



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

May 14, 2014

L-MT-14-045
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

MNGP Seismic Hazard and Screening Report (CEUS Sites), Response to NRC
Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f)
Regarding 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 NTF 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.

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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, ADAMS Accession No. ML14090A297.
7. NSPM Letter to NRC, "NSPM's Response to NRC Request for Information Pursuant to 10 CFR 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- 1.5 Year Response for CEUS Sites," October 31, 2013, ADAMS Accession No. ML13304B167.

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. The NRC agreed with the proposed path forward in Reference 5.

In Reference 6, NSPM 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 noted in Reference 6 that the base case velocity profiles submitted in Reference 7 did not reflect the site-specific geotechnical data for MNGP. The updated base case velocity profiles, and supporting data, are provided in the enclosure to this letter. The updated profiles supersede the corresponding information submitted in Reference 7.

The enclosure to this letter provides the final Seismic Hazard Evaluation and Screening Report for MNGP. The report was prepared for NSPM by Stevenson and Associates and follows the guidance in Section 4 of Reference 3.

During a March 31, 2014 conference call with the NRC, the NRC requested NSPM to address two additional items in the Seismic Hazard Evaluation and Screening Report. Responses to these two questions are provided below.

NRC Question 1: "Indicate the depths in the geotechnical profile at which the ISFSI data was used for the shear wave velocity versus where regional or 'similar' data was used."

NSPM Response: The depth of the geotechnical profile which utilized the ISFSI shear wave velocity data is the first 110 feet of the profile site (Section 2.3.2 on Page 9 of the Enclosure). Regional data was used below 110 feet to model the Precambrian basement with a shear wave velocity of 9,285 ft/s.

NRC Question 2: "How did the ISFSI data impact the uncertainties assumed in the GMRS calculation?"

NSPM Response: Incorporating the ISFSI shear wave velocity data caused a change in the epistemic uncertainty for only the top 10 feet of the geotechnical profile. The corresponding scale factor was changed from 1.57 to 1.25 to reflect agreement between shear wave velocities between the downhole and crosshole measurements at the ISFSI site (Section 2.3.2 on Page 9 of the Enclosure).

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 May 14, 2014.



Karen D. Fili
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company - Minnesota

Enclosure

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