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March 3, 2020

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

Serial No. 20-025
NSSL/MLC R0
Docket No. 50-336
License No. DPR-65

DOMINION ENERGY NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNIT 2
LICENSE AMENDMENT REQUEST TO REVISE TECHNICAL SPECIFICATION TABLE 3.3-11, ACCIDENT MONITORING INSTRUMENTATION

Pursuant to 10 CFR 50.90, Dominion Energy Nuclear Connecticut, Inc. (DENC) requests a license amendment in the form of changes to the Millstone Power Station Unit 2 (MPS2) Technical Specifications (TSs) for facility Operating License DPR-65. The proposed amendment would revise Action 3 in TS Table 3.3-11, "Accident Monitoring Instrumentation," to address unnecessary restrictions for monitoring valve position when any of the three valve position monitoring indications (i.e., Instruments 4, 5 and 6) become inoperable.

When valve position indication for the power-operated relief valves (PORVs), PORV block valves, or pressurizer safety valves (PSVs) is rendered inoperable, TS Table 3.3-11, Action 3 requires control room operators to obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. Based on the current wording of Action 3, should any of these four single-channel instruments fail, DENC would be required to enter TS 3.0.3 and initiate action to place the unit in hot shutdown.

The MPS2 plant configuration does not specifically require all of the alternate indications listed in Action 3 to determine valve position. Other primary system instrumentation can be used individually, or in combination to adequately determine if there is gross leakage of reactor coolant through an inadvertently open valve. Operators can use the available direct and indirect parameters to identify this condition, so that restorative or mitigative actions can be taken. Therefore, DENC proposes to revise TS Table 3.3-11, Action 3 to add an alternate method for determining if there is loss of coolant through a PORV or PSV flow path, in the event that any of the instruments identified in the current action statement are not available. Justification for how the instruments can be used to reliably diagnose this condition is provided in Attachment 1.

Attachment 1 provides a discussion of the proposed change. Attachments 2 and 3 provide the marked-up TS and TS Bases pages, respectively. The marked-up TS Bases pages are provided for information only. The changes to the affected TS

Bases page will be incorporated in accordance with the TS Bases Control Program when this amendment is approved.

DENC has evaluated the proposed amendment and has determined that it does not involve a significant hazards consideration as defined in 10 CFR 50.92. The proposed TS change has been reviewed and approved by the Facility Safety Review Committee.

DENC requests approval of this proposed amendment by March 5, 2021.

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

Should you have any questions in regard to this submittal, please contact Mr. Shayan Sinha at (804) 273-4687.

Sincerely,

Mark D. Sartain
Vice President – Nuclear Engineering and Fleet Support
Dominion Energy Nuclear Connecticut, Inc.

COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Mark D. Sartain, who is Vice President - Nuclear Engineering and Fleet Support of Dominion Energy Nuclear Connecticut, Inc. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of that company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 3rd day of March, 2020.

My Commission Expires: August 31, 2023

Notary Public

GARY DON MILLER
Notary Public
Commonwealth of Virginia
Reg. # 7629412
My Commission Expires August 31, 2023

Attachments:

1. Discussion of Proposed Change
2. Marked-up Technical Specification Page
3. Marked-up Technical Specification Bases Page (for information only)

Commitments made in this letter: None

cc: U.S. Nuclear Regulatory Commission
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ATTACHMENT 1

Discussion of Proposed Change

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

EVALUATION OF PROPOSED LICENSE AMENDMENT

DISCUSSION OF PROPOSED CHANGE

1.0 SUMMARY DESCRIPTION

Pursuant to 10 CFR 50.90, Dominion Energy Nuclear Connecticut, Inc. (DENC) requests a license amendment in the form of changes to the Millstone Power Station Unit 2 (MPS2) Technical Specifications (TSs, Reference 1) for facility Operating License DPR-65. The proposed amendment would revise Action 3 in TS Table 3.3-11, "Accident Monitoring Instrumentation," to address unnecessary restrictions for monitoring valve position when any of the three valve position monitoring indications (i.e., Instruments 4, 5 and 6) become inoperable.

When valve position indication for the power-operated relief valves (PORVs), PORV block valves, or pressurizer safety valves (PSVs) is rendered inoperable, TS Table 3.3-11, Action 3 requires control room operators to obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. Based on the current wording of Action 3, should any of these four single-channel instruments fail, DENC would be required to enter TS 3.0.3 and initiate action to place the unit in hot shutdown.

The MPS2 plant configuration does not specifically require all of the alternate indications listed in Action 3 to determine valve position. Other primary system instrumentation can be used individually or in combination, to adequately determine if there is gross leakage of reactor coolant through an inadvertently open valve. Operators can use the available direct and indirect parameters to identify this condition, so that restorative or mitigative actions can be taken. Therefore, DENC proposes to revise TS Table 3.3-11, Action 3 to add an alternate method for determining if there is loss of coolant through a PORV or PSV flow path, in the event that any of the instruments identified in the current action statement are not available. Justification for how the instruments can be used to reliably diagnose this condition is provided in this attachment.

2.0 DETAILED DESCRIPTION

2.1 System Design and Operation

The MPS2 RCS is protected against overpressurization by control and protective circuits such as pressurizer pressure high reactor trip, two PORVs (RC-402 and RC-404), and two PSVs (RC-200 and RC-201) connected to the top of the pressurizer.

The two PORVs relieve sufficient pressure to avoid opening of the PSVs. Each flow path has a PORV and a PORV block (isolation) valve (RC-403 and RC-405). The PORV block valve in each train is normally open. The steam discharged by the relief valves is piped to the quench tank where it is condensed. Valve position indication for the PORVs is provided at the main control panel in the control room. In accordance with Section III of the ASME Boiler and Pressure Vessel Code, the RCS is protected from overpressure by two spring-loaded PSVs. The discharge from the PSVs is also piped to the quench tank. A piping and

instrumentation diagram of the pressurizer, PORVs, PSVs and quench tank is shown in Drawing Number 25203-26014, Sheet 2 of 3 (Reference 3), which is incorporated by reference into the MPS2 Updated Final Safety Analysis Report (UFSAR, Reference 2) as Figure 4.1–1, Sheet 2.

2.2 Description of the Proposed Change

The proposed amendment would revise MPS2 TS Table 3.3-11, "Accident Monitoring Instrumentation," Action 3 as shown below. Note: Added text is italicized and bolded.

> With any individual valve position indicator inoperable, obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. ***With the number of OPERABLE accident monitoring instrumentation channels less than the required Minimum Channels OPERABLE in Table 3.3-11 and one or more of the above mentioned quench tank parameters or discharge pipe temperatures unavailable, either restore the inoperable accident monitoring instrumentation channel to OPERABLE status within 48 hours, or prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction, the plans for restoring the accident monitoring instrumentation channel to OPERABLE status, and any alternate methods in effect for identifying loss of coolant through an inadvertently opened valve during the interim.*** This ACTION is not required if the PORV block valve is closed with power removed in accordance with Specification 3.4.3.b or 3.4.3.c.

A special report (pursuant to TS 6.9.2) must be submitted within 10 days after the 48 hour completion time has expired. The purpose of the special report is to notify the NRC of the inoperability and describe the alternate methods in effect. The special report would also outline the cause of the malfunction and plans for restoring the affected position indicators to operable status. The proposed action wording and use of this type of special report is consistent with Table 3.3-11, Actions 4.a and 4.b; the 48 hour completion time is consistent with Action 4.b, which applies to conditions where the number of operable channels is less than the minimum channels operable requirements of Table 3.3-11.

A minor grammatical correction is also included for TS Table 3.3-11 Actions 4.a and 4.b. This correction changes the wording "in affect" to "in effect."

A markup of the affected TS pages showing the proposed changes is provided in Attachment 2. A markup of the associated TS Bases pages is provided in Attachment 3. The marked-up TS Bases pages are provided for information only. The changes to the affected TS Bases pages will be incorporated in accordance with the TS Bases Control Program after this amendment request is approved.

2.3 Reason for the Proposed Change

MPS2 TS 3.3.3.8, "Accident Monitoring Instrumentation," requires the accident monitoring instrument channels listed in TS Table 3.3-11 be operable in modes 1, 2 and 3. When any

of the three valve position indication instruments in TS Table 3.3-11 (i.e., Instruments 4, 5 and 6) is rendered inoperable, Action 3 requires control room operators to obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. Based on the current wording of Action 3, should any of these four single-channel instruments fail, DENC would be required to enter TS 3.0.3 and initiate action to place the unit in hot shutdown.

The current requirement to monitor all four of the specified parameters in Action 3 (i.e., quench tank temperature, level and pressure, as well as discharge pipe temperature) is overly restrictive. Operators can use the available direct and indirect parameters to identify if there is loss of coolant through a PORV or PSV, so that restorative or mitigative actions can be taken. Therefore, DENC proposes to revise TS Table 3.3-11, Action 3, to allow the flexibility to use alternate parameters for monitoring valve position when valve primary indication becomes inoperable.

3.0 TECHNICAL EVALUATION

3.1 Background

Power Operated Relief Valve/Pressurizer Safety Valve Background

The pressurizer, quench tank, PORV block, PORV, and PSV parameters can be found in MPS2 UFSAR Tables 4.3-6, 4.3-7, 4.3-9, 4.3-10, and 4.3-11, respectively. As discussed in the tables, the normal operating pressure and temperature for the pressurizer are 2250 psia and 653 ^{o}F, respectively. The capacity of each PORV is 153,000 lb/hr, and the capacity of each PSV is 294,000 lb/hr. The quench tank has an internal volume of 217 ft^3, and a normal operating pressure and temperature of 3 psig and 120 ^{o}F, respectively.

PORV, PORV block valve, and PSV position monitoring instrumentation is provided in the control room to inform operators if these valves are open or closed. For each PSV, this is accomplished using an acoustic valve monitor which detects downstream acoustics generated from the steam flowing through the valve and actuates an alarm in the control room. The valve position of the PORVs and PORV block valves are monitored from the control room using position indication lights.

As previously noted, the PORVs, PORV block valves, and PSVs discharge into the pressurizer quench tank. The temperature (TE-116), pressure (PT-116), and liquid level (LT-116) of this tank are indicated and alarmed in the control room. A change in these parameters would alarm and alert the operators of a discharge condition. Abnormal Operating Procedures (AOPs) and Emergency Operating Procedures (EOPs) contain instructions noting that RCS leakage to the pressurizer quench tank is indicated by a rise in tank pressure, temperature, or level and rising or elevated pressure relief line temperatures or flow indication from the relief line acoustic monitors. Control room operators are trained on utilization of the AOPs and EOPs.

Temperatures in the PSV (TE-107 and TE-108) and PORV (TE-106 and TE-114) discharge lines are measured and indicated in the main control room. An elevated temperature in

one of these lines is an indication that the associated valve may be leaking. High temperature alarms are provided to alert the operator to this condition.

The Limiting Conditions for Operation (LCO) for the PSVs and PORVs/PORV block valves are provided in TS 3.4.2 and 3.4.3, respectively. The safety analysis related to an "Inadvertent Opening of a Pressurized Water Reactor Pressurizer Pressure Relief Valve" scenario is summarized in MPS2 UFSAR Section 14.6.1.

Accident Monitoring Background

MPS2 TS LCO 3.3.3.8 states that the accident monitoring instrumentation channels shown in TS Table 3.3-11 shall be operable in modes 1, 2 and 3. For the PORV, PORV Block Valve, and Safety Valve (Instruments 4, 5, and 6 in Table 3.3-11), the requirement is that the position indicator for each valve must be operable.

The accident monitoring instrumentation contained in TS Table 3.3-11 was added to the MPS2 TSs in Amendment No. 66 (Reference 4) dated April 7, 1981 (ADAMS Accession No. ML012840177), to meet the requirements of NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations," (Reference 5) and NUREG-0737, "Clarification of TMI Action Plan Requirements" (Reference 6). Guidance for accident monitoring instrumentation is provided in Regulatory Guide (RG) 1.97, "Instrumentation for Light-Water-Cooled Nuclear Power Plant to Assess Plant and Environs Conditions During and Following an Accident" (Reference 7), and the MPS2 Current Licensing Basis demonstrates conformance with Revision 2 of this RG.

NUREG-0578, Position 2.1.3.a (Direct Indication of Power-Operated Relief Valve and Safety Valve Position for PWRs and BWRs), provides background information clarifying that the failure of relief and safety valves to close has been the cause of events that result in small break Loss of Coolant Accidents (LOCAs). Unambiguous indication of the position of the valves can aid the operator in detecting a failure and taking proper corrective action. At the time, Institute of Electrical and Electronics Engineers (IEEE) Standard 279 required that, to the extent feasible and practical, protection system input shall be derived from signals that are direct measures of the desired variable. However, only indirect indication of safety or relief valve position was generally provided and can be misleading, as was the case at Three Mile Island (TMI)-2. Although the pressurizer PORV was stuck open, control panel lights indicated that the valve was closed because the signal was derived from a sensor of solenoid actuation rather than a sensor of the valve position itself. The purpose of Position 2.1.3.a is to provide the operator with a more positive indication of valve position and therefore provide additional assurance that the integrity of the RCS can be maintained or a loss of integrity directly diagnosed.

As clarified in NUREG 0737, Position II.D.3 (Direct Indication of Relief and Safety Valve Position), the purpose of RCS relief and safety valve position indication is to provide the control room with unambiguous indication of valve position (i.e., open or closed) so that appropriate operator actions can be taken.

RG 1.97, Revision 2, Table 2 specifies that the purpose for monitoring the variable "Primary System Safety Relief Valve Positions (including PORV and code valves) or Flow Through

or Pressure in Relief Valve Lines" is to provide operational status and to monitor for loss of coolant. This is consistent with the applicable requirement in RG 1.97, Revision 2, Section B, which states that indications of plant variables are required by the control room operating personnel during accident situations to provide information to the operators that will enable them to determine the potential for causing a gross breach of the barriers to radioactivity release (i.e., fuel cladding, RCS pressure boundary, and containment) and to determine if a gross breach of a barrier has occurred.

MPS2 TS LCO 3.4.6.2, "Reactor Coolant System Operational Leakage," provides additional limits for pressure boundary, unidentified, primary to secondary, and identified leakage, and also specifies the corresponding required actions if the limits are exceeded.

With any individual PORV, PORV block or PSV position indicator inoperable, the applicable Action 3 of TS Table 3.3-11 directs operators to obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. This action is not required if the PORV block valve is closed with power removed in accordance with TS 3.4.3.b or 3.4.3.c.

3.2 Technical Analysis

Valve position for the pressurizer PORVs, PORV block valves, and PSVs is one of several indications that operators have available to determine whether the valves are open or closed. Other plant parameters are available that provide direct indication of a lifted or closed valve, or can be used indirectly to assist in diagnosing if a loss of RCS inventory is occurring and where it is occurring. Operators are trained to diagnose these parameters as part of determining if an RCS leak is occurring and these diagnostic skills can also be used to determine if the loss of inventory is from a PORV or PSV. It should be noted that an open PORV block valve without an associated open PORV is not of concern with respect to loss of coolant, since the PORV block valves are normally open and located in the same flow path as the PORVs (which are normally closed).

Examples of direct parameters for diagnosing an inadvertently opened or stuck open PORV or PSV include PORV discharge pipe (tailpipe) temperature, PSV discharge pipe (tailpipe) temperature, quench tank level, quench tank pressure, and quench tank temperature. If a PORV or PSV is opened, the following alarms would be expected in the control room within seconds:

- High PORV discharge pipe temperature (setpoint at 165 ºF) (Reference 8)
- High PSV discharge pipe temperature (setpoint at 155 ºF) (Reference 9 and 14)
- High quench tank level (setpoint at 55%) (Reference 10)
- High quench tank pressure (setpoint at 10 psig) (Reference 11)
- High quench tank temperature (setpoint at 120 ºF) (Reference 12)

Since multiple, independent instruments are available to the operator to provide indication of an inadvertently opened PORV or PSV, loss of one or more of these instruments would not preclude the operator from correctly diagnosing the condition.

An example of using indirect parameters to diagnose that the RCS is leaking through an inadvertently opened PORV or PSV might occur if the operators observed decreasing RCS pressure combined with a loss of RCS subcooling, which would indicate that saturated conditions are being approached. For this example, operators would check RCS pressure and pressurizer level, along with charging and letdown mismatch, to determine if the status of these parameters are indicative of a loss of inventory. If inventory is being lost, the operators would then check containment parameters and radiation monitors to determine if RCS inventory is being discharged to containment. Then the operators would check for other possible RCS inventory loss paths, such as auxiliary building sumps, radiation monitors, and tank levels for signs of inter-system leakage outside containment. If no signs of inter-system leakage exist, the leakage path may be a lifting PORV or PSV, which can be confirmed by available quench tank parameters or discharge pipe temperatures. For example, a loss of RCS inventory combined with low RCS pressure, decreasing reactor vessel level and high pressurizer level is indicative that the loss is through a PORV or PSV (bubble has shifted from pressurizer to core). Conversely, closure of a PORV or PSV would be indicated by recovery of level in both the reactor vessel and pressurizer and ultimately the recovery of RCS pressure to shut-off head of the high pressure safety injection pumps, in addition to downward trends of discharge pipe temperatures.

If a PORV is inadvertently opened, the operator would take action to isolate the PORV and PORV block valve from the control room. If successful closure of a PORV or PORV block valve cannot be confirmed because the position indication was already inoperable, isolation can be recognized by observation of an indicated reduction in available discharge pipe temperature, quench tank parameters, or other expected changes in plant parameters. If a PSV is inadvertently opened or a PORV flow path is inadvertently opened and cannot be isolated, EOP 2532, Loss of Coolant Accident (Reference 13), would be entered.

Conclusion

When valve position indication for the PORVs, PORV block valves, or PSVs is rendered inoperable, TS Table 3.3-11, Action 3 requires control room operators to obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. Based on the current wording of Action 3, should any of these four single-channel instruments fail, MPS2 would be required to enter TS 3.0.3 and initiate action to place the unit in hot shutdown.

The MPS2 plant configuration does not specifically require all four of the listed indications in Action 3 to determine valve position. Operators can use the available direct and indirect parameters to identify this condition, so that restorative or mitigative actions can be taken. As noted in the proposed TS Bases revision, once an alternate method is established, the applicable information is obtained once per shift.

Per the proposed TS revision, a special report (pursuant to TS 6.9.2) will be submitted within the 10 days after the 48 hour completion time has expired. The purpose of this special report is to notify the NRC of the inoperability and describe alternate methods in effect. The special report would also outline the cause of the malfunction and plans for restoring the affected position indicators to operable status.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

On February 20, 1971, the Atomic Energy Commission published in the Federal Register the General Design Criteria [GDC] for Nuclear Power Plants. The GDC, which are contained in Appendix A of 10 CFR 50, establish minimum requirements for the principal design criteria for water-cooled nuclear power plants. Although MPS2 was designed and licensed to the GDC, as issued on July 11, 1967, DENC has attempted to comply with the intent of the newer GDC to the extent possible, recognizing previous design commitments.

GDC 13, *Instrumentation and control*, states in part: "Instrumentation shall be provided to monitor variables and systems over their anticipated ranges for normal operation, for anticipated operational occurrences, and for accident conditions as appropriate to assure adequate safety, including those variables and systems that can affect the fission process, the integrity of the reactor core, the reactor coolant pressure boundary, and the containment and its associated systems."

The proposed change does not impact compliance with GDC 13. Instrumentation is provided for continuous measurement of all significant process variables. Controls are provided for the purpose of maintaining these variables within the limits prescribed for safe operation. The instrumentation conforms to applicable Institute of Electrical and Electronics Engineers (IEEE) standards.

Regulatory Guide 1.97, *Instrumentation For Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following An Accident*, describes the 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 TS Table 3.3-11, Action 3 does not impact compliance with the applicable portions of Regulatory Guide 1.97.

10 CFR 50.36, *Technical specifications*, 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 limiting condition for operation (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 change to TS Table 3.3-11, Action 3, which will add an alternate method for determining if there is loss of coolant through a PORV or PSV flow path, does not impact compliance with the provisions of 10 CFR 50.36.

4.2 No Significant Hazards Consideration

Pursuant to 10 CFR 50.90, Dominion Energy Nuclear Connecticut, Inc. (DENC) requests a license amendment in the form of changes to the Millstone Power Station Unit 2 (MPS2) Technical Specifications (TSs) for facility Operating License DPR-65. The proposed amendment would revise Action 3 in TS Table 3.3-11, "Accident Monitoring Instrumentation," to address unnecessary restrictions for monitoring valve position when any of the three valve position monitoring indications (i.e., Instruments 4, 5 and 6) become inoperable. When valve position indication for the power-operated relief valves (PORVs), PORV block valves, or pressurizer safety valves (PSVs) is rendered inoperable, TS Table 3.3-11, Action 3 requires control room operators to obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. Based on the current wording of Action 3, should any of these four single-channel instruments fail, DENC would be required to enter TS 3.0.3 and initiate action to place the unit in Hot Shutdown.

The MPS2 plant configuration does not specifically require all of the alternate indications listed in Action 3 to determine valve position. Other primary system instrumentation can be used individually or in combination, to adequately determine if there is gross leakage of reactor coolant through an inadvertently open valve. Operators can use the available direct and indirect parameters to identify this condition, so that restorative or mitigative actions can be taken. Therefore, DENC proposes to revise TS Table 3.3-11, Action 3 to add an alternate method for determining if there is loss of coolant through a PORV or PSV flow path, in the event that any of the instruments identified in the current action statement are not available. A minor grammatical correction is also included for Table 3.3-11 Actions 4.a and 4.b. This correction changes the wording "in affect" to "in effect."

DENC has evaluated whether a significant hazards consideration is involved with the proposed changes by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed 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 revises TS Table 3.3-11, Action 3 to add an alternate method for determining if there is loss of coolant through a PORV or PSV flow path, in the event that any of the instruments identified in the current action statement are not available. Grammatical corrections are also provided for TS Table 3.3-11 Actions 4.a and 4.b. The PORV, PORV block valves, and PSV instrumentation listed in TS Table 3.3-11 provide only indications of valve position. Use of alternate methods to determine if there is loss of coolant through an inadvertently open valve and minor grammatical changes do not constitute a design feature that is an initial condition for a design basis accident or transient analysis. Furthermore, it does not affect the function of the system, structure or component credited to mitigate a design basis accident or transient. Therefore, the proposed changes do not significantly increase the probability or consequences of an accident previously evaluated.

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 amendment does 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 amendment. 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 revises TS Table 3.3-11, Action 3 to add an alternate method for determining if there is loss of coolant through a PORV or PSV flow path, in the event that any of the instruments identified in the current action statement are not available. Grammatical corrections are also provided for Table 3.3-11 Actions 4.a and 4.b. The proposed change does 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, proposed amendment does not significantly reduce margin of safety.

4.3 Conclusions

Based on the above, DENC concludes that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

5.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. The proposed amendment 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 offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion 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.

6.0 PRECEDENT

No precedents were identified.

7.0 REFERENCES

1. Millstone Power Station Unit 2 Technical Specifications, Including Change No. 397.
2. Millstone Power Station Unit 2 Final Safety Analysis Report, Rev. 37.02
3. Drawing No. 25203-26014, Sheet 2, "Piping and Instrumentation Diagram Reactor Coolant System," Revision 49.
4. Millstone, Unit 2, "Issuance of Amendment No. 66, Changing TS in Response to Application dated 09/16/80," dated April 7, 1981, [ADAMS Accession No. ML012480177].
5. NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations," July 1979, [ADAMS Accession No. ML090060030].
6. NUREG-0737, "Clarification of TMI Action Plan Requirements." November 1980, [ADAMS Accession No. ML051400209].
7. Regulatory Guide (RG) 1.97 "Instrumentation for Light-Water-Cooled Nuclear Power Plant to Assess Plant," Revision 2, December 1980.
8. ARP 2590B-231, "Pressurizer Relief Valve Dis Temp Hi C-42," Millstone Power Station Alarm Response Procedure, Revision 7
9. ARP 2590B-230, "Pressurizer Safety Valve RC201 Dis Temp Hi B-42," Millstone Power Station Alarm Response Procedure, Revision 2
10. ARP 2590B-205, "Quench Tank Level Hi Lo A-36," Millstone Power Station Alarm Response Procedure, Revision 2
11. ARP 2590B-206, "Quench Tank Pres Hi B-36," Millstone Power Station Alarm Response Procedure, Revision 3
12. ARP 2590B-207, "Quench Tank Temp Hi C-36," Millstone Power Station Alarm Response Procedure, Revision 1
13. EOP 2532, "Loss of Coolant Accident," Millstone Power Station Emergency Operating Procedure, Revision 35
14. ARP 2590B-229, "Pressurizer Safety Valve RC200 Dis Temp Hi A-42," Millstone Power Station Alarm Response Procedure, Revision 2.

ATTACHMENT 2

Marked-Up Technical Specification Page

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

For Information Only

TABLE 3.3-11
ACCIDENT MONITORING INSTRUMENTATION

Instrument		Total No. of Channels	Minimum Channels OPERABLE	ACTION
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.

~~May 20, 2015~~

TABLE 3.3-11 (Continued)

ACTION STATEMENTS

ACTION 1 - With the number of OPERABLE channels less than the MINIMUM CHANNELS OPERABLE requirements of Table 3.3-11, either restore the inoperable channel(s) to OPERABLE status within 30 days or be in HOT STANDBY within the next 12 hours.

ACTION 2 - With the number of channels OPERABLE less than the MINIMUM CHANNELS OPERABLE, determine the subcooling margin once per 12 hours.

ACTION 3 - With any individual valve position indicator inoperable, obtain quench tank temperature, level and pressure information, and monitor discharge pipe temperature once per shift to determine valve position. This ACTION is not required if the PORV block valve is closed with power removed in accordance with Specification 3.4.3.b or 3.4.3.c.

INSERT

ACTION 4 - a. With the number of OPERABLE accident monitoring instrumentation channels less than the total number of channels shown in Table 3.3-11, restore the inoperable channel(s) to OPERABLE status within 7 days, or submit a special report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction, the plans for restoring the channel(s) to OPERABLE status, and any alternate methods in ~~a~~effect for estimating the applicable parameter during the interim.

e

b. With the number of OPERABLE accident monitoring instrumentation channels less than the MINIMUM CHANNELS OPERABLE requirements of Table 3.3-11, restore the inoperable channel(s) to OPERABLE status within 48 hours, or submit a special report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction, the plans for restoring the channel(s) to OPERABLE status, and any alternate methods in ~~a~~effect for estimating the applicable parameter during the interim.

e

TS Table 3.3-11
INSERT

With the number of OPERABLE accident monitoring instrumentation channels less than the required Minimum Channels OPERABLE in Table 3.3-11 and one or more of the above mentioned quench tank parameters or discharge pipe temperatures unavailable, either restore the inoperable accident monitoring instrumentation channel to OPERABLE status within 48 hours, or prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 10 days outlining the cause of the malfunction, the plans for restoring the accident monitoring instrumentation channel to OPERABLE status, and any alternate methods in effect for determining if there is loss of coolant through an inadvertently open valve during the interim.

ATTACHMENT 3

Marked-Up Technical Specification Bases Page
(For Information Only)

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

For Information Only November 3, 1995

INSTRUMENTATION

BASES

3/4.3.3.6 DELETED

3/4.3.3.7 DELETED

3/4.3.3.8 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. This capability is consistent with the recommendations of NUREG-0578, "TMI-2 Lessons Learned Task Force Status Report and Short-Term Recommendations".

INSERT

TS Bases 3/4.3.3.8
INSERT

If a PORV Position Indicator, PORV Block Valve Position Indicator or Safety Valve Position Indicator becomes inoperable, an alternate method can be used for determining if there is loss of reactor coolant through an inadvertently open valve. Direct parameters (such as quench tank temperature, level and pressure or discharge pipe temperature) can be used to determine if a gross leakage of the reactor coolant is present through an inadvertently opened valve. Primary system and containment instrumentation parameters may also be used to identify a loss of inventory and diagnose whether the source of a leak is through a PORV or Safety Valve flow path. Once an alternate method is established, the applicable information is obtained once per shift. Use of an alternate method requires a special report (pursuant to TS 6.9.2) to be submitted within the next 10 days, if position indication is not restored to OPERABLE status within 48 hours. The purpose of the special report is to notify the Commission of the inoperability and describe alternate methods in effect. The special report would also outline the cause of the malfunction and plans for restoring the affected position indicators to operable status.