



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

August 26, 2015

L-MT-15-064
10 CFR 50.55a(g)

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

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

Subject: Cycle 27 Inservice Inspection Summary Report

Reference: NRC Letter to NSPM, "Monticello Nuclear Generating Plant – Relief from the Requirements of the American Society of Mechanical Engineers Code for the Fifth 10-Year Inservice Inspection Program Interval (TAC Nos. ME8068, ME8070 and ME8071), dated February 26, 2013, ADAMS Accession No. ML13035A158.

Pursuant to 10 CFR 50.55a, "Codes and standards," paragraph (g), "Inservice inspection requirements," Northern States Power Company - a Minnesota corporation (NSPM), d/b/a as Xcel Energy, hereby submits the enclosed Inservice Inspection (ISI) Summary Report and Form OAR-1 "Owner's Activity Report" 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 Code, Section XI Code Case N-532-5, "Repair / Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission, 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 initially authorized by the U. S. Nuclear Regulatory Commission (see Reference) for MNGP Fifth Interval ISI 10 CFR 50.55a Request RR-006 and accepted by Regulatory Guide 1.147, Revision 17 as of August 2014.

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 27, including the 2015 Refueling Outage (1R27). The activities are applicable to the Fifth 10-year ISI Interval that began on September 1, 2012.

If you have any questions or require additional information, please contact Mr. Andrew Kouba at (763) 271-7251.

Summary of Commitments

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

A handwritten signature in black ink, appearing to read "Peter A. Gardner", with a stylized, cursive script.

Peter A. Gardner
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company- Minnesota

Enclosure

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



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. 27 Refueling Outage

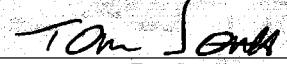
Outage Dates: April 12, 2015 to May 30, 2015

Inservice Inspection: Interval 5 (September 1, 2012 – May 31, 2022)
Period 1 (September 1, 2012 – August 31, 2015)

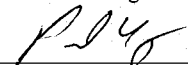
Prepared By:


Richard Daopere
Program Engineer, ISI Program Owner

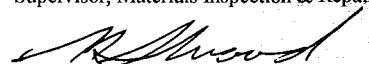
Reviewed By:


Tom Jones
Program Engineer

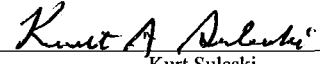
Approved By:


Paul Young
Supervisor, Materials Inspection & Repair

Approved By:


Gary Sherwood
Manager, Program Engineering

ANII:


Kurt Suleski
Hartford Steam Boiler - CT

Report Date: August 14, 2015

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SECTION 1.

SUMMARY

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In accordance with the ASME Section XI Code and requirements of authorized alternative 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 27 at Monticello Nuclear Generating Plant (MNGP) Unit 1, including the 27th refueling outage. Cycle 27 began July 19, 2013, immediately following completion of the 26th refueling outage.

Examinations and tests for Cycle 27 were scheduled and conducted in accordance with the 5th Interval ISI Plan and were applicable to the 1st Period of the 5th ISI Interval.

¹ NRC Letter to NSPM, "Monticello Nuclear Generating Plan – Relief from the Requirements of the American Society of Mechanical Engineers Code for the Fifth 10-Year Inservice Inspection Program Interval (TAC Nos. ME8068, ME8070 and ME8071), dated February 26, 2013, ADAMS Accession No. ML13035A158.

Monticello Nuclear Generating Plant
Inservice Inspection

Cycle 27 Summary Report
2015 Refueling Outage

SECTION 2.

FORM OAR-1

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FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number MNGP 1R27 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. 1R27
(if applicable)

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

Current inspection period 1st Inspection Period
(1st, 2nd, 3rd)

Edition and addenda of Section XI applicable to the inspection plans 2007 Edition, 2008 Addenda

Date and revision of inspection plans 5th Interval, Rev.0, 9/1/2012

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans (same)

Code Cases used for inspection and evaluation: N-613-1, 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 1R27 (2015 RFO) conform to the requirements of Section XI.
(refueling outage number)

Signed: [Signature], ISI Program Owner Date 8/14/15
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 HSB Global Services 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 A.N.I. MN 004028-CO
Inspector's Signature (National Board Number and Endorsements)

Date 8/14/15

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
B-N-2/B13.30	Comp. ID: C-3C, C-3D Shroud Shelf (Support Plate) H-9 Weld to Reactor Vessel	Successive examination was performed for linear indications in shroud shelf H-9 weld. No significant changes identified. (CAP AR-01476395, 01478721, and 01478744) Analytical evaluation performed in 2013 under CAP AR-01375496 and EC-21839 ² , superseding initial evaluation in 2011, remains applicable. Acceptable.
B-N-2/B13.40	Comp. ID: C-3E, C-3F Shroud Shelf (Support Plate) H-8 Weld to Core Shroud	Successive examination was performed for linear indications in shroud shelf H-8 weld. No significant changes identified. (CAP AR-01476394, 01478720, and 01478744) Analytical evaluation performed in 2013 under CAP AR-01375496 and EC-21839 ² , superseding initial evaluation in 2011, remains applicable. Acceptable.
B-N-2/B13.40	Comp. ID: C-3E, C-3F 0° and 180° Access Hole Cover welds on the Shroud Shelf (Support Plate)	Newly identified linear indications in Access Hole Cover welds. Analytical evaluation performed in conjunction with CAP AR-01477790 and EC-25627. Acceptable. CAP AR-01480527 for tracking evaluation submittal to NRC.

CAP AR - acronyms for "Corrective Action Program - Action Request"

EC - acronym for "Engineering Change", used to document and accept vendor analytical evaluation(s)

² NSPM submittal letter to NRC, "Cycle 26 Inservice Inspection and In-Vessel Visual Inspection Summary Reports" dated October 11, 2013, ADAMS Accession Number ML13308B206, and Enclosures 4, 6, and 8.

SECTION 4.

TABLE 2

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TABLE 2

ABSTRACT OF REPAIR/REPLACEMENT ACTIVITIES REQUIRED FOR CONTINUED SERVICE

Code Class	Item Description	Description of Work	Date Completed	Repair/Replacement Plan Number
3	Division 2 Emergency Service Water Valve ESW-1-2	Replacement of disc due to a broken integral stem.	4/29/2015	2015-27-022, Rev.1
2	Reactor Core Isolation Cooling (RCIC) Valve AO-13-22	Weld repair of areas eroded from steam leakage at gasketed joint. Replacement of hinge pin assembly and retainer fasteners.	5/30/2015	2015-27-036