Xcel Energy®

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June 30, 2021

L-MT-21-043
10 CFR 50.90

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Monticello Nuclear Generating Plant
Docket No. 50-263
Renewed Facility Operating License No. DPR-22

Supplement to License Amendment Request: Revise Technical Specifications to Adopt Risk Informed Completion Times TSTF-505, Revision 2, “Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b”

References:

1) Letter (L-MT-20-003) from NSPM to the NRC, " License Amendment Request: Revise Technical Specifications to Adopt Risk Informed Completion Times TSTF-505, Revision 2, “Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b” dated March 30, 2020 (ML20090F820)

2) Technical Specification Task Force (TSTF) Traveler , "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b" (TSTF-505-A, Revision 2), dated November 26, 2018

In Reference 1, Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), submitted a license amendment request to the Technical Specifications (TS) for the Monticello Nuclear Generating Plant (MNGP). The proposed amendment would modify TS requirements to permit the use of Risk-Informed Completion Times in accordance with TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b" (Reference 2). This letter supplements Reference 1 by replacing Enclosure 11 with the enclosure to this letter.

The information provided in this letter does not alter the evaluations performed in accordance with 10 CFR 50.92 in Reference 1.

NSPM is notifying the State of Minnesota of this request by transmitting a copy of this letter and enclosure to the designated State Official.

Please contact Mr. Ron Jacobson at (612) 330-6542 if there are any questions or if additional information is needed.

Summary of Commitments

This letter makes no new commitments and no revisions to existing commitments.

I declare under penalty of perjury, that the foregoing is true and correct.
Executed on June 30, 2021.

Thomas A. Conboy
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Monticello, USNRC
Resident Inspector, Monticello, USNRC
State of Minnesota

# ENCLOSURE

## MONTICELLO NUCLEAR GENERATING PLANT

Supplement to License Amendment Request

Revise Technical Specifications to Adopt Risk Informed Completion Times TSTF-505, Revision 2, "Provide Risk-Informed Extended Completion Times – RITSTF Initiative 4b"

## REVISED ENCLOSURE 11
## MONITORING PROGRAM

Enclosure 11 provided with the LAR has been updated to reflect alignment with NEI 06-09-A, Rev 0. Changes from the version included in the LAR have been identified by change bars.

(3 Pages Follow)

**Monitoring Program**

## 1.0 INTRODUCTION

Section 4.0, Item 12 of the NRC Final Safety Evaluation (SE) (Reference 1) for Nuclear Energy Institute (NEI) Topical Report NEI 06-09-A, "Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines", Revision 0 (Reference 2), requires that the license amendment request (LAR) provide a description of the implementing and monitoring program as described in Regulatory Guide (RG) 1.174, "An Approach For Using Probabilistic Risk Assessment In Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis", Revision 1 (Reference 3), and NEI 06-09-A. (Note that Revision 2 of RG 1.174 (Reference 4) was issued by the NRC in May 2011 which made editorial changes to the applicable section referenced in the NRC SE for Section 4.0, Item 12.)

This enclosure provides a description of the process applied to govern and monitor calculation of cumulative risk impact in support of the Risk-Informed Completion Time (RICT) Program, specifically the calculation of cumulative risk of extended Completion Times (CTs). Calculation of the cumulative risk for the RICT Program is discussed in Step 14 of Section 2.3.1 and Step 7.1 of Section 2.3.2 of NEI 06-09-A. General requirements for a Performance Monitoring Program for risk-informed applications are discussed in Element 3 of the RG 1.174, Revision 2.

## 2.0 DESCRIPTION OF MONITORING PROGRAM

The RICT Program will require calculation of cumulative risk impacts every refueling cycle not to exceed 24 months. For the assessment period under evaluation, plant and system historical data is collected to establish the risk increase associated with each application of an extended CT for both core damage frequency (CDF) and large early release frequency (LERF). The total risk impact will be calculated by summing all risk associated with each RICT application. This summation is the change in CDF or LERF above the zero maintenance baseline levels during the period of operation in the extended CT (i.e., beyond the front-stop CT). The change in risk will be converted to average annual values and documented every refueling cycle not to exceed 24 months.

The total average annual change in risk for extended CTs will be compared to the guidance of RG 1.174, Revision 2, Figures 4 and 5, acceptance guidelines for CDF and LERF, respectively. If the actual annual risk increase is acceptable (i.e., not in Region I of Figures 4 and 5 of RG 1.174, Revision 2), then RICT Program implementation is acceptable for the assessment period. Otherwise, further assessment of the cause of exceeding the acceptance guidelines of RG 1.1.74, Revision 2, and implementation of any necessary corrective actions to ensure future plant operation is within the guidelines will be conducted under the corrective action program (CAP).

The evaluation of the cumulative risk will also identify areas for consideration, such as:

- RICT applications that dominated the risk increase.
- Risk contributions from planned vs. emergent RICT applications.
- Risk Management Actions (RMA) implemented but not credited in the risk calculations.
- Risk impact from applying RICT to avoid multiple shorter duration outages.

Based on a review of the considerations above, corrective actions will be developed and implemented as appropriate. These actions may include:

- Administrative restrictions of the use of RICTs for specific high-risk configurations.
- Additional RMAs for specific configurations.
- Rescheduling planned maintenance activities.
- Deferring planned maintenance to shutdown conditions.
- Use of temporary equipment to replace out-of-service systems, structures, or components (SSC).
- Plant modifications to reduce risk impact of future planned maintenance configurations.

In addition to impacting cumulative risk, the implementation of the RICT Program may potentially impact the unavailability of SCCs. The Maintenance Rule (MR) monitoring programs under 10 CFR 50.65 provide for evaluation and disposition of unavailability impacts which may be incurred from implementation of the RICT Program. The SSCs in the scope of the RICT Program which are also in the scope of the MR allows the use of the MR Program.

The monitoring program of the MR, along with the specific assessment of cumulative risk impact described above, serve as the Implementation and Monitoring Program for the RICT Program as described in Element 3 of RG 1.174, Revision 1, and NEI 06-09-A.

## 3.0 REFERENCES

1. Letter from the NRC to NEI, “Final Safety Evaluation for Nuclear Energy Institute (NEI) Topical Report (TR) NEI 06-09, ‘Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines’ (TAC No. MD4995)”, dated May 17, 2007 (ADAMS Accession No. ML071200238)

2. NEI Topical Report NEI 06-09-A, “Risk-Informed Technical Specifications Initiative 4b, Risk-Managed Technical Specifications (RMTS) Guidelines”, Revision 0, dated October 2012 (ADAMS Accession No. ML12286A322)

3. NRC Regulatory Guide 1.174, “An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis”, Revision 1, dated November 2002 (ADAMS Accession No. ML023240437)

4. NRC Regulatory Guide 1.174, “An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis”, Revision 2, dated May 2011 (ADAMS Accession No. ML100910006)