

~~Security-Related Information Withhold Under 10 CFR 2.390(d)(1)~~

1717 Wakonade Drive East
Welch, MN 55089

800.895.4999
xcelenergy.com



DEC 13 2016

L-PI-16-094
10 CFR 50.54(f)

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

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

Prairie Island Nuclear Generating Plant, Units 1 and 2, Mitigating Strategies Flood Hazard Assessment (MSA) Submittal

References:

1. NRC Letter, "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated March 12, 2012 (ADAMS Accession No. ML12056A046)
2. NSPM Letter L-PI-16-039 to NRC, "Prairie Island Nuclear Generating Plant, Units 1 and 2, Response to March 12, 2012, Request for Information Enclosure 2, Recommendation 2.1, Flooding, Required Response 2, Flood Hazard Reevaluation Report," dated May 9, 2016 (ADAMS Accession No. ML16133A030)
3. NSPM Letter L-PI-16-076 to NRC, "Prairie Island Nuclear Generating Plant, Units 1 and 2 - Supplement to the Response to March 12, 2012, Request for Information Enclosure 2, Recommendation 2.1, Flooding, Required Response 2, Flood Hazard Reevaluation Report," dated September 29, 2016 (ADAMS Accession No. ML16273A556)
4. NRC Letter, "Coordination of Requests for Information Regarding Flooding Hazard Reevaluations and Mitigating Strategies for Beyond-Design-Basis External Events," dated September 1, 2015 (ADAMS Accession No. ML15174A257)

Enclosure 1 contains ~~Security-Related Information~~. When separated from Enclosure 1, this letter and Enclosure 2 are decontrolled.

AD10
NRR

~~Security-Related Information Withhold Under 10 CFR 2.390(d)(1)~~

5. NRC Staff Requirements Memorandum, "Staff Requirements - COMSECY-14-0037 - Integration of Mitigating Strategies for Beyond-Design-Basis External Events and the Reevaluation of Flooding Hazards," dated March 30, 2015 (ADAMS Accession No. ML15089A236)
6. Nuclear Energy Institute (NEI) guidance, NEI 12-06, Revision 2, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," dated December 2015 (ADAMS Accession No. ML16005A625)
7. NRC JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," Revision 1, dated January 22, 2016 (ADAMS Accession No. ML15357A163)
8. NRC Letter to NSPM, "Prairie Island Nuclear Generating Plant, Units 1 and 2 – Correction to Interim Staff Response to Reevaluated Flood Hazards Submitted in Response to 10 CFR 50.54(f) Information Request – Flood-Causing Mechanism Reevaluation (CAC NO. MF7710 and MF7711)," dated October 17, 2016 (ADAMS Accession No. ML16248A005)
9. NRC Letter, "Supplemental Information Related to Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) regarding Flooding Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated March 1, 2013 (ADAMS Accession No. ML13044A561)

On March 12, 2012, the NRC issued Reference 1 to request information associated with Near-Term Task Force (NTTF) Recommendation 2.1 for Flooding. One of the Required Responses in Reference 1 directed licensees to submit a Flood Hazard Reevaluation Report (FHRR). Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy, submitted the FHRR for the Prairie Island Nuclear Generating Plant (PINGP), Units 1 and 2, on May 9, 2016 (Reference 2). The reevaluated flood hazard was further supplemented in Reference 3. Per Reference 9, the NRC considers the reevaluated flood hazard to be beyond the current design/licensing basis of operating plants.

Concurrent with the flood hazard reevaluation, NSPM developed and implemented mitigating strategies in accordance with NRC Order EA-12-049, "Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," for the PINGP, Units 1 and 2. In Reference 5, the NRC affirmed that licensees need to address the reevaluated flooding hazards within their mitigating strategies for beyond-design-bases (BDB) external events, including the reevaluated flood hazards. This requirement was

confirmed by the NRC in Reference 4. Guidance for performing Mitigating Strategies Assessments (MSAs) is contained in Appendix G of NEI 12-06, Revision 2 (Reference 6). The Reference 6 guidance was endorsed by the NRC in Reference 7.

In Reference 8, the NRC concluded that the reevaluated flood hazards information is suitable for the assessment of mitigating strategies developed in response to Order EA-12-049 for the PINGP.

Enclosure 1 to this letter provides the PINGP Mitigating Strategies Flood Hazard Assessment (MSA) for Units 1 and 2. The new flooding analyses were bounded by the plant design basis flood for all postulated flooding scenarios, with the exception of local intense precipitation (LIP). The MSA evaluated FLEX strategy implementation during the LIP flooding event. The assessment concluded that the existing FLEX strategies can be successfully implemented as designed. No additional actions or procedural changes are required.

Enclosure 1 of this letter contains security-related information. NSPM hereby requests that Enclosure 1 be withheld from public disclosure in accordance with the provisions of 10 CFR 2.390. A redacted version of Enclosure 1 is provided in Enclosure 2.

Please contact Lynne Gunderson, Licensing Engineer, at 651-267-7421, if additional information or clarification is required.

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 December 3 2016.



Scott Northard
Site Vice President, Prairie Island Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosures (2)

cc: Administrator, Region III, USNRC
Project Manager, Prairie Island Nuclear Generating Plant, USNRC
Resident Inspector, Prairie Island Nuclear Generating Plant, USNRC