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

Serial No. 20-109  
NRA/SS R0  
Docket No. 50-336  
License No. DPR-65

**DOMINION ENERGY NUCLEAR CONNECTICUT, INC.**  
**MILLSTONE POWER STATION UNIT 2**  
**SUPPLEMENT TO LICENSE AMENDMENT REQUEST TO REVISE TS 3.8.1.1,**  
**“A.C. SOURCES – OPERATING,” TO SUPPORT MAINTENANCE AND**  
**REPLACEMENT OF THE MILLSTONE UNIT 3 ‘A’ RESERVE STATION SERVICE**  
**TRANSFORMER AND 345 KV SOUTH BUS SWITCHYARD COMPONENTS**

By letter dated August 17, 2019 (ADAMS Accession No. ML19234A111), and supplemented by letter dated October 22, 2019 (ADAMS Accession No. ML19304A294), Dominion Energy Nuclear Connecticut, Inc. (DENC) submitted a license amendment request (LAR) to revise Millstone Power Station Unit 2 (MPS2) Technical Specifications (TS). The LAR proposes to revise TS 3.8.1.1, “A.C. Sources - Operating,” to add a new Required Action a.3 that provides an option to extend the allowed outage time (AOT) from 72 hours to 10 days for one inoperable offsite circuit. The LAR also proposes a one-time allowance to the new proposed Required Action a.3 that extends the AOT to 35 days for one inoperable offsite circuit. This one-time allowance is needed for replacement of the Millstone Power Station Unit 3 (MPS3) ‘A’ reserve station service transformer, its associated equipment, and other 345 kV south bus switchyard components that are nearing the end of their dependable service life.

This supplement revises risk management action #6 in Attachment 4 of the October 22, 2019 LAR supplement, to clarify the scope of equipment that is applicable to this action.

Attachment 1 provides a description and assessment of the proposed changes. Attachment 2 provides the updated TS markup. Attachment 3 provides the updated TS Bases insert pages (for information only), to replace the corresponding pages previously submitted in the October 22, 2019 LAR supplement. Attachment 4 provides an updated risk management action summary.

Pursuant to the provisions of 10 CFR 50.92, the revised change proposed herein does not affect the conclusion of the Significant Hazards Consideration presented in the October 22, 2019 LAR supplement.



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**ATTACHMENT 1**

**DESCRIPTION AND ASSESSMENT OF PROPOSED CHANGES**

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

## 1.0 SUMMARY

By letter dated August 17, 2019 (ADAMS Accession No. ML19234A111), and supplemented by letter dated October 22, 2019 (ADAMS Accession No. ML19304A294), Dominion Energy Nuclear Connecticut, Inc. (DENC) submitted a license amendment request (LAR) to revise Millstone Power Station Unit 2 (MPS2) Technical Specifications (TS). The LAR proposes to revise TS 3.8.1.1, "A.C. Sources - Operating," to add a new Required Action a.3 that provides an option to extend the allowed outage time (AOT) from 72 hours to 10 days for one inoperable offsite circuit. The LAR also proposes a one-time allowance to the new proposed Required Action a.3 that extends the AOT to 35 days for one inoperable offsite circuit. This one-time allowance is needed for replacement of the Millstone Power Station Unit 3 (MPS3) 'A' reserve station service transformer (RSST), its associated equipment, and other 345 kV south bus switchyard components that are nearing the end of their dependable service life.

This supplement revises risk management action #6 in Attachment 4 of the October 22, 2019 LAR supplement, to clarify the scope of equipment that is applicable to this action.

## 2.0 DESCRIPTION OF CHANGE

DENC included eight risk management actions in Attachment 4 of the October 22, 2019 LAR supplement, which were also included in the TS Bases mark-up. Risk management action #6 is shown below:

*"TS required systems, subsystems, trains, components, and devices that depend on the remaining power sources will be verified to be operable and positive measures will be provided to preclude subsequent testing or maintenance activities on these systems, subsystems, trains, components, and devices."*

DENC proposes to revise this action as follows:

~~TS required systems, subsystems, trains, components, and devices that depend on the remaining power sources~~ **The Tier 2 equipment listed below** will be verified to be operable **OPERABLE/FUNCTIONAL**, and positive measures will be provided to preclude subsequent testing or maintenance activities on ~~these systems, subsystems, trains, components, and devices.~~ **this equipment (except for testing required to restore or maintain OPERABILITY/FUNCTIONALITY):**

- **MPS2 EDGs H7A, H7B**
- **MPS3 SBO Diesel Generator 3BGS-EG1**
- **MPS3 Diesel-driven Fire Water Pump M7-7 (which is common to MPS2 and MPS3)**
- **MPS2 Service Water Pumps P5A, P5B, P5C**
- **MPS2 Auxiliary Feedwater Pumps P9A, P9B, P4**
- **MPS2 High Pressure Safety Injection (HPSI) Pumps P41A, P41B, P41C (and associated equipment)**

A clean version of the risk management action summary, including the updated risk management action #6, is provided in Attachment 4. Because the TS markup in the October 22, 2019 LAR supplement included a requirement stating that the risk management actions contained in DENC letter 19-282B, Attachment 4 remain in effect during the permanent 10-day and one-time 35-day AOTs, the TS mark-up also needed to be updated to modify the letter reference. A revised TS markup is provided in Attachment 2, which now cites Attachment 4 of this submittal letter for the updated list of risk management actions. It should be noted that the TS mark-up in Attachment 2 also includes TS changes from the RAI response in DENC letter 20-033, dated February 11, 2020 (ADAMS Accession No. ML20048A019). Attachment 3 provides the updated TS Bases insert pages (for information only) to replace the corresponding pages previously submitted in the October 22, 2019 LAR supplement.

### 3.0 TECHNICAL EVALUATION OF CHANGE

During development of the RAI response in DENC letter 20-070, dated March 19, 2020 (ADAMS Accession No. ML20079K424) DENC identified a conflict with the wording of risk management action #6 as it pertains to the MPS2 LAR. Risk management action #6 (from the October 22, 2019 LAR supplement) states:

“TS required systems, subsystems, trains, components, and devices **that depend on the remaining power sources** will be verified to be operable and positive measures will be provided to preclude subsequent testing or maintenance activities on these systems, subsystems, trains, components, and devices.”

The MPS2 Limiting Condition for Operation (LCO) 3.8.1.1 requires two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system to be OPERABLE. It was determined that the underlined wording in risk management action #6 was not applicable to this MPS2 LAR, because the MPS electrical system design allows each individual offsite power source (of the three sources that can be credited in MPS2 TS LCO 3.8.1.1) to power both trains of plant equipment. These design capabilities are detailed in Attachment 1, Section 3.3 of the October 22, 2019 LAR supplement. Also, as described in Attachment 1, Section 4.2.2 of the October 22, 2019 LAR supplement, two offsite power sources for MPS2 will be energized through two separate paths and available for use under the proposed maintenance configuration (though independence is lost at breaker 13T).

The October 22, 2019 LAR supplement identified a requirement to protect Tier 2 equipment during the permanent 10-day and one-time 35-day AOTs in Attachment 1, Section 4.4.1. This supplement revises the scope of risk management action #6 to focus on verifying the status of the Tier 2 equipment and providing positive measures to preclude testing and maintenance during the proposed TS Required Actions with extended AOTs.

Additionally, one component in the Tier 2 list (MPS3 Diesel-driven Fire Water Pump M7-7, which is common to MPS2 and MPS3) has FUNCTIONALITY requirements provided in the MPS3 Technical Requirements Manual (TRM) 3.7.12.1 but does not have OPERABILITY requirements per any of the MPS2/3 TS LCOs. For this reason, the descriptor "TS" has been removed and references to "OPERABILITY" have been changed to "OPERABILITY/FUNCTIONALITY" in the updated risk management action #6. An allowance was also added to permit testing of the Tier 2 equipment for the purpose of restoring or maintaining equipment OPERABILITY or FUNCTIONALITY.

Pursuant to the provisions of 10 CFR 50.92, the revised change proposed herein does not affect the conclusion of the Significant Hazards Consideration presented in the October 22, 2019 LAR supplement.

**ATTACHMENT 2**

**UPDATED MARK-UP OF PROPOSED TECHNICAL SPECIFICATION CHANGES**

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



~~March 16, 2006~~

3/4.8 ELECTRICAL POWER SYSTEMS

3/4.8.1 A.C. SOURCES

OPERATING

LIMITING CONDITION FOR OPERATION

3.8.1.1 As a minimum, the following A.C. electrical power sources shall be OPERABLE:

- a. Two physically independent circuits between the offsite transmission network and the onsite Class 1E distribution system, and
- b. Two separate and independent diesel generators each with a separate fuel oil supply tank containing a minimum of 12,000 gallons of fuel.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Inoperable Equipment	Required ACTION
a. One offsite circuit	<p>a.1 Perform Surveillance Requirement 4.8.1.1.1 for remaining offsite circuit within 1 hour prior to or after entering this condition, and at least once per 8 hours thereafter.</p> <p>AND</p> <p>a.2 Restore the inoperable offsite circuit to OPERABLE status within 72 hours or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.</p>

(within 10 days\* if Required ACTION a.3 is met)

AND  
a.3 With MPS3 in MODE 5, 6, or defueled, the MPS3 'A' RSST inoperable, and the MPS3 'A' NSST energized with breaker 15G-13T-2 (13T) and associated disconnect switches closed, restore either offsite circuit to OPERABLE status within 10 days\* if the following requirements are met:  
- Within 30 days prior to entering the 10-day\*AOT, the availability of the supplemental power source (MPS3 SBO diesel generator) shall be verified.  
- During the 10-day\*AOT, the availability of the supplemental power source shall be checked once per shift. If the supplemental power source becomes unavailable at any time during the 10-day\*AOT, restore to available status within 24 hours or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.  
- The risk management actions contained in DENC letter 20-109, Attachment 4 (also provided in TS Bases 3/4.8), shall remain in effect during the 10-day\*AOT.

\* To facilitate replacement of the MPS3 'A' RSST and associated equipment, use of a one-time 35-day allowed outage time is permitted provided the requirements of Required ACTION a.3 are met. The work shall be completed no later than the end of MPS3 Refueling Outage 22 (fall 2023).

### **MPS2 TS Bases Insert**

Required Action a.3 provides an option that can be entered for the configuration where the Millstone Unit 3 'A' RSST is inoperable and the Millstone Unit 3 'A' NSST is energized with breaker 15G-13T-2 closed. This option to extend 10-day AOT allows for performance of Millstone Unit 3 'A' RSST and/or 345 kV south bus switchyard component maintenance and repair activities in this configuration while Millstone Unit 2 is operating.

Required Action a.3 can only be entered if the availability of a supplemental power source, which is the Millstone Unit 3 SBO diesel generator, has been verified by testing within 30 days prior to entering the extended AOT. The verification testing is performed by bringing the Millstone Unit 3 SBO diesel generator to its rated voltage and frequency for more than 5 minutes and ensuring all its auxiliary support systems are available or operational. While in the Required Action, the availability of supplemental power source must also be checked once per shift. This check consists of administratively examining logs or other information to determine if the Millstone Unit No. 3 SBO diesel generator is out of service for maintenance or other reasons. The check also includes local visual observation of MPS3 SBO diesel generator once per shift, along with confirmation of correct switch configuration and indicated power availability once per day.

To provide additional defense-in-depth during the 10-day AOT, the following risk management actions are taken:

1. The AOT will be used no more than once every 18 month refueling interval for Unit 3 to perform maintenance on the Millstone Unit 3 'A' RSST and/or 345 kV south bus switchyard components.
2. The AOT will not be scheduled when adverse or inclement weather and/or unstable grid conditions are predicted or present.
3. The load dispatcher will be contacted once per day to ensure no significant grid perturbations are expected during the AOT.
4. Component testing or maintenance of safety systems and important non-safety equipment in the offsite power systems that can increase the likelihood of a plant trip will be avoided. No elective maintenance within the switchyard that could challenge offsite power availability will be scheduled, other than 345 kV south bus switchyard maintenance and repairs as permitted in action 5.
5. During concurrent maintenance and repair activities on 345 kV south bus switchyard components, 345 kV line 310 (Millstone to Manchester line) will be removed from service to prevent a loss of load trip of Unit 2 from a 310 line fault.
6. ~~TS required systems, subsystems, trains, components, and devices that depend on the remaining power sources~~ **The Tier 2 equipment listed below** will be verified to be operable **OPERABLE/FUNCTIONAL**, and positive measures will be provided to preclude subsequent testing or maintenance activities on these

~~systems, subsystems, trains, components, and devices.~~ **this equipment (except for testing required to restore or maintain OPERABILITY/FUNCTIONALITY):**

- **Unit 2 EDGs H7A, H7B**
- **Unit 3 SBO Diesel Generator 3BGS-EG1**
- **Unit 3 Diesel-driven Fire Water Pump M7-7 (which is common to MPS2 and MPS3)**
- **Unit 2 Service Water Pumps P5A, P5B, P5C**
- **Unit 2 Auxiliary Feedwater Pumps P9A, P9B, P4**
- **Unit 2 High Pressure Safety Injection (HPSI) Pumps P41A, P41B, P41C (and associated equipment)**

7. The Unit 2 turbine-driven auxiliary feedwater pump will be controlled as protected equipment.
8. The status of the Unit 2 EDGs will be monitored once per shift.

If the supplemental power source becomes unavailable at any time during the 10-day AOT, it shall be restored to available status within 24 hours or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours. Opening breaker 13T and its associated disconnect switches results in exiting the Required ACTION with the 10-day AOT, because this would restore the Millstone Unit 3 'A' NSST to OPERABLE status as an offsite circuit.

To facilitate replacement of the Unit 3 'A' RSST and associated equipment, use of a one-time 35-day AOT is permitted provided the supplemental power source requirements of the Required ACTION for the 10-day AOT are met, and the related risk management actions are taken. The work shall be completed no later than the end of Unit 3 Refueling Outage 22 (fall 2023).

**ATTACHMENT 4**

**UPDATED RISK MANAGEMENT ACTION SUMMARY**

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

No.	Risk Management Action	Due Date/Event
1	The AOT will be used no more than once every 18 month refueling interval for MPS3 to perform maintenance on the MPS3 'A' RSST and/or 345 kV south bus switchyard components.	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.
2	The AOT will not be scheduled when adverse or inclement weather and/or unstable grid conditions are predicted or present.	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.
3	The load dispatcher will be contacted once per day to ensure no significant grid perturbations are expected during the AOT.	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.
4	Component testing or maintenance of safety systems and important non-safety equipment in the offsite power systems that can increase the likelihood of a plant trip will be avoided. No elective maintenance within the switchyard that could challenge offsite power availability will be scheduled, other than 345 kV south bus switchyard maintenance and repairs.	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.
5	During concurrent maintenance and repair activities on 345 kV south bus switchyard components, the 345 kV offsite line 310 will be removed from service, to prevent a loss of load trip of MPS2 from a 310 line fault.	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.
6	<p>The Tier 2 equipment listed below will be verified to be OPERABLE/FUNCTIONAL, and positive measures will be provided to preclude subsequent testing or maintenance activities on this equipment (except for testing required to restore or maintain OPERABILITY/FUNCTIONALITY):</p> <ul style="list-style-type: none"> <li>• MPS2 EDGs H7A, H7B</li> <li>• MPS3 SBO Diesel Generator 3BGS-EG1</li> <li>• MPS3 Diesel-driven Fire Water Pump M7-7 (which is common to MPS2 and MPS3)</li> <li>• MPS2 Service Water Pumps P5A, P5B, P5C</li> <li>• MPS2 Auxiliary Feedwater Pumps P9A, P9B, P4</li> <li>• MPS2 High Pressure Safety Injection (HPSI) Pumps P41A, P41B, P41C (and associated equipment)</li> </ul>	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.
7	The MPS2 turbine-driven auxiliary feedwater pump will be controlled as protected equipment.	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.
8	The status of the MPS2 EDGs will be verified once per shift.	During the time MPS3 'A' RSST is inoperable and breaker 13T is closed.