



2807 West County Road 75
Monticello, MN 55089

May 25, 2022

L-MT-22-022
10 CFR 50.55a(z)(1)

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

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

Response to a Request for Additional Information: Monticello Alternative VR-10, Excess Flow Check Valve Testing Frequency (EPID: L-2022-LLR-0031)

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), submitted a request for a 10 CFR 50.55a(z)(1) alternative (VR-10), dated March 7, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22067A083) pertaining to the testing of Excess Flow Check Valves (EFCVs) under the inservice testing (IST) program for the Monticello Nuclear Generating Plant. On May 3, 2022, (ADAMS Accession No. ML22123A282) the U.S. Nuclear Regulatory Commission (NRC) provided a request for additional information (RAI). The enclosure to this letter provides the response to this RAI.

Summary of Commitments

This letter makes no new commitments and no revisions to existing commitments.

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Should you have any questions or if additional information is needed, please contact Mr. Richard Loeffler at (612) 342-8981 or Rick.A.Loeffler@xcelenergy.com.



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Northern States Power Company – Minnesota

Enclosure

cc: Administrator, Region III, US NRC
Project Manager, Monticello, US NRC
Resident Inspector, Monticello, US NRC

ENCLOSURE

**RESPONSE TO THE REQUEST FOR ADDITIONAL INFORMATION
MONTICELLO NUCLEAR GENERATING PLANT
ALTERNATIVE VR-10 RELATED TO EXCESS FLOW CHECK VALVE TESTING**

(2 pages follow)

RESPONSE TO THE REQUEST FOR ADDITIONAL INFORMATION

MONTICELLO NUCLEAR GENERATING PLANT

ALTERNATIVE VR-10 RELATED TO EXCESS FLOW CHECK VALVE TESTING

EMIB-RAI-1

Monticello Nuclear Generating Plant (Monticello) Alternative Request VR-10, Section "Full Description of Proposed Alternative," states that NEI 04-10, "Risk-Informed Technical Specifications Initiative 5b, Risk-Informed Method for Control of Surveillance Frequencies, Industry Guidance Document," Revision 1, dated April 2007 (ADAMS Accession No. ML071360456) addresses surveillances performed on a "Staggered Test Basis," in the risk assessment. The NRC staff understands that "Staggered Test Basis" is only used in Monticello Technical Specification (TS) 5.5.13, "Monticello Control Room Envelope Habitability Program." Explain and clarify the use of "Staggered Test Basis" for Surveillance Frequency Control Program (SFCP) specifically for the excess flow check valves (EFCVs).

Response

Testing of those EFCVs under Surveillance Requirement 3.6.1.3.8 will be performed on a Staggered Test Basis in conjunction with refueling outages (RFOs). It is projected that the EFCVs will be grouped into approximately equal sized "test sets" by several characteristics (e.g., valve manufacturer, design, service, size, and physical location of the EFCV instrument racks, etc.) to facilitate efficient testing. Testing of the EFCV test sets will be staggered and performed at approximately equal intervals over the entire surveillance frequency interval with one set of EFCVs tested each RFO until the entire number of sets (i.e., the entire population of EFCVs) are tested over the specified surveillance frequency. For example, if there were 100 EFCVs and the surveillance frequency determined by the SFCP was 8 years, the EFCVs would be divided into four test sets (with approximately 25 percent of the EFCVs in each set) and a different set would in turn be tested each RFO, until all four EFCV sets were tested over 8 years. American Society of Mechanical Engineering Operation and Maintenance (OM) Code inservice test (IST) criteria as implemented through the MNGP IST program for testing, results evaluation, and corrective actions will be followed.

EMIB-RAI-2

As precedents for Monticello Alternative Request VR-10, the request references a LaSalle County Station, Units 1 and 2 (LaSalle) request approved by the NRC in a letter dated July 3, 2018 (ADAMS Accession No. ML18163A054), and Peach Bottom Atomic Power Station, Units 2 and 3 (Peach Bottom) request approved by the NRC in a letter dated April 28, 2017 (ADAMS Accession No. ML17108A762). As discussed in the NRC safety evaluation, the LaSalle alternative requires that each EFCV be tested at least once every 10 years. As discussed in the NRC safety evaluation for the Peach Bottom request the alternative requires that each main steam isolation valve (MSIV) be tested every two years.

Enclosure

Monticello Alternative Request VR-10, Section "Full Description of Proposed Alternative," last paragraph, states, in part, that the proposed alternative allows the frequency for testing of the subject EFCVs under Surveillance Requirement (SR) 3.6.1.3.8 to be determined by applying the SFCP in accordance with NRC approved NEI 04-10. The use of the SFCP or NEI 04-10 does not provide a maximum extension of the test interval in lieu of the ASME OM Code interval of 24 months for the EFCVs. Similar to the cited precedents, will there be a maximum test interval for each EFCV within the scope of the request? If so, what is that maximum test interval?

Response

The SFCP does not impose any pre-defined limits on the surveillance frequency. A surveillance frequency change using the method defined under the SFCP has to be technically justifiable based in part on the performance history of the components and the system(s) associated with the test itself, past industry and plant-specific operating experience, and the risk analysis. The SFCP process expects that the next logical interval is selected. If it is not selected, then a basis is documented within the evaluation of the change. Once the test frequency change has been implemented, the SFCP requires periodic re-assessment based on the results of performance monitoring and feedback, which is intended to ensure that the testing being conducted can provide meaningful data and is sufficient to detect performance degradation. The programmatic elements of the SFCP ensure that the testing is conducted in a manner and periodicity that ensures the intent of the test is met.