

Millstone Unit 2

Revise TS 3.8.1.1

MPS2 Revise TS 3.8.1.1

AGENDA

- **Issue**
- **Proposed Resolution**
- **Risk Assessment/Risk Management Strategy**
- **Conclusion**

MPS2 Revise TS 3.8.1.1

Issue

- MPS2 credits MPS3 'A' RSST or the MPS3 'A' NSST to meet alternate offsite power source requirements for GDC-17
- When MPS3 'A' RSST is removed from service for maintenance, MPS2 must credit the MPS3 'A' NSST as the alternate offsite power source for GDC-17.
- If 13T-2 is closed, MPS2 cannot credit MPS3 'A' NSST as the alternate source of offsite power, which would require MPS2 to enter TS 3.8.1.1 Action a – allows 72 hours to restore
- To avoid entry into MPS2 TS 3.8.1.1 ACTION a, switchyard breaker 13T-2 is normally opened when the MPS3 'A' RSST is out of service.
- However, opening breaker 13T-2 to allow MPS2 to meet GDC-17 requirements increases the probability of a LOOP at MPS3.

MPS2 Revise TS 3.8.1.1

Proposed Resolution

- DNC proposes to add a Required ACTION to MPS2 TS 3.8.1.1 “A.C. Sources – Operating” for the configuration where switchyard breaker 13T-2 is closed coincident with the MPS3 ‘A’ RSST inoperable or out of service.
- The proposed amendment would improve operational safety by reducing the likelihood of a LOOP at MPS3 while limiting the MPS2 CDF increase to an acceptably small value.
- An allowed outage time of 14 days is being proposed, which will allow for completion of an extended MPS3 ‘A’ RSST maintenance evolution, while maintaining a reliable source of offsite power to both MPS units.

MPS2

Revise TS 3.8.1.1

Inoperable Equipment	Required ACTION
<p>f. MPS3 'A' Reserve Station Service Transformer</p> <p>AND</p> <p>Switchyard breaker 13T-2 closed</p>	<p>f.1 Perform Surveillance Requirement 4.8.1.1.1 for the 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>f.2 Restore the MPS3 'A' RSST to OPERABLE status within 72 hours (within 14 days if ACTION Statement f.3 is met) or open switchyard breaker 13T-2 and its associated disconnect switches or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.</p> <p>AND</p> <p>f.3 Restore the MPS3 'A' RSST to OPERABLE status within 14 days if the following conditions are met: Verify the MPS2 emergency diesel generators are OPERABLE and switchyard breakers 7T-2, 8T-2, and 9T-2 are closed within 1 hour prior to or after entering this condition, and at least once per 24 hours thereafter. If a MPS2 emergency diesel generator becomes inoperable, refer to ACTION Statement C. If switchyard breaker 7T-2, 8T-2, or 9T-2 is found open, either close the affected breaker(s) or open switchyard breaker 13T-2 and its associated disconnect switches within 24 hours or be in HOT STANDBY within the next 6 hours and COLD SHUTDOWN within the following 30 hours.</p>

* 9T-2 is allowed to be open for up to 24 hours while performing post-maintenance testing.

MPS2 Revise TS 3.8.1.1

Risk Assessment – MPS3

- 348 Line fault results in LOOP with 13T-2 open and MPS3 'A' RSST out of service
- MPS3 LOOP occurs even if the disturbance is an instantaneous interruption
- Since calculated risk to MPS2 is acceptably low, increased shutdown risk introduced to MPS3 is unwarranted.

MPS2 Revise TS 3.8.1.1

Risk Assessment – MPS2

- Two independent failures required to generate LOOP
 - Switchyard component fault
 - Failure that causes MPS2 reactor trip
- LOOP frequency increases by 0.003%
- Δ CDF and Δ LERF values ~ $1.4E-11/\text{yr}$ and $3E-13/\text{yr}$, respectively
- Per RGs 1.174 and 1.177, the proposed TS change has an acceptably small risk increase.

MPS2 Revise TS 3.8.1.1

Risk Management Strategy

- Avoid the following configurations:
 - ✓ No MPS2 high reactor trip activities (e.g., RPS matrix testing)
 - ✓ With the exception of MPS3 'A' RSST restoration activities, no planned maintenance on 310 Line or switchyard breakers 7T, 8T, 9T
 - ✓ No planned maintenance on MPS2 EDGs
- Maintenance Rule performance criteria developed for switchyard breakers 7T, 8T, 9T, 13T and North Bus

MPS2 Revise TS 3.8.1.1

Conclusion

- An allowed outage time of 14 days is being proposed, which will allow for completion of an extended MPS3 'A' RSST maintenance evolution, while maintaining a reliable source of offsite power to both MPS units.

Questions?