



Monticello Nuclear Generating Plant  
2807 W County Road 75  
Monticello, MN 55362

April 3, 2014

L-MT-14-035  
10 CFR 50.54(f)

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

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

Interim Evaluation in Response to the NRC Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding the Seismic Aspects of Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident

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. ML12053A340.
2. NRC Letter, "Endorsement of Electric Power Research Institute Final Draft Report 1025287, 'Seismic Evaluation Guidance,'" dated February 15, 2013, ADAMS Accession No. ML12319A074.
3. Electric Power Research Institute (EPRI) Report Number 1025287, "Seismic Evaluation Guidance: Screening, Prioritization and Implementation Details (SPID) for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic," dated November 2012, ADAMS Accession No. ML12333A170.
4. Nuclear Energy Institute (NEI) letter to NRC, "Proposed Path Forward for NTTF Recommendation 2.1: Seismic Reevaluations," dated April 9, 2013, ADAMS Accession No. ML13101A379.
5. NRC Letter, "Electric Power Research Institute Final Draft Report XXXXXX, 'Seismic Evaluation Guidance: Augmented Approach for the Resolution of Fukushima Near-Term Task Force Recommendation 2.1: Seismic,' As an Acceptable Alternative to the March 12, 2012, Information Request for Seismic Reevaluations," dated May 7, 2013, ADAMS Accession No. ML13106A331.

6. NSPM Letter to NRC, "Request Commitment Change for Response to NRC Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding the Seismic Aspects of Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated March 31, 2014.
7. NRC Letter, "Supplemental Information Related to Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Seismic Hazard Reevaluations for Recommendation 2.1 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated February 20, 2014, ADAMS Accession No. ML14030A046.
8. NEI Letter to NRC, "Seismic Risk Evaluations for Plants in the Central and Eastern United States," dated March 12, 2014, ADAMS Accession No. ML14083A584.
9. NRC Generic Issue 199 (GI-199) Report, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants, Safety/Risk Assessment," dated August 2010, ADAMS Accession No. ML100270582.

On March 12, 2012, the Nuclear Regulatory Commission (NRC) Staff issued Reference 1 to all power reactor licensees and holders of construction permits in active or deferred status. Enclosure 1 of Reference 1 contains specific Requested Actions, Requested Information, and Required Responses associated with Near-Term Task Force (NTTF) Recommendation 2.1, Seismic Evaluations. Enclosure 1 of Reference 1 requested each addressee in the Central and Eastern United States (CEUS) to submit a written response consistent with the requested seismic hazard evaluation information (items 1 through 7) by September 12, 2013. On February 15, 2013, the NRC issued Reference 2, endorsing the Reference 3 industry guidance for responding to Reference 1. Section 4 of Reference 3 identifies the detailed information to be included in the seismic hazard evaluation submittals.

On April 9, 2013, NEI submitted Reference 4 to the NRC, requesting NRC agreement to delay submittal of some of the CEUS seismic hazard evaluation information so that an update to the EPRI (2004, 2006) ground motion attenuation model could be completed and used to develop that information. NEI proposed that descriptions of subsurface materials and properties and base case velocity profiles (items 3a and 3b in Section 4 of Reference 3) be submitted to NRC by September 12, 2013, with the remaining seismic hazard and screening information submitted to NRC by March 31, 2014. In Reference 5, the NRC agreed with the proposed path forward.

In Reference 6, Northern States Power Company, a Minnesota corporation (NSPM), doing business as Xcel Energy, requested a commitment change to submit the remaining information described in Section 4 of Reference 3 no later than May 16, 2014, for the Monticello Nuclear Generating Plant (MNGP). NSPM also committed in Reference 6 to complete a risk evaluation, a spent fuel pool evaluation, and a high

frequency confirmation based on the priority assigned by the NRC. Additionally, NSPM committed to submit the Expedited Seismic Evaluation Process (ESEP) report, as proposed in Reference 4 and agreed to by the NRC in Reference 5, as an interim action by December 31, 2014.

The Reference 6 commitment change request was discussed with the NRC in a conference call on March 31, 2014. During this conference call, the NRC requested NSPM provide an interim evaluation to demonstrate that the plant can cope with the reevaluated hazard while the ESEP and risk evaluations are conducted. The purpose of this letter is to provide this interim evaluation for the MNGP.

Consistent with the NRC letter dated February 20, 2014 (Reference 7), the seismic hazard reevaluations to be completed as part of the response to Reference 1 are distinct from the current design and licensing bases of the MNGP. Therefore, the results from the seismic hazard reevaluations are not expected to call into question the operability or functionality of Structures, Systems and Components (SSC) and are not expected to be reportable pursuant to 10 CFR 50.72 and 10 CFR 50.73.

The Reference 7 letter also requests that licensees provide an interim evaluation or actions to demonstrate that the plant can cope with the reevaluated hazard while the expedited approach and risk evaluations are conducted. In response to that request, a letter from NEI dated March 12, 2014 (Reference 8), provides seismic core damage risk estimates using the updated seismic hazards for the operating nuclear plants in the CEUS. These risk estimates continue to support the following conclusions of the NRC GI-199 Safety/Risk Assessment in Reference 9:

Overall seismic core damage risk estimates are consistent with the Commission's Safety Goal Policy Statement because they are within the subsidiary objective of  $10^{-4}$ /year for core damage frequency. The GI-199 Safety/Risk Assessment (Reference 9), based in part on information from the U.S. NRC's Individual Plant Examination of External Events (IPEEE) program, indicates that no concern exists regarding adequate protection and that the current seismic design of operating reactors provides a safety margin to withstand potential earthquakes exceeding the original design basis.

The comparisons documented in the Reference 8 letter show that there has not been an overall increase in seismic risk for the fleet of U.S. nuclear plants. In addition, all sixty-one of the CEUS sites have seismic core damage risk estimates below the  $10^{-4}$ /year threshold considered in Reference 9. The MNGP is included in the Reference 8 risk estimates. Thus, it can be concluded that the current seismic design of MNGP continues to provide a safety margin to withstand potential earthquakes exceeding the seismic design basis, as was concluded in Reference 9.

If there are any questions or if additional information is needed, please contact Ms. Jennie Wike, Licensing Engineer, at 612-330-5788.

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 April 3, 2014.



Peter A. Gardner  
Site Operations Director, Monticello Nuclear Generating Plant  
Northern States Power Company - Minnesota

cc: Administrator, Region III, USNRC  
Director of Nuclear Reactor Regulation (NRR), USNRC  
Project Manager, Monticello Nuclear Generating Plant, USNRC  
Resident Inspector, Monticello Nuclear Generating Plant, USNRC