



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, ILLINOIS 60532-4352

December 15, 2022

Mr. Christopher Domingos  
Site Vice President  
Monticello Nuclear Generating Plant  
Northern States Power Company, Minnesota  
2807 West County Road 75  
Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT – TRIENNIAL INSPECTION  
OF EVALUATION OF CHANGES, TESTS AND EXPERIMENTS BASELINE  
INSPECTION REPORT 05000263/2022012

Dear Christopher Domingos:

On November 22, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Monticello Nuclear Generating Plant and discussed the results of this inspection with Mr. S. Hafen, Plant Manager and other members of your staff. The results of this inspection are documented in the enclosed report.

No findings or violations of more than minor significance were identified during this inspection.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard A. Skokowski".

Signed by Skokowski, Richard  
on 12/15/22

Richard A. Skokowski, Chief  
Engineering Branch 2  
Division of Operating Reactor Safety

Docket No. 05000263  
License No. DPR-22

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

Letter to Christopher Domingos from Richard A. Skokowski dated December 15, 2022.

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT – TRIENNIAL INSPECTION  
OF EVALUATION OF CHANGES, TESTS AND EXPERIMENTS BASELINE  
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**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 05000263

License Number: DPR-22

Report Number: 05000263/2022012

Enterprise Identifier: I-2022-012-0020

Licensee: Northern States Power Company, Minnesota

Facility: Monticello Nuclear Generating Plant

Location: Monticello, MN

Inspection Dates: November 14, 2022 to November 22, 2022

Inspectors: M. Abuhamdan, Reactor Inspector  
M. Gangewere, Reactor Inspector  
D. Melendez-Colon, Reactor Inspector  
E. Sanchez Santiago, Senior Project Engineer

Approved By: Richard A. Skokowski, Chief  
Engineering Branch 2  
Division of Operating Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a triennial inspection of evaluation of changes, tests and experiments baseline inspection at Monticello Nuclear Generating Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## REACTOR SAFETY

### 71111.17T - Evaluations of Changes, Tests, and Experiments

#### Sample Selection (IP Section 02.01) (23 Samples)

The inspectors reviewed the following evaluations, screenings, and/or applicability determinations for 10 CFR 50.59 from March 2019 through November 2022.

- (1) SCR-19-006, Temporarily Isolate B CRV Via RO-4258B
- (2) SCR-19-0094, Removal of D311-04 and D312-05 Components from Scope of EQ Program
- (3) SCR-20-0047, Evaluation of MOV and IST Program Valve Functions
- (4) SCR-20-0050, 11 EDG Droop Modification
- (5) SCR-19-0056, OffGas Recombiner Controller Upgrades
- (6) SCR-19-0068, Increase Design Temp for RWN60-1 1/2-HJ
- (7) SCR-19-0105, 03-009 AOV Component Calculation AO-2541A,B and AO-2561A,B
- (8) SCR-20-0054, Normally Closed Air Valves
- (9) SCR-20-0071, 13 ESW Quarterly Pump and Valve Test New Rev. 64
- (10) SCR-20-0104, Use of Uncertainties for HPCI/RCIC Pump Discharge Pressure in Surveillance Acceptance Criteria
- (11) SCR-20-0101, Update ISP-RHR-0552-02 to Perform LSFT Testing
- (12) SCR-20-0108, New Online LSFT Procedures to Support ECCS Testing Efficiency
- (13) SCR-20-0130, (evaluation) Use of Atrium 10XM Lead Test Assemblies
- (14) SCR-20-0140, Revise USAR-14 Table 14.7
- (15) SCR-21-0012, (evaluation) Evaluation for Implementation of BWROG Rev 4 EOP
- (16) SCR-21-0022, Correct ISP-RHR-0552-02 Setpoints
- (17) SCR-21-0054, RHR MOV Functional Analysis
- (18) SCR-21-0064, 0136 ILRT - Lower Torus Water Temperature Band
- (19) SCR-21-0080, Cranes and Heavy Loads - System Operation
- (20) SCR-21-0102, RHRSW Pump In-Service Testing
- (21) SCR-22-0072, Change to Intercell Acceptance Criteria for D8 Battery
- (22) SCR-22-0080, Primary Containment Isolation Valve Exercise
- (23) SCR-22-0029, Revision of 2167 Plant Startup

## INSPECTION RESULTS

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On November 22, 2022, the inspectors presented the triennial inspection of evaluation of changes, tests and experiments baseline inspection results to Mr. S. Hafen, Plant Manager and other members of the licensee staff.

## DOCUMENTS REVIEWED

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.17T	Calculations	01-082	Basis for Monticello DBLFPB for 10CFR50.59 Criterion 7	2
		10-082	RHR MOV Functional Analysis	2C
		10-117	HPCI MOV Functional Analysis	0A
		10-118	RCIC MOV Functional Analysis	0A
		11-325	Functional Analysis for Non GL 89-10 Program MOVs	1
		13-055	Core Spray and LPCI Flow Delivered to Reactor Vessel for Safety Analysis	Rev.2
		16-006	Hard Pipe Vent D8 Battery HCVS 125VDC Battery Calculation	Rev.1
		16-014	Monticello LOCA Break Spectrum for EPU/EFW with ATRIUM 10XM Fuel and Revised Modeling Parameters	Rev.1
		18-002	HPCI/RCIC Discharge Pressures for Tech Spec Surveillance Testing	0
	Corrective Action Documents	01001494	Review of Assumptions in Accidents and License Bases Events for Control of Plant Initial Conditions & Operator Actions	03/13/2001
		01476976	Action Request-Question on the 12 EDG Voltage Regulator Wiring	06/12/2015
		01496761	Potential Non-Conservative Tech Spec for EDG Voltage	12/10/2015
		500001496761	Potential Non-Conservative Techl Spec for EDG Voltage	10/14/2015
		501000039632	94-142 Weak Link Error	04/13/2020
		501000044839	TMOD Extension Form Not Completed for EC	09/30/2022
		501000045266	94-142 Additional Weak Link Errors	10/08/2020
		501000047373	10 CFR 50.59 Screening Required	12/25/2020
		501000048821	Unable to Adjust Switch to New Setpoint	02/18/2021
		501000052371	Prolonged Operation Below 100 MWE	06/25/2021
		501000055651	CV-1729 Controller Issue	09/13/2021
		501000055698	CV-1729 ECR Testing Not Performed	09/03/2021
		501000057242	EC Approved w/o Qual'd 50.50 Review	10/14/2021
		501000057287	EOC-EC Approved w/o Qual'd 50.59 Review	10/16/2021
		501000057444	TCR Roll-Up CAP 10.19	10/19/2021

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		501000059567	10 CFR 50.59 Screening Required	01/08/2022
		501000059582	10 CFR 50.59 Screening Required	01/07/2022
		501000059636	NRC Scaffold Question	01/11/2022
		501000060154	1047-01 Tags Hanging >70 Days	01/29/2022
		501000060155	FZ-3795 Temporary Configuration > 70 Days	01/29/2022
		501000060510	10 CFR 50.59 Screening Required	02/11/2022
		501000062038	10 CFR 50.59 Screening Required	04/08/2022
		501000062298	10 CFR 50.59 Screening Required	04/15/2022
		501000062487	10 CFR 50.59 Screening Required	04/22/2022
		501000062628	Sub-Standard 50.59 Screenings	04/28/2022
		501000063094	10 CFR 50.59 Scm for Tags Hang > 70 Days	05/13/2022
		501000063269	Tags Hanging Greater than 70 Days 50.59	05/20/2022
		601000002203	Close/Isolate/Abandon Drywell Air Line	03/12/2020
		602000014958	B.01.04-05 R55 Complete	2/27/2020
		602000015997	ISP-RHR-0552-02 Rev 5 Complete	05/01/2020
		602000019462	C.5-2007 rev 23 EOP SAMG Update	01/29/2021
		602000019785	C.5-GM-02.01 Rev 24 EOP/SAMG Update	02/22/2021
		602000020067	C.5-2001 Rev 1 EOP SAMG Updates	03/11/2021
	Corrective Action Documents Resulting from Inspection	501000068477	20225059-SCR-21-22 Typo	11/14/2022
		501000068564	20225059: Obs. Re: Clearance Orders	11/17/2022
		501000068605	20225059: Generic Screening Concern	11/17/2022
		5011000068595	20225059: Obs. Re: Scaffolds	11/16/2022
	Drawings	NF-93216-1	Instrument Air Line Isometric	76
		NH-36049-12	P&ID Instrument Air Reactor Building and Drywell	81
		NH-36665	P&ID Service Water System & Make-up Intake Structure	104
	Engineering Changes	0000028104	EC 26083 ECN - Battery Connection Resistance	Rev.0
		601000000149	601000000149 - 11 EDG Voltage Regulator Droop Modification	Rev.0
		601000000429	OffGas Recombiner Controller Upgrades	Rev.0
		601000000661	Replace DC Overloads in EQ Buckets	Rev.0
		601000001143	Isolation of FSW D2 via RO-4258B	0
		601000001564	Increase Design Temp for RWN60-1 1/2-HJ	Rev.0
		601000002221	Evaluate MOV Functions	12/04/2020



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		60100001549	Revise Calculation 08-055 - RHR Aux Air Compressor	Rev.0
	Engineering Evaluations	600000845060	Evaluate the Impact of the EPG/SAG Revision 4 Changes on the ATWS Event	0
	Miscellaneous	19-0068	Increase Design Temp for RWN60-1 1/2-HJ	Rev.0
		19-056	OffGas Recombiner Controller Upgrades	Rev.0
		20-0101	Update ISP-RHR-0552-02 to Perform LSFT Testing	Rev.0
		20-0108	New Online LSFT Procedures to Support ECCS Testing Efficiency	Rev.0
		4 AWI-09.04.01	Technical Position Number TP 13	61
		601000001552	Drywell Equipment Drain Sump	11/02/2020
		601000002969	RHR MOV Functional Analysis	05/01/2021
		602000021383	2167 Revision 104 Complete	08/09/2022
		602000022857	0255-05-III-4A Rev 35 One Time Use TCR	09/29/2021
		602000022859	0255-05-III-2A Rev 35 Once Time Use TCR	09/29/2021
		ANSI 831.1 - 1977 EDITION	Power Piping	05/01/1977
		B.02.03-01	Reactor Core Isolation Cooling	8
		B.03.02-05	HPCI	63
		IST-BASIS	Pump and Valve In-Service Testing Program Basis	8
		SCR-04-0932	Procedure, Drawing, VTM & Database Changes that are Editorial as Defined in Part I	Rev. 6 (02/11/2020)
		SCR-19-0006	Temporarily Isolate B CRV Via RO-4258B	0
		SCR-19-0094	Removal of D311-04 and D312-05 Components from Scope of EQ Program	Rev.0
		SCR-19-0105	03-009 AOV Component Calculation AO-2541A,B & AO-2561A,B	0
		SCR-20-0047	Evaluation of MOV and IST Program Valve Functions	0
		SCR-20-0050	11 EDG Droop Modification	Rev.0
		SCR-20-0054	Normally Closed Air Valves	0
		SCR-20-0071	13 ESW Quarterly Pump and Valve Test New Rev. 64	0
		SCR-20-0104	Use of Uncertainties for HPCI/RCIC Pump Discharge Pressure in Surveillance Acceptance Criteria	0
		SCR-20-0130	Use of ATRIUM 10XM Lead Test Assemblies	0

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		SCR-20-0138	Scaffolding	0
		SCR-20-0140	Revise USAR-14 Table 14.7	Rev.0
		SCR-21-0012	Evaluation for Implementation of BWROG Rev 4 EOP	0
		SCR-21-0022	Correct ISP-RHR-0552-02 Setpoints	0
		SCR-21-0054	RHR MOV Functional Analysis	0
		SCR-21-0064	0136 ILRT - Lower Torus Water Temperature Band	0
		SCR-21-0080	Cranes and Heavy Loads - System Operation	Rev.0
		SCR-21-0102	RHRSW Pump In-Service Testing	0
		SCR-22-0029	Revision of 2167, Plant Startup	0
		SCR-22-0072	Change to Intercell Acceptance Criteria for DS Battery	Rev.0
		SCR-22-0080	PCR 602000026536 Primary Containment Isolation Valve Exercise	0
	Operability Evaluations	01496761-01	Potential Non-Conservative Tech Spec for EDG Voltage	10/23/2015
	Procedures	0108	HPCI Pump Flow and Valve Tests with Reactor Pressure Less than or Equal to 165 psig	70
		0114	RCIC Pump Flow and Valve Tests with Reactor Pressure Less than or Equal to 165 psig	55
		0136	Integrated Primary Containment Leak Rate Test	34
		0255-05-III-2A	Comprehensive 12 RHRSW Pump and Valve Tests	36
		0255-05-III-4A	Comprehensive 14 RHRSW Pump and Valve Tests	36
		0255-06-IA-1	HPCI Quarterly Pump and Valve Tests	110
		0255-06-III-1	HPCI Comprehensive Pump and Valve Tests	36
		0255-08-IA-1	RCIC Quarterly Pump and Valve Tests	89
		0255-08-III-1	RCIC Comprehensive Pump and Valve Tests	25
		0255-10-IA-1	Primary Containment Isolation Valve Exercise	48 and 49
		0255-11-III-3	13 ESW Quarterly Pump and Valve Tests	65
		1047-01	Shift Supervisor Checklist	50
		B.08.15-05	Operations Manual Section: Cranes an Heavy Loads	Rev.31
		C.5-1100	RPV Control	22
		C.5-1100	RPV Control (MODE 1, 2, 3)	23
		C.5-3502	Containment Spray	21
		ESP-125-0614-03	D8 125V DC Battery Check	Rev.6

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		EWI-08.03.02	Logic System Testing Program	Rev.10
		FG-E-SE-03	50.59 Resource Manual	12
		FG-E-SE-03	50.59 Resource Manual	12
		FP-E-SE-03	10 CFR 50.59 and 72.48 Processes	18
		FP-G-DOC-04	Procedure Processing	39, 43
		FP-MA-FSC-01	Scaffolding	0
		FP-PE-MOV-07	Motor Operated Valve Program	7
		ISP-ECC-0029	Reactor LO-LO Level ECCS Initiation & HI Level RCIC/HPCI Turbine Trips Trip Unit Test and Calibration Procedure with LSFT	Rev.0
		ISP-ECC-0031	ECCS HIGH Drywell Pressure Sensor with LSFT	Rev.0
		ISP-ECC-0033	ECCS Pump Start Permissive Sensor with LSFT	Rev.0
		ISP-RHR-0552-02	Reactor Recirculation LOOPS DP, LPCI Select Interlock Channel Calibration	5, 7, 8
		ISP-RHR-0603	Reactor Steam Dome Pressure Low - Channel Calibration and Channel Functional Test with LSFT	Rev.0
		MPS-1100	Specification for the Analysis of Piping and Piping Support Systems	Rev. 11
		Ops Man B.01.04-05	Reactor Recirculation System	55, 56
		Ops Man B.03.04-05	Residual Heat Removal System	95
		QF0501	50.59 Screening	14