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October 14, 2016

L-XE-16-010  
Generic Letter 2016-01

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

Prairie Island Nuclear Generating Plant,  
Units 1 and 2  
Docket 50-282 and 50-306  
Renewed Facility Operating License Nos.  
DPR-42 and DPR-60

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

Response to Generic Letter 2016-01, Monitoring of Neutron-Absorbing Materials in Spent Fuel Pools

- References:
- 1) Generic Letter 2016-01, "Monitoring of Neutron-Absorbing Materials in Spent Fuel Pools," dated April 7, 2016 (Agencywide Document Access and Management System (ADAMS) Accession No. ML16097A169).
  - 2) Letter from NRC to NSPM, "Issuance of Amendment 182 to revise the Technical Specifications to Support Fuel Storage System Changes," dated October 24, 2014 (ADAMS Accession Nos. ML15160A207 (public) and ML14197A020 (non-public)).
  - 3) Letter from NRC to NSP, "Issuance of Amendments 129 and 121 Regarding Credit for Soluble Boron in Spent Fuel Pool Criticality Analyses," dated June 12, 1997 (Legacy ADAMS Accession No. 9706230246).
  - 4) Letter from NRC to NMC, "Issuance of Amendments 172 and 162 Regarding Spent Fuel Storage," dated February 5, 2006 (ADAMS Accession No. ML060250224).
  - 5) Letter from NRC to NSPM, "Issuance of Amendments 209 and 196 Regarding Spent Fuel Pool Criticality Changes", dated August 29, 2013 (ADAMS Accession Nos. ML13241A383 (public) and ML13220A170 (non-public)).

In Reference 1, the NRC requested that all nuclear power plant operators provide information with respect to neutron-absorbing materials credited in the licensing and design basis to maintain subcriticality in the spent fuel pool (SFP). Pursuant to 10 CFR 50.54(f), Northern

States Power Company, a Minnesota Corporation (NSPM), doing business as Xcel Energy, hereby submits the requested information for the Monticello Nuclear Generating Plant (MNGP) and the Prairie Island Nuclear Generating Plant (PINGP).

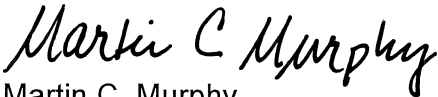
In Reference 2, the NRC approved Amendment 182 to the MNGP Technical Specifications (TS). As part of the amendment, NSPM established a SFP neutron absorber monitoring program at MNGP. The program was incorporated into the MNGP TS as TS 5.5.14, "Spent Fuel Pool Boron Monitoring Program." Therefore, NSPM has implemented a neutron absorber monitoring program at MNGP that has not been revised since approval of Amendment 182 in Reference 2. Accordingly, NSPM has determined that MNGP is a Category 3 plant as described in Reference 1 and, therefore, Reference 2 provides the requested information.

In Reference 3, the NRC approved Amendments 129 and 121 to the PINGP TS for Units 1 and 2, respectively. In these amendments, the NRC approved a change in NSPM's criticality analyses for the SFP to remove all credit for neutron-absorbing materials (i.e., Boraflex) in the SFP storage racks, instead crediting the soluble boron in the SFP for maintaining subcriticality. NSPM has subsequently submitted two changes to the SFP criticality analyses, which the NRC approved in References 4 and 5, both of which credited soluble boron in lieu of neutron-absorbing materials in the SFP storage racks. Therefore, no neutron-absorbing materials are currently credited to meet the NRC subcriticality requirements in the PINGP SFP. Accordingly, NSPM has determined that PINGP is a Category 1 plant as described in Reference 1 and, therefore, References 3-5 provide the requested information.

#### 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 October 14, 2016.



Martin C. Murphy  
Director, Nuclear Licensing and Regulatory Services  
Northern States Power Company – Minnesota

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