactor Power Level – High Steam Generator Water Level – Low Reactor Coolant Flow – Low Local Power Density – High Pressurizer Pressure – High Thermal Margin/Low Pressure (TM/LP) Containment Pressure – High Loss of Turbine - Hydraulic Fluid Pressure - Low Steam Generator Pressure - Low

The TM/LP, and the Reactor Coolant System (RCS) [AB] Low Flow reactor trips, and the  $\Delta$ T input to the Reactor Power Level – High reactor trip may be bypassed if reactor power, as determined by the Wide Range Nuclear Instrumentation (WRNI), is less than 5% rated thermal power. Above this power level the ability to bypass these trips/inputs is automatically removed.

While the WRNIs are not specifically required by TS to be operable in Modes 1, and 2, they provide input to the automatic bypass defeat function for the TM/LP, RCS Low Flow, and Reactor Power Level – High RPS trips. These trips are required in Modes 1 and 2. TS LCO 3.3.1.1 requires that, "as a minimum, the reactor protective (RPS) instrumentation channels and bypasses of table 3.3-1 shall be OPERABLE." If a WRNI channel is removed from service, the automatic removal of the TM/LP, RCS Low Flow, and Reactor Power Level – High bypass is also lost for that channel.

## 2. Event Description

Technical Specification Action Statement (TSAS) 3.3.1.1 Action 2 requires that with the number of operable channels one less than the total number of channels, "operation may continue" provided the inoperable channel is placed in either the bypassed or tripped condition within 1 hour. Failure to place the channel in bypass or trip would require entry into TSAS 3.0.3 to facilitate a shutdown of the unit.

A review of the maintenance history for the last three years indicated that on several occasions (10) the WRNI channels were calibrated in Mode 1. During this maintenance activity the TM/LP, RCS Low Flow, and Reactor Power Level – High reactor trips were not placed in the bypassed or tripped condition per TSAS 3.3.1.1 Action 2, and TSAS 3.0.3 was not entered. In each of these instances the duration of the maintenance activity exceeded the time allowed by TSAS for completion of the required actions. On this basis the condition is reportable pursuant to 10 CFR 50.73(a)(2)(i)(B), as operation in a condition prohibited by the Technical Specifications.

## 3. <u>Cause</u>

The cause was determined to be a weakness in licensed operator knowledge of the relationship between the WRNIs and the RPS Automatic Bypass Defeat function in that although the WRNIs are not specifically required by TS to be operable in Modes 1, and 2, they provide input to the automatic bypass defeat function for the TM/LP, RCS Low Flow, and Reactor Power Level – High RPS trips. These trips are required in Modes 1 and 2.

## NRC FORM 366A (1-2001) LICENSEE EVENT REPORT (LER)

| ICENSEE EVENT REPORT (LER)       |           |      |                      |                    |         |
|----------------------------------|-----------|------|----------------------|--------------------|---------|
| 1. FACILITY NAME                 | 2. DOCKET |      | 6. LER NUMBE         | R                  | 3. PAGE |
| Millstone Power Station - Unit 2 | 05000336  | YEAR | SEQUENTIAL<br>NUMBER | REVISION<br>NUMBER | 3 of 3  |
| : •                              |           | 2006 | - 004                | 00                 | l       |

NARRATIVE (If more space is required, use additional copies of NRC Form 366A) (17)

## 4. Assessment of Safety Consequences

In order to bypass the TM/LP, RCS Low Flow, and Reactor Power Level – High reactor trips, the reactor must be < 5% reactor thermal power and the Zero Mode Bypass Switch must be in the bypass position. During the calibration of the WRNIs the Zero Mode Bypass Switch is in the normal (off) position, therefore, the TM/LP, RCS Low Flow, and Reactor Power Level – High reactor trips were always available. Accordingly, there are no safety consequences associated with this event.

## 5. Corrective Action

The actions to prevent recurrence include training the Operators on this incident, revision of appropriate station procedures to address this incident, and evaluating the need for a TS change.

Additionally a Night Order has been issued instructing the operators to declare the TM/LP, RCS Low Flow, and Reactor Power Level – High reactor trips inoperable for the affected channel and enter TSAS 3.3.1.1. Action 2, when the associated WRNIs are inoperable.

Additional corrective actions are being taken in accordance with the station's corrective action program.

6. Previous Occurrences

No previous similar events/conditions were identified.

Energy Industry Identification System (EIIS) codes are identified in the text as [XX].