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L-PI-16-082 0C7 2 8 2016 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 - NEI 12-06, Appendix H, Revision 2, H.4.1 Path 1: GMRS ≤ SSE, Mitigating Strategies Assessment (MSA) report for the New Seismic Hazard Information

References:

- 1. 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)
- 2. Nuclear Regulatory Commission (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)
- 3. NSPM Letter (L-PI-14-028) to NRC, "PINGP Seismic Hazard and Screening Report (CEUS Sites), Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated March 27, 2014, (ADAMS Accession No. ML14086A628)
- 4. NRC Letter to NSPM, "Prairie Island Nuclear Generating Plant, Units 1 And 2 Staff Assessment Of Information Provided Pursuant To Title 10 of the Code Of Federal Regulations Part 50, Section 50.54(f), Seismic Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force (NTTF) Review of Insights from the Fukushima Dai-ichi Accident and Staff Closure of Activites Associated with NTTF Recommendation 2.1, "Seismic" (TAC NOS. MF3784 AND MF3785)," dated December 15, 2015 (ADAMS Accession No. ML15341A162)

The purpose of this letter is to provide the results of the assessment performed by Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy, for the Prairie Island Nuclear Generating Plant (PINGP), Units 1 and 2, to determine if the FLEX strategies developed, implemented and maintained in accordance with NRC Order EA-12-049 can be implemented considering the impacts of the reevaluated seismic hazard. The assessment was performed in accordance with the guidance provided in Appendix H of NEI 12-06, Revision 2 (Reference 1), which was endorsed by the NRC (Reference 2).

The Mitigating Strategies Seismic Hazard Information (MSSHI) is PINGP's reevaluated seismic hazard information developed using Probabilistic Seismic Hazard Analysis (PSHA). The MSSHI includes a performance-based Ground Motion Response Spectrum (GMRS), Uniform Hazard Response Spectra (UHRS) at various annual probabilities of exceedance, and a family of seismic hazard curves at various frequencies and fractiles developed at the PINGP control point elevation. NSPM submitted the reevaluated seismic hazard information including the UHRS, GMRS and the hazard curves to the NRC on March 27, 2014 (Reference 3). The NRC staff concluded that the GMRS that was submitted adequately characterizes the reevaluated seismic hazard for the PINGP site (Reference 4).

Consistent with H.4.1 of Reference 1, the PINGP GMRS is bounded by the Safe Shutdown Earthquake (SSE) spectrum at frequencies 1 Hz and greater. Therefore, the FLEX strategies for PINGP can be implemented as designed and no further seismic evaluations are necessary as noted in the NRC Staff Closure letter for PINGP (Reference 4).

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

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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 26, 2016.

Scott Northard

Site Vice President, Prairie Island Nuclear Generating Plant

Northern States Power Company - Minnesota

Enclosure

cc: Administrator, Region III, USNRC

Project Manager, Prairie Island Nuclear Generating Plant, USNRC Resident Inspector, Prairie Island Nuclear Generating Plant, USNRC