



2807 West County Road 75
Monticello, MN 55362

June 18, 2025

L-MT-25-026
10 CFR 50.73

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

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

Monticello Nuclear Generating Plant Licensee Event Report 2025-002-00

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), hereby submits Licensee Event Report (LER) 50-263/2025-002-00 per 10 CFR 50.73(a)(2)(i)(B).

If you have any questions about this submittal, please contact Carrie Seipp, Senior Regulatory Engineer, at 612-330-5576.

Summary of Commitments

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

A handwritten signature in black ink, appearing to read 'Greg D. Brown'.

Greg D. Brown
Plant Manager, Monticello Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Monticello, USNRC
Resident Inspector, Monticello, USNRC
State of Minnesota

ENCLOSURE

**MONTICELLO NUCLEAR GENERATING PLANT
LICENSEE EVENT REPORT 50-263/2025-002-00**

3 pages follow



LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by email to Infocollections.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. Facility Name Monticello Nuclear Generating Plant	<input checked="" type="checkbox"/> 050 <input type="checkbox"/> 052	2. Docket Number 263	3. Page 1 OF 3
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4. Title
 Condition Prohibited by Technical Specifications due to inappropriate assessment of Primary Containment Isolation Valve

5. Event Date			6. LER Number			7. Report Date			8. Other Facilities Involved	
Month	Day	Year	Year	Sequential Number	Revision No.	Month	Day	Year	Facility Name	<input type="checkbox"/> 050
05	12	2019	2025	002	00	06	18	2025	Facility Name	<input type="checkbox"/> 052
										Docket Number

9. Operating Mode 2	10. Power Level 000
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11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

10 CFR Part 20	<input type="checkbox"/> 20.2203(a)(2)(vi)	10 CFR Part 50	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	<input type="checkbox"/> 73.1200(a)
<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	<input type="checkbox"/> 73.1200(b)
<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)	<input type="checkbox"/> 73.1200(c)
<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.1200(d)
<input type="checkbox"/> 20.2203(a)(2)(i)	10 CFR Part 21	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	10 CFR Part 73	<input type="checkbox"/> 73.1200(e)
<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 21.2(c)	<input type="checkbox"/> 50.69(g)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.77(a)(1)	<input type="checkbox"/> 73.1200(f)
<input type="checkbox"/> 20.2203(a)(2)(iii)		<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.77(a)(2)(i)	<input type="checkbox"/> 73.1200(g)
<input type="checkbox"/> 20.2203(a)(2)(iv)		<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	<input type="checkbox"/> 73.77(a)(2)(ii)	<input type="checkbox"/> 73.1200(h)
<input type="checkbox"/> 20.2203(a)(2)(v)		<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)		

OTHER (Specify here, in abstract, or NRC 366A).

12. Licensee Contact for this LER

Licensee Contact Carrie Seipp, Senior Nuclear Regulatory Engineer	Phone Number (Include area code) 612-330-5576
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13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable to IRIS	Cause	System	Component	Manufacturer	Reportable to IRIS
A	AD	ISV	A391	Y					

14. Supplemental Report Expected

<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes (If yes, complete 15. Expected Submission Date)
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15. Expected Submission Date

Month	Day	Year

16. Abstract (Limit to 1326 spaces, i.e., approximately 13 single-spaced typewritten lines)

On April 20, 2025 at 1246 CDT, while Monticello Nuclear Generating Plant was in Mode 5 for Refueling Outage 1R32, it was discovered that the Inboard Reactor Recirculation Sample Line Isolation Air Operated Valve, CV-2790, had been inoperable and potentially unable to close as required in the event of a design basis accident since Refueling Outage 1R29 in 2019.

With CV-2790 inoperable, Technical Specification (TS) 3.6.1.3 "Primary Containment Isolation Valves (PCIVs)" condition A required the affected penetration be isolated within 4 hours and, if condition A was not completed, condition F required the plant to be in Mode 3 in 12 hours. Since the condition of inoperability of CV-2790 was not known upon entering Mode 2 following Refueling Outage 1R29 on May 12, 2019 at 1858 CDT, the affected penetration was not isolated. This issue is reportable under 10 CFR 50.73(a)(2)(i)(B) as an operation or condition prohibited by TS.

The cause was an erroneous evaluation of the diagnostic test of CV-2790 during Refueling Outage 1R29 in 2019. The evaluation assessed the average closing friction, which was deemed acceptable, rather than evaluating the maximum closing friction. During Refueling Outage 1R32 in 2025, CV-2790 was overhauled and the subsequent diagnostic test correctly evaluated the valve's performance, confirming its ability to meet the required closing function.



**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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1. FACILITY NAME Monticello Nuclear Generating Plant	<input checked="" type="checkbox"/> 050	2. DOCKET NUMBER 263	3. LER NUMBER		
	<input type="checkbox"/> 052		YEAR 2025	SEQUENTIAL NUMBER 002	REV NO. 00

NARRATIVE

EVENT DESCRIPTION

On April 20, 2025 at 1246 CDT, while Monticello Nuclear Generating Plant (MNGP) was in Mode 5 for Refueling Outage 1R32, it was discovered that the Inboard Reactor Recirculation Sample Line Isolation Air Operated Valve (AOV), CV-2790, [EIS System Code: AD, Manufacturer: Anchor Darling 3/4 inch Double Disc Gate Valve, Pressure Class: 1878 psig] had been inoperable and potentially unable to close as required in the event of a design basis accident since Refueling Outage 1R29 in 2019.

Program engineers were preparing to update to the 6th Inservice Testing Interval, which includes the initial implementation of ASME Code for Operation and Maintenance of Nuclear Power Plants (OM Code) Division 1, Mandatory Appendix IV "Preservice and Inservice Testing of Active Pneumatically Operated Valve Assemblies in Nuclear Reactor Power Plants." This requires reanalysis and update to the calculations for valves within the scope of OM Code Appendix IV. On April 2, 2025, during review of the component calculation for CV-2790, which included the updated Appendix IV requirements, it was identified that the diagnostic test performed on CV-2790 during Refueling Outage 1R29 in 2019 was erroneously determined to be acceptable due to an error of evaluating the average closing friction rather than the maximum closing friction.

On April 2, 2025 at 1430 CDT, Technical Specification (TS) 3.6.1.3 "Primary Containment Isolation Valves (PCIVs)" Condition A was entered for CV-2790. On April 2, 2025 at 1707 CDT, CV-2790 was closed and de-energized and on April 2, 2025 at 1718 CDT, TS 3.6.1.3 Condition A was met. On April 20, 2025 at 1246 CDT, during a Past Operability Evaluation, it was determined that CV-2790 had been inoperable and potentially unable to close as required in the event of a design basis accident since the Refueling Outage 1R29 in 2019.

Since it was determined that CV-2790 was inoperable, TS 3.6.1.3 Condition A should have been entered whenever the plant was in Modes 1, 2, or 3. Required Action A.1 of TS 3.6.1.3 is to "isolate the affected penetration flow path by use of at least one closed and de-activated automatic valve, closed manual valve, blind flange, or check valve with flow through the valve secured" in 4 hours. Condition F of TS 3.6.1.3 requires the plant to be in Mode 3 in 12 hours if the Required Action and associated Completion Time of Condition A is not met. Since the condition of inoperability of CV-2790 was not known upon entering Mode 2 following Refueling Outage 1R29 on May 12, 2019 at 1858 CDT, the affected penetration was not isolated. This was a condition prohibited by Technical Specifications when in Modes 1, 2, and 3 since May 12, 2019 at 1858 CDT.

ASSESSMENT OF SAFETY CONSEQUENCES

There were no radiological, environmental, or industrial impacts associated with this issue. The health and safety of the public and site personnel were not impacted during this issue.

CV-2790 and the associated Outboard Reactor Recirculation Sample Line Isolation AOV CV-2791 are Primary Containment Isolation Valves in series on the same penetration. These AOVs have safety functions to automatically close upon Reactor Water Low-Low Level, Main Steam Line Low Pressure (Mode 1 only), Main Steam Line High Flow, Main Steam Line Tunnel High Temperature, High Drywell Pressure, Reactor Water Clean Up High Flow or Reactor Water Clean Up High Room Temperature.

A review was performed for the three years prior to the discovery of this issue and it was determined that the Primary Containment Isolation function for this penetration was maintained during the period of inoperability of CV-2790 since CV-2791 was operable and able to isolate the penetration's flow path if necessary. There were no other systems, structures, or components that were inoperable or contributed to this issue.

(04-02-2024)



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NARRATIVE

CAUSE OF THE EVENT

The cause of this issue is that the evaluation performed by a Program engineer of the Refueling Outage 1R29 diagnostic test in 2019, which identified the higher closing friction values, erroneously assessed the average closing friction which did not trigger a more in-depth evaluation of the diagnostic test. The maximum closing friction, which for CV-2790 occurred at a position where the actuator closing output capability was the lowest, should have been evaluated.

CORRECTIVE ACTIONS

CV-2790 was overhauled during Refueling Outage 1R32 and returned to service on May 8, 2025. The diagnostic test was evaluated and appropriately determined that the valve can perform its required close function.

The planned incorporation of OM Code Appendix IV requirements will reduce the probability of a similar issue occurring in the future.

PREVIOUS SIMILAR EVENTS

There were no previous similar events in the past three years.