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January 4, 2006

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
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Serial No. 05-509  
MPS Lic/ MAE R0  
Docket No. 50-336  
License No. DPR-65

**DOMINION NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 2**  
**PROPOSED REVISION TO TECHNICAL SPECIFICATIONS (LBDCR 05-MP2-007)**  
**PRESSURIZER POWER OPERATED RELIEF VALVES (PORVs) AND**  
**PRESSURIZER SAFETY VALVES POSITION INDICATION**

Pursuant to 10 CFR 50.90, Dominion Nuclear Connecticut, Inc. (DNC) hereby requests to amend Operating License DPR-65 for Millstone Power Station Unit 2 (MPS2). The enclosed license amendment request proposes to revise Technical Specification 3/4.3.3.8, "Instrumentation, Accident Monitoring." The proposed changes modify the description of pressurizer power operated relief valves (PORVs) and pressurizer safety valves position indicators.

The proposed amendment does not involve a significant impact on public health and safety and does not involve a significant hazards consideration pursuant to the provisions of 10 CFR 50.92.

The Site Operations Review Committee has reviewed and concurred with the determinations.

Attachment 1 of this letter contains the description of the proposed technical specification (TS) changes and the significant hazards consideration. Attachment 2 contains the TS marked-up pages, and Attachment 3 contains the retyped pages. MPS2 TS bases are not impacted by the proposed changes in TS.

DNC requests issuance of this amendment no later than August 1, 2006, with the amendment to be implemented within 60 days of issuance.

In accordance with 10 CFR 50.91(b), a copy of this license amendment request is being provided to the State of Connecticut.

If you have any questions or require additional information, please contact Mr. Paul R. Willoughby at (804) 273-3572.

Very truly yours,

A handwritten signature in black ink, appearing to read "L. Hartz". The signature is written in a cursive style with a large initial "L" and "H".

Leslie N. Hartz  
Vice President – Nuclear Engineering

Attachments:

1. Evaluation of Proposed License Amendment
1. Marked-Up TS Pages
2. Re-typed TS Pages

Commitments made in this letter: None.

cc: U.S. Nuclear Regulatory Commission  
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**ATTACHMENT 1**

**PROPOSED REVISION TO TECHNICAL SPECIFICATIONS (LBDCR 05-MP2-007)**  
**PRESSURIZER POWER OPERATED RELIEF VALVES (PORVs) AND**  
**PRESSURIZER SAFETY VALVES POSITION INDICATORS**  
  
**EVALUATION OF PROPOSED LICENSE AMENDMENT**

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

**EVALUATION OF PROPOSED LICENSE AMENDMENT**

- 1.0 DESCRIPTION
- 2.0 PROPOSED CHANGE
- 3.0 BACKGROUND
  - 3.1 Description of The Pressurizer Power Operated Relief Valves and Pressurizer Safety Valves Acoustic Valve Monitor
  - 3.2 Reason for the Proposed Amendment
- 4.0 TECHNICAL ANALYSIS
  - 4.1 Details of the Proposed Amendment
  - 4.2 Safety Summary
- 5.0 REGULATORY ANALYSIS
  - 5.1 No Significant Hazards Consideration
  - 5.2 Applicable Regulatory Requirements/Criteria
- 6.0 ENVIRONMENTAL CONSIDERATION

## 1.0 DESCRIPTION

Pursuant to 10 CFR 50.90, Dominion Nuclear Connecticut, Inc. (DNC) hereby requests to amend Operating License DPR-65 for Millstone Power Station Unit 2 (MPS2). The enclosed license amendment request proposes to revise Technical Specification (TS) 3/4.3.3.8, "Instrumentation, Accident Monitoring." The proposed changes modify the description of pressurizer power operated relief valves (PORVs) and pressurizer safety valves position indicators.

## 2.0 PROPOSED CHANGE

1. Modify TS 3/4.3.3.8, Table 3.3-11, "Accident Monitoring Instrumentation," Items 4 and 6, by deleting the wording "Acoustic Monitor."
2. Modify TS 3/4.3.3.8, Table 4.3-7, "Accident Monitoring Instrumentation Surveillance Requirements," Items 4 and 6, by deleting the wording "(Acoustic Monitor)."

## 3.0 BACKGROUND

### 3.1 Description of the Pressurizer Power Operated Relief Valves and Pressurizer Safety Valves Acoustic Valve Monitor

Each valve has an accelerometer (acoustic monitor) mounted on the discharge piping used to identify flow past the valve. This accelerometer feeds a monitor which has an amplifier and a filter capable of separating flow noise from background. This monitor gives local indication at the panel on one of 6 scales, from 0 to 1 through 0 to 300 G's. At 30% of full scale, a control board alarm will annunciate. This monitor provides positive indication of the valve passing flow.

### 3.2 Reason for the Proposed Amendment

The wording "Acoustic Monitor" provides a detail of the type of monitoring instrumentation used for the valves position indicators. This detail, which is related to system design, is not necessary to be included in the TS to provide adequate protection of public health and safety. Additionally, this detail does not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be included in the technical specifications.

## 4.0 TECHNICAL ANALYSIS

### 4.1 Details of the Proposed Amendment

The PORVs and pressurizer safety valves design includes positive position indication. This position indication instrumentation is required to meet the requirements of Regulatory Guide (RG) 1.97.

Current TS contains the wording "Acoustic Monitor" in TS 3/4.3.3.8, Tables 3.3-11 and 4.3-7, items 4 and 6. The wording "Acoustic Monitor" constitutes a specific detail related to system design. The removal of this detail from the TS is acceptable because this type of information is not necessary to be included in TS to provide adequate protection of public health and safety. The TS still retains the requirement on the total and minimum channels required to be operable and to verify channel operability at the designated frequencies. Should the design of the position indication system be changed or upgraded, compliance with RG 1.97 will be maintained.

Additionally, this type of information is not necessary to be included in TS to meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be included in the technical specifications. This can be demonstrated as follows:

10 CFR 50.36(c)(2)(ii) provides four (4) criteria that can be used to determine the requirements that must be included in the technical specifications.

Criterion 1 Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

This criterion addresses instrumentation installed to detect excessive RCS leakage. The PORVs and pressurizer safety valves position indicators are required to indicate opening of PORVs and pressurizer safety valves, which fulfill the requirement of Criterion 1. However, the wording "Acoustic Monitor" in TS 3/4.3.3.8, Tables 3.3-11 and 4.3-7, items 4 and 6 constitutes a specific detail related to system design. This detail is not required to ensure the operability of the position indicator no matter which type of position indicator is utilized. Deletion of this detail does not affect how the indicators will function. The PORVs and pressurizer safety valves position indication instrumentation will continue to provide positive position indication which fully meets the requirements of RG 1.97. Therefore, the wording "Acoustic Monitor" does not satisfy Criterion 1.

Criterion 2 A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture those process variables that have initial values assumed in the design basis accident and transient analyses, and which are monitored and controlled during power operation. This criterion also includes active design features (e.g., high pressure/low pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients. The required PORVs and pressurizer safety valves capacities and setpoints are process variables, which are used as assumptions in the design basis accident and transient analyses. The PORVs and pressurizer safety valves position indicators (and the associated wording "Acoustic Monitor") provide only indications of valve position. Therefore, the PORVs and pressurizer safety valves position indicators (and the associated wording "Acoustic Monitor") do not constitute a process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis. The wording "Acoustic Monitor" does not satisfy Criterion 2.

Criterion 3 A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

The purpose of this criterion is to capture only those structures, systems, and components that are part of the primary success path of the safety analysis (an examination of the actions required to mitigate the consequences of the design basis accidents and transients). The primary success path of a safety analysis consists of the combinations and sequences of equipment needed to operate, so that the plant response to the design basis accidents and transients limits the consequences of these events to within the appropriate acceptance criteria. Also captured by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function. It does not include backup and diverse equipment. PORVs are modeled in accident and transient analyses where PORV operation makes the accident/transient more bounding (i.e., for minimum departure from nucleate boiling ratio [DNBR]). This includes loss of external load and inadvertent opening of PORV. The PORVs and pressurizer safety valves position indicators (and the

associated wording "Acoustic Monitor") provide only indications of valve positions. They do not function or actuate to mitigate a design basis accident or transient. Therefore, the wording "Acoustic Monitor" does not satisfy Criterion 3.

Criterion 4 A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

The purpose of this criterion is to capture only those structures, systems, and components that operating experience or probabilistic risk assessment has shown to be significant to public health and safety. The PORVs and pressurizer safety valves position indicators (and the associated wording "Acoustic Monitor") do not represent a constraint of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk. Therefore, the wording "Acoustic Monitor" does not satisfy Criterion 4.

The wording "Acoustic Monitor", does not meet any of the 10 CFR 50.36c(2)(ii) criteria for items that must be in technical specifications. Therefore, this wording can be deleted from MPS2 TS.

## 4.2 Safety Summary

The proposed changes will remove the wording "Acoustic Monitor" from items 4 and 6 of TS 3/4.3.3.8, Tables 3.3-11 and 4.3-7. The PORVs and pressurizer safety valves design include valve position indication. This position indication instrumentation meets the requirements of RG 1.97. The cabling and electrical connections for the PORVs and pressurizer safety valves are qualified to function under accident conditions per 10 CFR 50.49. The proposed change will not impact any of the PORV or pressurizer safety valves position indication requirements as described above. Therefore, these changes have no adverse effect on plant safety.

## 5.0 REGULATORY ANALYSIS

### 5.1 No Significant Hazards Consideration

In accordance with 10CFR50.92, DNC has reviewed the proposed change and has concluded that it does not involve a significant hazards consideration (SHC). The basis for this conclusion is that the three criteria of 10CFR50.92(c) are not compromised as detailed below.

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed amendment removes the wording "Acoustic Monitor", which provides specific details related to system design, from items 4 and 6 of TS 3/4.3.3.8, Tables 3.3-11 and 4.3-7. The PORVs and Pressurizer Safety Valves position indicators (and the associated "Acoustic Monitor") provide only indications of valve position. They do not constitute a design feature that is an initial condition for a design basis accident or transient analysis. Furthermore, they do not affect the function of the system, equipment in the system or actuate to mitigate a design basis accident or transient. Therefore, the proposed changes do not increase the probability or consequences of an accident previously evaluated.

Additionally, the TS retains the requirement for the total and minimum channels required to be OPERABLE and to verify channel OPERABILITY at the designated frequencies. The PORVs and Pressurizer Safety Valves are equipped with positive position indication that meets the requirements of RG 1.97.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes do not impact the capability of existing equipment to perform its intended functions. No system setpoints are being modified and no changes are being made to the method in which plant operations are conducted. No new failure modes that would impact accident analyses are introduced by the proposed changes. The proposed amendment does not introduce accident initiators or malfunctions that would cause a new or different kind of accident. Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

The proposed amendment removes the wording "Acoustic Monitor" from items 4 and 6 of TS 3/4.3.3.8, Table 3.3-11 and 4.3-7. The proposed changes do not affect any of the assumptions used in the accident analysis, nor does it affect any operability requirements for equipment important to plant safety. Therefore, the margin of safety is not impacted by the proposed amendment.

As described above, this license amendment request does not impact the probability of an accident previously evaluated, does not involve a significant increase in the consequences of an accident previously evaluated, does not create the possibility of a new or different kind of accident from any accident previously evaluated, and does not result in a significant reduction in a margin of safety. Therefore, DNC has concluded that the proposed changes do not involve an SHC.

## 5.2 Applicable Regulatory Requirements/Criteria

The requirements of General Design Criterion (GDC) 13 of Appendix A to Title 10 of the Code of Federal Regulations Part 50 (10 CFR Part 50) state that, "Domestic Licensing of Production and Utilization Facilities," includes a requirement that instrumentation be provided to monitor variables and systems over their anticipated ranges for accident conditions as appropriate to ensure adequate safety. The proposed changes do not impact compliance with GDC 13.

Criterion 19, "Control Room," of Appendix A to 10 CFR Part 50 includes a requirement that a control room be provided from which actions can be taken to maintain the nuclear power unit in a safe condition under accident conditions, including loss-of-coolant accidents, and that equipment, including the necessary instrumentation, at appropriate locations outside the control room be provided with a design capability for prompt hot shutdown of the reactor. The proposed changes do not impact compliance with GDC 19.

Additionally, Regulatory Guide 1.97, "Instrumentation For Light-Water-Cooled Nuclear Power Plants To Assess Plant And Environs Conditions During And Following An Accident," describes a method acceptable to the NRC staff for complying with the Commission's regulations to provide instrumentation to monitor plant variables and systems during and following an accident in a light-water cooled nuclear power plant. The proposed changes made to the position instrumentation continue to meet the requirements of Regulatory Guide 1.97.

The TS limiting condition of operation (LCO) must satisfy the requirements of Section 10 CFR 50.36, which specifies the Commission's regulatory requirements related to the content of technical specifications. Specifically, 10 CFR 50.36(c)(2)(ii) sets forth four criteria to be used in determining whether a LCO is required to be included in technical specifications. These criteria are: (1) installed

instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the RCS pressure boundary; (2) initial plant conditions that are assumed in a design-basis transient and accident analysis; (3) components or systems that are used for mitigating consequences of the design-basis transient and accident; and (4) components or systems which probabilistic risk assessment has shown to be significant to public health and safety. The proposed technical specifications changes, which remove the wording "Acoustic Monitor" from items 4 and 6 of TS 3/4.3.3.8, Table 3.3-11 and 4.3-7, do not affect the assurance that compliance with the provisions of 10 CFR 50.36 is maintained.

## 6.0 ENVIRONMENTAL CONSIDERATION

DNC has determined that the proposed amendment would change requirements with respect to use of a facility component located within the restricted area, as defined by 10 CFR 20, or it would change inspection or surveillance requirements. DNC has evaluated the proposed change and has determined that the change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released off site, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

**ATTACHMENT 2**

**PROPOSED REVISION TO TECHNICAL SPECIFICATIONS (LBDCR 05-MP2-007)**  
**PRESSURIZER POWER OPERATED RELIEF VALVES (PORVs) AND**  
**PRESSURIZER SAFETY VALVES POSITION INDICATORS**  
  
**TECHNICAL SPECIFICATIONS MARKED-UP PAGES**

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

TABLE 3.3-11

ACCIDENT MONITORING INSTRUMENTATION

<u>Instrument</u>	<u>Total No. of Channels</u>	<u>Minimum Channels Operable</u>	<u>Action</u>
1. Pressurizer Water Level	2	1	1
2. Auxiliary Feedwater Flow Rate	2/S.G.	1/S.G.	1
3. RCS Subcooled/Superheat Monitor	2	1	2
4. PORV Position Indicator <del>Acoustic Monitor</del>	1/valve	1/valve	3
5. PORV Block Valve Position Indicator	1/valve	1/valve	3
6. Safety Valve Position Indicator <del>Acoustic Monitor</del>	1/valve	1/valve	3
7. Containment Pressure (Wide Range)	2	1	4
8. Containment Water Level (Narrow Range)	1	1	7##
9. Containment Water Level (Wide Range)	2	1	4
10. Core Exit Thermocouples	4 CETs/core quadrant	2 CETs in any of 2 core quadrants	5
11. Main Steam Line Radiation Monitor	3	3	6
12. Reactor Vessel Coolant Level	2*	1*	8

\* A channel is eight (8) sensors in a probe. A channel is operable if four (4) or more sensors, two (2) or more in the upper four and two (2) or more in the lower four, are operable.

## Refer to ACTION statement in Technical Specification 3.4.6.1.

MILLSTONE - UNIT 2

3/4 3-32

Amendment No. 66, 120, 140, 282,

September 25, 2003

TABLE 4.3-7

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

MILLSTONE - UNIT 2

3/4-3-35

Amendment No. 66, 68, 120, 140, 282,



<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Pressurizer Water Level	M	R
2. Auxiliary Feedwater Flow Rate	M	R
3. Reactor Coolant System Subcooled/Superheat Monitor	M	R
4. PORV Position Indicator ( <del>Acoustic Monitor</del> )	M	R
5. PORV Block Valve Position Indicator	N.A.	R
6. Safety Valve Position Indicator ( <del>Acoustic Monitor</del> )	M	R
7. Containment Pressure	M	R
8. Containment Water Level (Narrow Range)	M	R
9. Containment Water Level (Wide Range)	M	R
10. Core Exit Thermocouples	M	R*
11. Main Steam Line Radiation Monitor	M	R
12. Reactor Vessel Coolant Level	M	R*

\* Electronic calibration from the ICC cabinets only.

**ATTACHMENT 3**

**PROPOSED REVISION TO TECHNICAL SPECIFICATIONS (LBDCR 05-MP2-007)**  
**PRESSURIZER POWER OPERATED RELIEF VALVES (PORVs) AND**  
**PRESSURIZER SAFETY VALVES POSITION INDICATORS**

**TECHNICAL SPECIFICATIONS RE-TYPED PAGES**

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

**TABLE 3.3-11**  
**ACCIDENT MONITORING INSTRUMENTATION**

<u>Instrument</u>	<u>Total No. of Channels</u>	<u>Minimum Channels Operable</u>	<u>Action</u>
1. Pressurizer Water Level	2	1	1
2. Auxiliary Feedwater Flow Rate	2/S.G.	1/S.G.	1
3. RCS Subcooled/Superheat Monitor	2	1	2
4. PORV Position Indicator	1/valve	1/valve	3
5. PORV Block Valve Position Indicator	1/valve	1/valve	3
6. Safety Valve Position Indicator	1/valve	1/valve	3
7. Containment Pressure (Wide Range)	2	1	4
8. Containment Water Level (Narrow Range)	1	1	7##
9. Containment Water Level (Wide Range)	2	1	4
10. Core Exit Thermocouples	4 CETs/core quadrant	2 CETs in any of 2 core quadrants	5
11. Main Steam Line Radiation Monitor	3	3	6
12. Reactor Vessel Coolant Level	2*	1*	8

\* A channel is eight (8) sensors in a probe. A channel is OPERABLE if four (4) or more sensors, two (2) or more in the upper four and two (2) or more in the lower four, are operable.

## Refer to ACTION statement in Technical Specification 3.4.6.1.

MILLSTONE - UNIT 2  
 3/4 3-35  
 Amendment No. 66, 68, 120, 140, 282,

TABLE 4.3-7

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Pressurizer Water Level	M	R
2. Auxiliary Feedwater Flow Rate	M	R
3. Reactor Coolant System Subcooled/Superheat Monitor	M	R
4. PORV Position Indicator	M	R
5. PORV Block Valve Position Indicator	N.A.	R
6. Safety Valve Position Indicator	M	R
7. Containment Pressure	M	R
8. Containment Water Level (Narrow Range)	M	R
9. Containment Water Level (Wide Range)	M	R
10. Core Exit Thermocouples	M	R*
11. Main Steam Line Radiation Monitor	M	R
12. Reactor Vessel Coolant Level	M	R*

\* Electronic calibration from the ICC cabinets only.