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2807 West County Road 75
Monticello, MN 55362

June 7, 2019

L-MT-19-033
10 CFR 50.46(a)(3)(ii)

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

Thirty-Day Report of Changes in Emergency Core Cooling System Evaluation Models Pursuant to 10 CFR 50.46

References:

1) Letter from NSPM to NRC, "Thirty Day Report of Changes in the Emergency Core Cooling System Evaluation Models Pursuant to 10 CFR 50.46", (L-MT-19-003), dated January 28, 2019 (ADAMS Accession No ML19028A256)

2) Framatome Report ANP-3720P Revision 0, "Monticello LOCA MAPLHGR Limits for EPU/EFW with ATRIUM 10XM Fuel and Revised ECCS Modeling Parameters", January 2019

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), in accordance with 10 CFR 50.46, "Acceptance criteria for emergency core cooling systems for light-water nuclear power reactors", is submitting this thirty-day report which reflects the results of a reanalysis performed with the Emergency Core Cooling System (ECCS) evaluation models for the Monticello Nuclear Generating Plant (MNGP). On January 28, 2019, NSPM submitted a thirty-day report (Reference 1) concerning changes or errors identified in the ECCS evaluation for the MNGP.

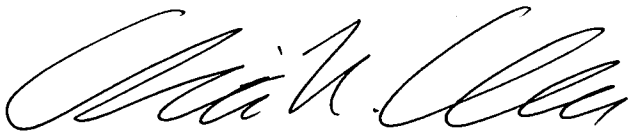
In January 2019, a reanalysis was completed by Framatome, Inc. in accordance with the NRC approved Loss of Coolant Accident (LOCA) evaluation models for the MNGP (Reference 2). This reanalysis incorporated existing changes and corrected errors in the evaluation models reflecting the fuel designs for the current operating cycle that began on May 12, 2019, and those projected for an equilibrium cycle of ATRIUM™ 10XM fuel. The results demonstrate that MNGP operation within the Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limit ensures that the LOCA response acceptance criteria in 10 CFR 50.46 are satisfied. This new MAPLHGR analysis supersedes prior MNGP MAPLHGR analyses and establishes a new baseline LOCA analysis of record for the ATRIUM™ 10XM fuel.

The resulting licensing basis Peak Cladding Temperature (PCT) is 2125°F for the ATRIUM™ 10XM fuel. This PCT is 75°F below the 2200°F acceptance criterion of 10 CFR 50.46(b)(1).

Should you have questions regarding this letter, please contact Mr. Richard Loeffler at (612) 342-8981.

Summary of Commitments

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



Christopher R. Church
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company – Minnesota

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