



2807 West County Road 75
Monticello, MN 55362

August 17, 2021

L-MT-21-038
10 CFR 50.55a(g)

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

2021 Refueling Outage 90-Day Inservice Inspection (ISI) Summary Report

Pursuant to 10 CFR 50.55a(g), Northern States Power Company - a Minnesota corporation (NSPM), doing business as Xcel Energy, hereby submits the enclosed Inservice Inspection (ISI) Summary Report and Form OAR-1 "Owner's Activity Report" (Enclosure 1) for the Monticello Nuclear Generating Plant (MNGP).

The Owner's Activity Report has been prepared in accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code, Section XI Code Case N-532-5, "Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submissions as Required by IWA-4000 and IWA-6000, Section XI, Division 1." This code case is an alternative to the requirements of ASME Boiler and Pressure Vessel Code, Section XI, Articles IWA-4000 and IWA-6000, as authorized by the U. S. Nuclear Regulatory Commission (NRC) through Regulatory Guide 1.147, "Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1," Revision 19, October 2019.

The Owner's Activity Report is included in the enclosure and provides an overview of inservice examination results and repair/replacement activities performed during Cycle 30, including the 2021 Refueling Outage (1R30).


Examinations and tests for Cycle 30 were scheduled and conducted in accordance with the following plans:

- 5th Interval ISI Plan, applicable to Inspection Period 3
- 3rd Interval IWE Plan, applicable to Inspection Period 1

Included in this report is supplemental information for the Cycle 25 (RFO-25) ISI Summary Report submitted August 23, 2011 (Reference ADAMS Accession Number ML112351222). MNGP identified an omission of RFO 25 reportable indications on the Boiling Water Vessel Integrity Program (BWRVIP) supplement to the Cycle 25 ISI Summary Report, entered the condition into the Quality Issues Management / Corrective Action Program, updated the list of indications, and are including the updated list as a supplement to this ISI Summary Report.

Summary of Commitments

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

A handwritten signature in black ink, appearing to read 'T A Conboy', with a long horizontal stroke extending to the right.

Thomas A. Conboy
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosures (2)

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

ENCLOSURE 1

Monticello Nuclear Generating Plant

Owner's Activity Report

Form OAR-1



Xcel Energy, Inc.
Northern States Power Co. - Minnesota
414 Nicollet Mall
Minneapolis, MN 55401

INSERVICE INSPECTION

SUMMARY REPORT

Monticello Nuclear Generating Plant Unit 1
2807 West County Road 75
Monticello, MN 55362

Commercial Service Date: June 30, 1971


Cycle No. 30 Refueling Outage

Outage Dates: April 17, 2021 to May 20, 2021

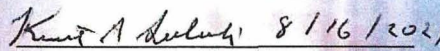
Inservice Inspection: Interval 5 (September 1, 2012 – May 31, 2022)
Period 3 (September 1, 2019 – May 31, 2022)

Containment (IWE) Inspection: Interval 3 (September 9, 2019 – September 8, 2029)
Period 1 (September 9, 2019 – September 8, 2022)

Prepared By:

 August 16, 2021
Richard Deopere
ASME Section XI ISI Program Owner

ANII:

 8/16/2021
Kurt Suleski
The Hartford Steam Boiler Inspection and Insurance Company

Approved By:

T. Erickson - Electronically Approved 8/16/2021
Todd Erickson
Engineering Manager

Report Date: August 16, 2021

TABLE OF CONTENTS

<u>SECTIONS</u>	<u>PAGES</u>
1. Summary	1
2. Form OAR-1, Owner's Activity Report for Cycle 30	1
3. Table 1, Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service	1
4. Table 2, Abstract of Repair/Replacement Activities Required for Continued Service	1
5. Cycle 25 (2011) ISI Summary Report Supplemental Information	3

SECTION 1.

SUMMARY

Page 1 of 1

In accordance with the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code, Section XI and approved alternative requirements of Code Case N-532-5¹, this report provides the following:

- Form OAR-1, Owner's Activity Report
- Table 1, Items with Flaws or Relevant Conditions That Required Evaluation for Continued Service
- Table 2, Abstract of Repair/Replacement Activities Required for Continued Service.

This information is applicable to Inservice Inspection (ISI) activities performed during operating Cycle 30 at Monticello Nuclear Generating Plant (MNGP) Unit 1, including the 30th refueling outage. Cycle 30 began May 13, 2019, immediately following completion of the 29th refueling outage.

Examinations and tests for Cycle 30 were scheduled and conducted in accordance with the following plans:

- 5th Interval ISI Plan, applicable to Inspection Period 3
- 3rd Interval IWE Plan, applicable to Inspection Period 1.

Also included in this report is supplemental information for the Cycle 25 (RFO-25) ISI Summary Report submitted August 23, 2011 (Reference ADAMS Accession Number ML112351222). MNGP identified an omission of RFO 25 reportable indications on the Boiling Water Vessel Integrity Program (BWRVIP) supplement to the Cycle 25 ISI Summary Report, entered the condition into the Quality Issues Management / Corrective Action Program, updated the list of indications, and are including the updated list as a supplement to this ISI Summary Report.

¹ NRC Regulatory Guide 1.147, Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1, Revision 19, October 2019

Monticello Nuclear Generating Plant
Inservice Inspection

Cycle 30 Summary Report
2021 Refueling Outage

SECTION 2.

FORM OAR-1

Page 1 of 1

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number MNGP 1R30 OAR-1

Plant Monticello Nuclear Generating Plant, 2807 West County Road 75, Monticello, Minnesota 55362

Unit No. 1 Commercial service date June 30, 1971 Refueling outage no. 1R30
(if applicable)

Current inspection interval ISI: 5th Inspection Interval / IWE: 3rd Inspection Interval
(1st, 2nd, 3rd, 4th, other)

Current inspection period ISI: 3rd Inspection Period / IWE: 1st Inspection Period
(1st, 2nd, 3rd)

Edition and addenda of Section XI applicable to the inspection plans ISI: 2007 Edition, 2008 Addenda / IWE: 2013 Edition

Date and revision of inspection plans ISI: 5th Interval Plan, Rev.1, 4/5/2017 / IWE: 3rd Interval Plan, Rev. 0, 9/5/2019

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans 2017 Edition, IWA-4540(b)

Code Cases used for inspection and evaluation: N-508-4, N-552-1, N-613-2, N-702, N-716
(if applicable, including cases modified by Case N-532 and later revisions)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of 1R30 (2021 RFO) conform to the requirements of Section XI.
(refueling outage number)

Signed: [Signature] ISI Program Owner Date August 14, 2021
Owner or Owner's Designee, Title

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company of Hartford, Connecticut have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in the report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

[Signature] Commission NB11863 I,N,R
Inspector's Signature (National Board Number and Endorsements)

Date 8/14/2021

SECTION 3.

TABLE 1

Page 1 of 1

TABLE 1
ITEMS WITH FLAWS OR RELEVANT CONDITIONS THAT REQUIRED
EVALUATION FOR CONTINUED SERVICE

Examination Category and Item Number	Item Description	Evaluation Description
None	None	None

SECTION 4.

TABLE 2

Page 1 of 1

**TABLE 2
ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE**

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
None	None	None	None	None

SECTION 5.

Cycle 25 ISI Summary Report Supplemental Information

(2 pages to follow)

Supplemental records, applicable to the Cycle 25 ISI Summary Report, include the following items:

1. Cycle 25 IVVI Summary Report, "Table BWRVIP-1: RFO25 Indications," Page 2 of 8
 - Added Row
 - Shroud Support Leg
 - 1 new indication on H10 weld at 30 degree location
 - Bounded by previous evaluation EC 14116
 - 2 new indications on H10 weld at 120 degree location
 - Bounded by previous evaluation EC 14116
2. Cycle 25 IVVI Summary Report, "RFO25 Inspection Results," Page 7 of 8
 - Updated Shroud Support Inspection section
 - Second bullet: Added "and 120°"
 - Added fifth bullet
 - One new indication discovered on H10 weld at 30 degree location and two new indications at 120 degree location.

Note: The heading on the following pages is applicable to the Cycle 25, 2011 Refueling Outage Summary Report.

Monticello Nuclear Generating Plant
BWRVIP Inspection Program

Cycle 25 IVVI Summary Report
2011 Refueling Outage

Page 2 of 8

Table BWRVIP-1: RFO25 Indications

Component	Indication/CAP	Resolution
Guide Rod	Indication on the guide rod at 175 degree location (CAP 01280462)	Indication evaluated and accepted for continued service through the next cycle in condition evaluation for CAP 01280462. Indication will be re-examined in next outage in 2013.
Shroud Support Leg	Indication discovered on H10 weld at 90 degree location. (CAP 01282530)	Indication evaluated and accepted for continued service through the next cycle in Engineering Change (EC) 18051. Indication will be re-examined in next outage.
Shroud Support Leg	Indication discovered on H10 weld at 330 degree location. (CAP 01283709)	Indication evaluated and accepted for continued service through the next cycle in EC 18051. Indication will be re-examined in next outage.
Shroud Support Leg	Indication discovered on H10 weld at 350 degree location. (CAP 01283715)	Indication evaluated and accepted for continued service through the next cycle in EC 18051. Indication will be re-examined in next outage.
Shroud Support Leg	1 new indication discovered on H10 weld at 30 degree location and two new indications at 120 degree location. (CAP 501000037654)	These locations had previously identified indications from 2009. Previous evaluation EC 14116 was bounding of new indications.
Shroud Support Plate/Baffle Plate	Indications discovered on H8 and H9 welds on lower plenum side. (CAP 01280490)	Indications evaluated and accepted for continued service in EC 18051, 18095 and 18067. Indications will be re-examined in next outage in 2013.
N/A	Legacy FME (CAP 01280284)	All FME removed from vessel.

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Monticello Nuclear Generating Plant
BWRVIP Inspection Program

Cycle 25 IVVI Summary Report
2011 Refueling Outage

Page 7 of 8

RF025 Inspection Results

Core Spray Piping

- Examination of previously recorded indication on Core Spray Piping weld P3A at 90° (repaired) showed no change.
- No new relevant indications

Core Spray Sparger

- Examination of the Core Spray Spargers revealed no relevant indications.

Top Guide Assembly

- Examination of the Top Guide Assembly revealed no relevant indications.

Shroud Support Inspection

- Examination of previously recorded indications on H10 at 010°, 030°, 060°, 120°, 150°, 170°, 190°, 210°, 240°, 270°, and 300° showed no change.
- Examinations of previously recorded indications on H10 revealed new relevant indications at 90° and 120°.
- VT-3 examination of the Shroud Support Legs revealed new indications at 330° and 350°.
- During examinations of previously recorded indications on H10, new relevant indications were reported on the H-8 and H-9 welds on the underside of the Shroud Support Plate.
- 1 new indication discovered on H10 weld at 30 degree location and two new indications at 120 degree location (CAP 501000037654).

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2021

Control Rod Guide Tubes

- Examination of accessible Control Rod Guide Tubes revealed no relevant indications.