



August 7, 2009

L-MT-09-078
10 CFR 50.55a

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

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

Cycle No. 24 Inservice Inspection Summary Report for Inservice Inspection and ASME Section XI Repairs and Replacements

Pursuant to 10 CFR 50.55a and Subsection IWA, Paragraph IWA-6240 of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 1995 Edition, with the 1996 Addenda, the Northern States Power Company – a Minnesota corporation (NSPM), submits the Cycle No. 24 Inservice Inspection (ISI) Summary Report for ISI and ASME Section XI Repairs and Replacements completed between April 28, 2007, to May 10, 2009.

Pursuant to ASME Section XI, Subsection IWB, Paragraph IWB-3144(b), evaluation analysis results are being submitted for components that were accepted for continued service in accordance with IWB-3142.4.

This summary report also provides amended information to the previously submitted Cycle Nos. 21, 22, and 23 ISI Summary Reports, including supplemental NIS-1 Forms, an NIS-1 attachment, and supplemental NIS-2 Forms.

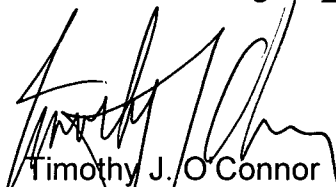
Enclosure 1 provides a copy of the Cycle No. 24 Inservice Inspection Summary Report, which includes the above discussed changes.

Summary of Commitments

No new commitments or changes to any existing commitments are proposed by this letter.

A047
NRR

I declare under penalty of perjury that the foregoing is true and correct.
Executed on August __, 2009.



Timothy J. O'Connor
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosure

cc: Administrator, Region III, USNRC (2 copies of enclosure)
Project Manager, Monticello, USNRC (1 copy of enclosure)
Resident Inspector, Monticello, USNRC (1 copy of enclosure)
Mr. Joel Amato, Chief Boiler Inspector, State of Minnesota (1 copy of enclosure)
Mr. Paul Fisher, Hartford Insurance (1 copy of enclosure)

ENCLOSURE 1

**NORTHERN STATES POWER COMPANY
MONTICELLO NUCLEAR GENERATING PLANT
DOCKET 50-263**

**INSERVICE INSPECTION SUMMARY REPORT
CYCLE NO. 24 REFUELING OUTAGE**



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. 24 Refueling Outage

Outage Dates: March 14, 2009 to May 10, 2009

Inservice Inspection Interval 4, Period 2


Prepared By:


Section XI ISI Coordinator


Reviewed By:


Program Engineer

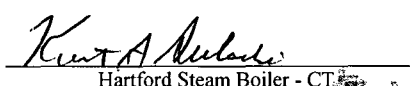
Approved By:


Supervisor, MIR

Approved By:


Manager, Program Engineering

ANII:


Hartford Steam Boiler - CT

Report Date: August 6, 2009

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I. Summary

Page 1 of 5

1.0 Introduction

This report encompasses all Inservice Inspection (ISI) activities performed during Unit 1 Cycle 24 of operation at Monticello Nuclear Generating Plant (MNGP). Cycle 24 began April 28, 2007, immediately following completion of the 23rd refueling outage. This report also includes activities performed during the 24th refueling outage that began March 14, 2009 and concluded on May 10, 2009.

All examinations and tests for Cycle 24 were scheduled and conducted in accordance with the 4th Interval ISI Plan. The exams and tests were credited to the 2nd period of the 4th ISI Interval, as applicable.

Also included in this report is supplemental information for the Cycle 23 ISI Summary Report submitted in July 2007, the Cycle 22 ISI Summary Report submitted in July 2005, and the Cycle 21 Summary Report submitted in August 2003.

2.0 Personnel

Visual and nondestructive examinations for inservice inspection (ISI) and preservice inspection (PSI) activities were performed by Nuclear Management Company (NMC) / Northern States Power Company of Minnesota (NSPM), Lambert-MacGill-Thomas (LMT), International Quality Consultants (IQC), Inc., TEAM, and AREVA-NP. Hartford Steam Boiler Inspection & Insurance Co. of Connecticut (HSB-CT) provided the Authorized Inspection. Personnel certification records are maintained by NSPM.

3.0 Examination Reports, Equipment and Materials

The examination reports listed in the attached appendices contain references to procedures, equipment, and materials used to complete specific examinations. Records of the reports and referenced information are maintained by NSPM.

4.0 Inspection Summary

In accordance with the 4th Interval ISI Plan and approved ISI Relief Request #1, Class 1 and 2 piping welds were examined using methodologies applicable to Risk-Informed ISI (RI-ISI). The remainder of the components and their supports were examined per the requirements set forth in American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI.

I. Summary (continued)

Page 2 of 5

Comprehensive in-vessel visual inspections (IVVI) of reactor vessel internal components were conducted to ensure continued integrity of the Reactor Pressure Vessel (RPV) internals. Additionally, enhanced visual inspections (EVT-1) were performed per the recommendations set forth in Boiling Water Reactor Vessel Internals Project (BWRVIP) guideline BWRVIP-03.

Examinations performed during Cycle 24 are listed in attached appendices. Code Case N-460, which allows a reduction of examination volume coverage <10% to be considered essentially 100%, was applied to exams where coverage was reduced due to interference or part geometry. These limitations are recorded on the examination reports.

Components with exam limitations that did not meet the required coverage requirements of essentially 100% will be included in a 10CFR50.55a request for relief under separate cover.

Results of the Class 1 and 2 ISI and PSI examinations, identified conditions, and corrective actions are noted and summarized in the attached appendices. Listed anomalies were either corrected, or an engineering evaluation was performed to accept "as-is" conditions.

Results of system pressure tests and snubber functional tests performed during Cycle 24 are summarized in attached appendices.

Repair-replacement activities for Cycle 24 were performed to the requirements of 4th ISI Interval Relief Request #7 which is based on ASME Section XI, 2001 Edition with no Addenda as approved by the Nuclear Regulatory Commission (NRC). A summary of the activities and copies of the NIS-2 forms are attached to this report in the applicable appendix.

I. Summary (continued)

Page 3 of 5

During Cycle 24, an audit of Cycle 23's ANII activities identified an editorial error on an NIS-2 form (2007-23-0070) and an editorial error on the NIS-1 Attachment (Appendix A) submitted previously with the Cycle 23 ISI Summary Report in July 2007. This condition was identified subsequent to submittal of the Cycle 23 ISI Summary Report. As part of the corrective action process, the corrected NIS-2 form and NIS-1 Attachment are included in this Summary Report.

Additionally, a corrective action was written against an installed safety relief valve that was determined to contain a non-conforming weld condition on an internal component (RV-2-71H with topworks s/n 194). The condition was corrected by removal of the valve during the Cycle 24 outage under work order 344394. As part of the corrective action process, the applicable NIS-2 forms from Cycle 21 and 22 are resubmitted referencing the condition.

In conclusion, based on the results of the Cycle 24 ISI activities, the integrity of the plant systems has been adequately maintained.

I. Summary (continued)

Page 4 of 5

5.0 List of Abbreviations

The Summary Report Examination Appendices contains several abbreviations identified below (plant component identifiers, and standard Section XI identifiers are not included in list):

| | | |
|---------|---|--|
| AUG | = | Augmented Exam Program |
| B- | = | Bolt (plus number identifier) |
| BWRVIP | = | Boiling Water Reactor Vessel and Internals Project |
| CA | = | Corrective Action |
| CAP | = | Corrective Action Process |
| CE | = | Condition Evaluation |
| CRD | = | Control Rod Drive |
| CRDMs | = | CRD Mechanisms |
| D | = | Long Seam Downstream of Circ Weld |
| DC / EC | = | Design / Engineering Change |
| DS | = | Downstream |
| EDG | = | Emergency Diesel Generator |
| EFT | = | Emergency Filtration Train |
| EPU | = | Extended Power Uprate |
| EVT | = | Enhanced Visual Examination |
| EDG-ESW | = | EDG Emergency Service Water |
| ESW | = | Emergency Service Water |
| FSW | = | EFT Emergency Service Water |
| GEO | = | Geometry / Geometric Reflector |
| H- | = | Hanger (plus number identifier) |
| HELB | = | High Energy Line Break |
| ISO | = | ISI Isometric Drawing |
| IVVI | = | In-Vessel Visual Inspection |
| LS | = | Longitudinal Seam |
| MS | = | Main Steam |
| MT | = | Magnetic Particle Examination |
| NC | = | Non-Code Commitment Exam |
| NRI | = | No Reportable Indications |
| OE | = | Operating Experience |
| P- | = | Pump (plus number identifier) |
| PM | = | Preventative Maintenance |
| PMT | = | Post-Maintenance Testing |
| PSI | = | Pre-Service Inspection |
| PT | = | Liquid Penetrant Examination |
| PEI | = | Program Engineering Instruction |
| RCIC | = | Reactor Core Isolation Cooling |
| RF | = | Refuel |
| RFO | = | Refueling Outage |

I. Summary (continued)

Page 4 of 5

5.0 List of Abbreviations (continued)

| | | |
|-------|---|--|
| RHR | = | Residual Heat Removal |
| RHRSW | = | RHR Service Water (common usage) |
| RI | = | Reportable Indication |
| RPV | = | Reactor Pressure Vessel |
| R/R | = | Repair / Replacement |
| RSW | = | RHR Service Water |
| Rx | = | Reactor |
| SW | = | Service Water |
| U&D | = | Long Seam Upstream & Downstream of Circ Weld |
| U | = | Long Seam Upstream of Circ Weld |
| US | = | Upstream |
| UT | = | Ultrasonic Examination |
| V- | = | Valve (plus number identifier) |
| VT | = | Visual Examination |
| W- | = | Weld (plus number identifier) |
| WCR | = | Weld Control Record |
| WO | = | Work Order |

II. Form NIS-1 Information

Page 1 of 2

Form NIS-1 Owner's Data Report for Inservice Inspections

As required by the Provisions of the ASME Code Rules

1. **Owner:** Xcel Energy, Inc. / Northern States Power Company - Minnesota
Address: 414 Nicollet Mall, Mpls, MN 55401

2. **Plant:** Monticello Nuclear Generating Plant
Address: Monticello, MN 55362

3. **Plant Unit:** 1 4. **Owner (Certificate of Authorization):** N/A

5. **Commercial Service Date:** 6/30/71 6. **National Board No. for Unit:** N/A

7. **Components Inspected:**

| <u>Component or Appurtenance</u> | <u>Manufacturer or Installer</u> | <u>Manufacturer or Installer Serial No.</u> | <u>State or Province No.</u> | <u>National Board No.</u> |
|----------------------------------|----------------------------------|---|------------------------------|---------------------------|
| Reactor Pressure Vessel | Chicago Bridge & Iron | B-4697 | --- | --- |

(See appendices for components inspected during the cycle)

8. **Examination Dates:** 04/28/2007 to 05/10/2009.

9. **Inspection Interval:** 05/01/2003 to 05/31/2012.

10. **Applicable Edition of Section XI:** 1995 Addenda: 1996.

11. **Abstract of Examinations.** Include a list of examinations and a statement concerning status of work required for current interval.

- See appendices A through E (Attached)

12. **Abstract of Conditions Noted.**

- See appendices A through E (Attached)

13. **Abstract of Corrective Measures Recommended and Taken.**

- See appendices A through E (Attached)

II. Form NIS-1 Information

Page 2 of 2

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Certification of Authorization No. (if applicable) N/A Expiration Date N/A

Date August 6 20 09 Signed NSPM / XCEL ENERGY By [Signature]
Owner Section XI ISI Coordinator

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MISSISSIPPI and employed by HARTFORD STEAM BOILER INS OF CT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 4/28/07 to 5/10/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions NB 11863 A, MI 144028-CO
National Board, State, Province, Endorsements

Date AUGUST 6 20 09

III. Form NIS-2 Information

Page 1 of 4

Cycle 24 NIS-2 Summary

| R/R ITEM NUMBER | WORK DOCUMENT(S) | COMPONENT OR SYSTEM | WORK DESCRIPTION |
|----------------------------|-----------------------------|---|--|
| 2007-24-001 | WO-141451 | RV-1745 | Replace existing like for like with new valve |
| 2007-24-002 | WO-331287 | P-109B | Replace 16 top column flange bolting during pump refurbishment |
| 2007-24-003 | WO-331287 EC-11704 | P-109B | Machine ID of Stuffing Box during pump refurbishment |
| 2007-24-004 | WO-324875 | TCV-4030A | Replace existing valve |
| 2007-24-005 | WO-293778 | P-111A, EDG-ESW Pump #11 | Replace P-111A with Rebuilt Spare from stock |
| 2008-24-006 | WO-337964 | #12 Recirc Pump (P-200B) Stuffing Box Cover | Replacement of stuffing box cover for Recirc Pump #12 due to seal replacement |
| 2008-24-008 | WO-354387 EC-12170 | A-Loop FSW pipe (Div-1) | Reconfigure piping for future flow meter installation |
| 2008-24-009 | WO-354388 EC-12170 | B-Loop FSW pipe (Div-2) | Reconfigure piping for future flow meter installation |
| 2008-24-011 | WO-354387 EC-12170 | A-Loop FSW pipe (Div-1) | Remove temporary blank spool pieces and replace with Krohne 3030 flow meters |
| 2008-24-012 | WO-354388 EC-12170 | B-Loop FSW pipe (Div-2) | Remove temporary blank spool pieces and replace with Krohne 3030 flow meters |
| 2008-24-013 | WO-326521 | SS-PS2-H2 | Snubber Changeouts with rebuilt spares from stock |
| | WO-326522 | SS-PS1-H3 | |
| | WO-326527 | SS-312-1 | |
| | WO-326528 | SS-312-2 | |
| | WO-326530 | SS-PS1-H2 | |
| | WO-326531 | SS-6AR | |
| | WO-326533 | SS-306 | |
| | WO-326577 | SS-191 | |
| | WO-326583 | SS-36B | |
| | WO-326584 | SS-36A | |
| | WO-326592 | SS-560 | |
| 2008-24-017 | WO-140391 | FW-97-1 | Grind off and restore hinge pin plug seal welds for anti-rotation pin installation |

III. Form NIS-2 Information

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Cycle 24 NIS-2 Summary

| R/R ITEM NUMBER | WORK DOCUMENT(S) | COMPONENT OR SYSTEM | WORK DESCRIPTION |
|-----------------|------------------|----------------------------|--|
| 2008-24-019 | WO-356231 | Spare Snubbers (size, s/n) | General R/R Plan to allow replacement of Main Cylinder, Piston, Piston Rings, Piston Rod, Piston Rod Nut, and Manifold. (see NIS-2 for details of components replaced) |
| | | 3 Kip, 006A | |
| | | 10 Kip, 403 | |
| | | 10 Kip, 013 | |
| | | 10 Kip, 028 | |
| | | 10 Kip, 033 | |
| | | 10 Kip, 035 | |
| | | 10 Kip, 037 | |
| | | 10 Kip, 040 | |
| | | 10 Kip, 047 | |
| | | 10 Kip, 054-1 | |
| | | 10 Kip, 095 | |
| | | 10 Kip, 171 | |
| | | 10 Kip, 500 | |
| | | 20 Kip, 021A | |
| | | 20 Kip, 099 | |
| | | 20 Kip, 105 | |
| | | 20 Kip, 116 | |
| | | 20 Kip, 117 | |
| | | 20 Kip, 119 | |
| | | 20 Kip, 120 | |
| | | 20 Kip, 130 | |
| | | 20 Kip, 152 | |
| | | 20 Kip, 463 | |
| | | 30 Kip, 020 | |
| | | 30 Kip, 005 | |
| | | 30 Kip, 100 | |
| | | 30 Kip, 101 | |
| | | 30 Kip, 468 | |
| | | 30 Kip, 470 | |
| | | 30 Kip, 520 | |
| | | 130 Kip, 175 | |
| 2008-24-020 | WO-319050 | P-111D | Replaced existing bowl assembly with new spare; replaced fasteners during refurbishment. |

III. Form NIS-2 Information

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Cycle 24 NIS-2 Summary

| R/R ITEM NUMBER | WORK DOCUMENT(S) | COMPONENT OR SYSTEM | WORK DESCRIPTION |
|----------------------------|-----------------------------|---|--|
| 2008-24-021 | WO-343959 | SW-102 | Removal and restore disc to nut tackweld to permit disassembly for inspection. |
| 2008-24-022, Rev.1 | WO-322606 | B Loop FSW Piping | Replace piping and fittings upstream of ESW-31 due to MIC thinning. |
| 2008-24-023 | WO-320292 | CRDMs | Change out selected drives with refurbished spares |
| 2008-24-024 | WO-320292 | Cap Screws for CRDMs | Replace 8 cap screws for each drive listed in R/R Plan 2008-24-023. |
| 2008-24-025 | WO-343738 | CV-1728 | Replacement of plug due to integral stem replacement for galling. |
| 2008-24-026 | WO-346874 | A-Loop, Recirc Piping REW13A- 28"-DCA, 2" DCA branch connection | Replacement of flange associated with Decon coupon removal |
| 2008-24-027 | WO-354743 | RV-2-71F | Replace Main Stage Disc during refurbishment due to disassembly damage |
| 2008-24-028 | WO-355111 | MO-1749 | Remove tack weld in support of disassembly for stem and actuator replacement |
| 2008-24-029, Rev.1 | WO-374028 | RHRSW | Replacement of RHRSW piping and associated fittings |
| 2008-24-030 | WO-354410 | ESW/FSW | Replacement of piping and associated fittings |
| 2008-24-031 | WO-364432 | Spare MS SRV | Replace Main Stage Disc during refurbishment due to out of spec tolerances |
| 2008-24-032 | WO-355111 EC-10869 | MO-1749 | Replace studs and nuts in support of stem and actuator replacement |
| 2008-24-033 | WO-355111 EC-10869 | TWH-114 | Replace pipe clamp in support of EC-10869 replacement of MO-1749 stem and actuator. |
| 2009-24-035 | WO-374028 | SR-105 SR-399 SR-469 | Support removal / reinstallation associated with piping replacement in R/R Plan 2008-24-029, Rev.1 |
| 2009-24-036 | WO-362738 EC-11125 | TWH-89 | Replace existing spring cans in support of EC-11125 for EPU |
| 2009-24-037 | WO-362738 EC-11125 | SR-113 | Modified in support of EC-11125 for EPU. Added bumper plates for additional lateral support. |
| 2009-24-039 | WO-362738 EC-11125 | TWH-144 | Replace existing spring cans in support of EC-11125 for EPU |
| 2009-24-040 | WO-380817 | RCIC Steam | Temporary removal and installation of pipe due to interference with AO-2-86D work activities. |

III. Form NIS-2 Information

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Cycle 24 NIS-2 Summary

| R/R ITEM NUMBER | WORK DOCUMENT(S) | COMPONENT OR SYSTEM | WORK DESCRIPTION |
|----------------------------|-----------------------------|--|---|
| 2009-24-041 | WO-359136 | MO-2036 | Replaced bonnet fastener due to disassembly damage |
| 2009-24-042 | WO-344367 | Primary Containment | Replace 1 nut, (and 15 washer sets) for the Drywell Head due to normal wear. |
| 2009-24-043 | WO-381681 | ESW | Reroute piping in steam chase and condenser room for HELB. |
| 2009-24-044 | WO-380817 | AO-2-86D | Replace 3 studs and 20 nuts damaged during disassembly in support of valve maintenance activities |
| 2009-24-045 | WO-380817 | AO-2-86D | Replace downstream welded seat ring insert due to damage from flow related disc contact |
| 2009-24-046 | WO-381724 | RHRSW-A SW9-18"-GF | Replace RHRSW-A due to MIC thinning. |
| 2009-24-047 | WO-383235 EC-14055 | RHRSW-B SW10-18"-GF | Weld overlay (2) defective RHRSW-B in tunnel to intake and turbine building per Code Case N-661 due to MIC thinning |
| 2009-24-048 | WO-381679 EC-9174 | Main Steam | Replace defective Strain Gauges |
| 2009-24-049 | WO-380817 | AO-2-86D | Replace disc like-for-like due to flow related damage. |
| 2009-24-050 | WO-316178 EC-12841 | RHRSW-B BS-1952 | Weld buildup and machining of basket strainer flange & cover sealing surfaces due to corrosion. |
| 2009-24-051 | WO-326530 | Snubber PS1-H2 | Replace misplaced snubber attachment bolting |
| 2009-24-052 | WO-381679 WO-383608 | Main Steam | Removed surface indication identified during strain gauge replacement. |
| 2009-24-053 | WO-381707 EC-14055 | RHRSW-A SW9-18"-GF | Weld overlay defective RHRSW-A above RCIC room per Code Case N-661 due to MIC thinning. |
| 2009-24-054 | WO-381724 | SR-451 SR-452 SR-453 SR-454 SR-455 | Shim the supports to restore the pipe-to-support clearances required by the design following replacement of pipe due to MIC thinning. |
| 2009-24-055, Rev.1 | WO-381724-15/16 EC-14190 | SW30A-3"-HF | Class 3 boundary change. Previously abandoned in place piping reclassified as non-safety. |
| 2009-24-056 | WO-344364 | Rx Vessel Closure Head Washer set | Replace potentially damaged spherical washer set like for like |

III. Form NIS-2 Information

NIS-2 Forms

(119 pages to follow)

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2007-24-001

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/20/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-141451
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System Core Spray (CSP), Class 2
- (a) Applicable Construction Code B31.1, 1977E / W '78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| RV-1745 | Crosby | N89658-00-0003 | n/a | UV | 2003 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| RV-1745 | Crosby | N89658-00-0004 | n/a | UV | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replaced existing valve like-for-like with new valve. Year Built is installation date.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 295 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2007-24-001

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Accepted valve tests from manufacturer.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed

[Signature] SECTION XI ISI COORD.
Owner or Owner's Designee, Title

Date 7/20/09

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/6/07 to 7/23/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions NB 11863 A, N, S MW 004028-CO
National Board, Province and Endorsements

Date 7/23/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
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Repair/Replacement Plan No.: 2007-24-002

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-331287
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System RHR Service Water (RSW), Class 3
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a
- Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------------|----------------------|-------------------------|--------------------|---------------------------|-------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| <i>Top Column Bolts</i> | <i>Unknown</i> | <i>n/a</i> | <i>n/a</i> | <i>Pump s/n VTP-24769</i> | <i>1967</i> | <i>removed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>Top Colum Bolts</i> | <i>Cardinal</i> | <i>n/a</i> | <i>n/a</i> | <i>Pump s/n VTP-24769</i> | <i>2007</i> | <i>installed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replaced 16 top column bolts due to normal wear.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |


Repair/Replacement Plan No.: 2007-24-002

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Original bolting: "Steel". New bolting: ASTM A-449 (bolts built 1988, installed 2007).

CERTIFICATE OF COMPLIANCE


We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , SECTION XI ISI COORD Date 8/2/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 6/19/07 to 8/2/09 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, N, I, F, F, W, 034028 -CO
Inspector's Signature National Board, Province and Endorsements

Date 8/2/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2007-24-003

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-331287, EC-11704
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System RHR Service Water (RSW), P-109B, Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|----------------------------|-----------------------------|-------------------------|--------------------|----------------------|-------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| <u>P-109B Stuffing Box</u> | <u>Worthington (Sulzer)</u> | <u>Pump VTP-24769</u> | <u>n/a</u> | <u>n/a</u> | <u>2007</u> | <u>Corrected</u> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Machine stuffing box ID for defect removal (erosion) and install ID sleeve.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
 Exempt ☐ Other ☐ Pressure 230 psi Test Temp na °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

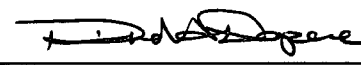
Repair/Replacement Plan No.: 2007-24-003

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Existing Stuffing Box (pressure retaining) was machined on the ID to accept a bushing (non-pressure retaining). (reference EC-11074) Stuffing Box re-installed.

CERTIFICATE OF COMPLIANCE

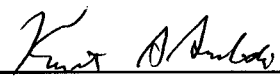
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/2/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/20/09 to 8/12/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions ND 11860 A, N, J NH 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/12/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2007-24-004

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/29/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-324875
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System Emergency Service Water (FSW), Class 3
- (a) Applicable Construction Code B31.1, 1973E / W'76A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|-----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| TCV-4030A | Penn | 9405 | n/a | n/a | 2001 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| TCV-4030A | Johnson Controls/Penn | 60-01704-1-2 | n/a | n/a | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replace Valve Like-for-Like
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 68.5 psi Test Temp N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
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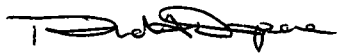
Repair/Replacement Plan No.: 2007-24-004

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Post R/R pressure test per work order PMT.

CERTIFICATE OF COMPLIANCE

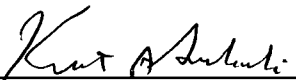
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD. Date 7/31/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 12/1/03 to 7/31/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863, A4, J 144004028-10
Inspector's Signature National Board, Province and Endorsements
Date 7/31/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
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Repair/Replacement Plan No.: 2007-24-005

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-293778
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System EDG Emerg. Service Water (EDG-ESW), Pump #11 (P-111A), Class 3
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|-------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| <i>P-111A</i> | <i>Johnston</i> | <i>QD6701</i> | <i>n/a</i> | <i>n/a</i> | <i>2004</i> | <i>Removed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>P-111A</i> | <i>Johnston</i> | <i>QD6702</i> | <i>n/a</i> | <i>n/a</i> | <i>2008</i> | <i>Installed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replaced EDG-ESW Pump #11 (P-111A) with rebuilt spare.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 48.1 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2007-24-005

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

System leakage test with VT-2 of discharge flange joint and post maintenance IST was performed per the work order PMT.

This satisfies post-repair/replacement testing for the spare which was rebuilt under WO152929 (ref. R/R Plan 2006-23-0022).

Pumps meet requirements of Design Change 92Q300.

CERTIFICATE OF COMPLIANCE

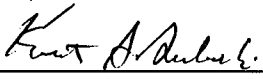
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/18/07 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A.S. MN 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-006

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO 337964
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Reactor Recirculation System (REC), P-200B, Class 1
5. (a) Applicable Construction Code ASME Section III, Class C, 1965E /No Add Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|--------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Stuffing Box Cover | Bingham-Williamette | s/n 11N35-3 | n/a | Ht. 83852 | 2007 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Stuffing Box Cover | Sulzer | p/n 5122530 | n/a | Ht. 238938 | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replace stuffing box cover on Recirc Pump 12 (P-200B) as part of seal ass'y.
Stuffing box cover made in 2007 and installed in 2009.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☒ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

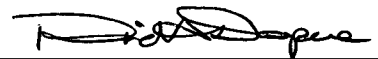
Repair/Replacement Plan No.: 2008-24-006

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Pressure testing satisfied per WO 337964, successful completion of 4290-02-OCD.
No PSI or IST required.*

CERTIFICATE OF COMPLIANCE

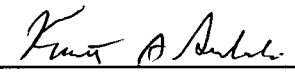
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  SECTION XI ISI COORD Date 8/2/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/7/08 to 8/2/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NP 11863 A, N, I MN 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/2/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
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Repair/Replacement Plan No.: 2008-24-008

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 3
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO 354387/EC12170
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System EFT Emergency Service Water (FSW), Division 1, Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) na
6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| ESW1-4"-HBD | NSP | n/a | n/a | n/a | 1983 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-4"-HBD | Xcel Energy | n/a | n/a | n/a | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-3"-HBD | NSP | n/a | n/a | n/a | 2008 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-3"-HBD | Xcel Energy | n/a | n/a | n/a | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| see | subsequent | sheets | for | additional | items | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Reconfigured piping components and hangers for future flow meter installation
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
 Exempt ☐ Other ☐ Pressure 71.7 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 3

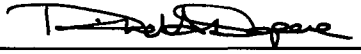
Repair/Replacement Plan No.: 2008-24-008

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

In support of EC-12170, the piping system was reconfigured in the Intake Structure and EFT Room to accept future installation of ultrasonic flow meters. This included associated pipe, fittings, flanges, and one valve, a temporary spoolpiece assembly, fasteners, and installation of one support in the intake structure and two supports in the EFT Room. Performed weld visuals and NDE on welds, as applicable. Performed system leakage test with VT-2 at nominal system pressure. Performed a check valve open and close test (CTO/CTC) on replaced valve ESW-18.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/5/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/21/08 to 8/5/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, NJE MW 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/5/09

Sheet 3 of 3

R/R Plan No. 2008-24-008
WO No. WO 354387
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-009

- Owner NSP-Minnesota, an Xcel Energy Company
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
- Plant Monticello Nuclear Generating Plant
Name
2807 West County Road 75, Monticello, MN 55362
Address
- Work Performed By NSPM / Xcel Energy
Company Name
2807 West County Rd. 75, Monticello, MN 55362
Address
- Identification of System EFT Emergency Service Water (FSW), Division 2, Class 3
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) na
- Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| ESW5-4"-HBD | NSP | na | na | na | 1983 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW5-4"-HBD | Xcel Energy | na | na | na | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW5-3"-HBD | Velan | na | na | na | 1983 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW5-3"-HBD | Xcel Energy | na | na | na | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| see | subsequent | sheets | for | additional | items | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Reconfigured piping components and hangers for future flow meter installation
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 71.9 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

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| Approval: <u>PCR 01148046</u> |
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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 3

Repair/Replacement Plan No.: 2008-24-009

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

In support of EC-12170, the piping system was reconfigured in the Intake Structure and EFT Room to accept future installation of ultrasonic flow meters. This included associated pipe, fittings, flanges, and one valve, a temporary spoolpiece assembly, fasteners, installation of one support in the intake structure and one support in the EFT Room, and modification of one existing support in the Intake Structure and one in the EFT Room. Performed weld visuals and NDE on welds, as applicable. Performed system leakage test with VT-2 at nominal system pressure. Performed a check valve open and close test (CTO/CTC) on replaced valve ESW-17.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed *T. D. Dore*, SECTION XI ISI COORD Date 8/5/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/15/08 to 8/5/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Kent A. Deluca Commissions *KB 11863 A, N, I NW 004028-00*
Inspector's Signature National Board, Province and Endorsements
Date 8/5/09

Sheet 3 of 3

R/R Plan No. 2008-24-009
WO No. WO 354388
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

[illegible]

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-011

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-354387, EC-12170
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System EFT Emergency Service Water (FSW), Division 1, Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) na

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|------------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| ESW1-4"-HBD temp spool | Xcel Energy | n/a | n/a | n/a | 2008 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| FE-4230 | Krohne | A08 71338 | n/a | n/a | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-3"-HBD temp spool | Xcel Energy | n/a | n/a | n/a | 2008 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| FE-4232 | Krohne | A08 71473 | n/a | n/a | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replace temporary flanged piping spool pieces with ultrasonic flow meters.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
 Exempt ☐ Other ☐ Pressure 69.7 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-011

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Replaced temporary spool pieces at 2 locations of Division 1 FSW system and installed Krohne UFM 3030 ultrasonic flowmeters. Work was performed in support of EC-12170.
Performed a system leakage test with VT-2 at nominal system pressure per work order pre-operational testing..*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed

Richard A. Dugan, SECTION XI ISI COORD

Date 8/5/09

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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/5/09 to 8/5/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Kurt A. Anshel
Inspector's Signature

Commissions 4B 11863 A, N, I MN004028-CO
National Board, Province and Endorsements

Date 8/5/09

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|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-012

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-354388, EC-12170
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
- Identification of System EFT Emergency Service Water (FSW), Division 2, Class 3
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) na

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------------------|----------------------|-------------------------|--------------------|----------------------|-------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| <i>ESW5-4"-HBD temp spool</i> | <i>Xcel Energy</i> | <i>n/a</i> | <i>n/a</i> | <i>n/a</i> | <i>2008</i> | <i>Removed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>FE-4231</i> | <i>Krohne</i> | <i>A08 71339</i> | <i>n/a</i> | <i>n/a</i> | <i>2008</i> | <i>Installed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>ESW5-3"-HBD temp spool</i> | <i>Xcel Energy</i> | <i>n/a</i> | <i>n/a</i> | <i>n/a</i> | <i>2008</i> | <i>Removed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>FE-4233</i> | <i>Krohne</i> | <i>A08 71475</i> | <i>n/a</i> | <i>n/a</i> | <i>2008</i> | <i>Installed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replace temporary flanged piping spool pieces with ultrasonic flow meters.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 68.9 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-013

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/26/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 4
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 *(see attached pages for applicable Work Orders)*
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System (see attached pages for applicable systems and Class)
5. (a) Applicable Construction Code USAS B31.1, 1967E /No Add Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|--------------------------|
| | | | | | | | YES | NO |
| SEE | ATTACHED | PAGES | - | - | - | - | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Removed existing snubbers for seal life program, replaced with rebuilt spares.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

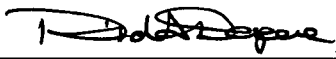
Repair/Replacement Plan No.: 2008-24-012

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Replaced temporary spool pieces at 2 locations of Division 2 FSW system and installed Krohne UFM 3030 ultrasonic flowmeters. Work was performed in support of EC-12170.
Performed a system leakage test with VT-2 at nominal system pressure per work order pre-operational testing..*

CERTIFICATE OF COMPLIANCE

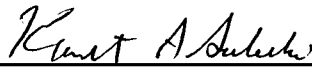
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  SECTION XI ISI COORD. Date 8/5/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 5/8/08 to 8/5/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 AP, F 14W 304018-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/5/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 4

Repair/Replacement Plan No.: 2008-24-013

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Functional testing per procedure 0251. Preservice VT-3 examination of non-exempt snubbers per procedure 4903.

"Year Built" is the installation date.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed

[Signature], SECTION XI ISI CORO

Date 7/26/09

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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/15/08 to 7/27/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]

Inspector's Signature

Commissions NB 11863 A, I, MN 004028-CO

National Board, Province and Endorsements

Date

7/27/09

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 3 of 4

Work Performed By NSPM / Xcel Energy
 System SNB, Snubbers
 Construction Code USAS B31.1, 1967

R/R Plan No. 2008-24-013
 WO No. Various (see below)
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component (System, Class) | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification (Work Order) | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|--------------------------------------|----------------------|-------------------------|--------------------|--------------------------------------|------------|--|-------------------|----|
| | | | | | | | Yes | No |
| PS2-H2 (MST, 1) | Bergen Paterson | 516 | n/a | 30 Kip (326521) | 2000 | removed | | X |
| PS2-H2 (MST, 1) | Bergen Paterson | 005 | n/a | 30 Kip (326521) | 2009 | installed | | X |
| PS1-H3 (MST, 1) | Bergen Paterson | 192 | n/a | 30 Kip (326522) | 2000 | removed | | X |
| PS1-H3 (MST, 1) | Bergen Paterson | 020 | n/a | 30 Kip (326522) | 2009 | installed | | X |
| SS-312-1 (RHR, 2) | Bergen Paterson | 522 | n/a | 30 Kip (326527) | 2000 | removed | | X |
| SS-312-1 (RHR, 2) | Bergen Paterson | 100 | n/a | 30 Kip (326527) | 2009 | installed | | X |
| SS-312-2 (RHR, 2) | Bergen Paterson | 518 | n/a | 30 Kip (326528) | 2000 | removed | | X |
| SS-312-2 (RHR, 2) | Bergen Paterson | 101 | n/a | 30 Kip (326528) | 2009 | installed | | X |
| PS1-H2 (MST, 1) | Bergen Paterson | 052 | n/a | 30 Kip (326530) | 2000 | removed | | X |
| PS1-H2 (MST, 1) | Bergen Paterson | 145 | n/a | 30 Kip (326530) | 2009 | installed | | X |
| SS-6AR (REC, 1) | Bergen Paterson | 464 | n/a | 20 Kip (326531) | 2000 | removed | | X |
| SS-6AR (REC, 1) | Bergen Paterson | 021A | n/a | 20 Kip (326531) | 2009 | installed | | X |
| SS-306 (RHR, 2) | Bergen Paterson | 517 | n/a | 30 Kip (326533) | 2000 | removed | | X |
| SS-306 (RHR, 2) | Bergen Paterson | 468 | n/a | 30 Kip (326533) | 2009 | installed | | X |
| SS-191 (PCT, 2) | Bergen Paterson | 112 | n/a | 20 Kip (326577) | 2000 | removed | | X |
| SS-191 (PCT, 2) | Bergen Paterson | 099 | n/a | 20 Kip (326577) | 2009 | installed | | X |

Sheet 4 of 4

R/R Plan No. 2008-24-013
WO No. Various (see below)
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

[illegible]

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-017

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/20/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-140391
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Condensate and Feedwater (CFW), Class 1
5. (a) Applicable Construction Code B31.1, 1977 / '78 Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|-----------------------|-------------------------|--------------------|----------------------|----------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| <i>FW-97-1</i> | <i>Anchor Darling</i> | <i>14-SPN-218U</i> | <i>n/a</i> | <i>none</i> | <i>unknown</i> | <i>Corrected</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Removed hinge pin plugs to install anti-rotation pin and reinstalled by welding.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☒ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-017

9. Remarks

(Applicable Manufacturer's Data Reports to be Attached)

None.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed RICHARD DEOPERE, SECTION XI ISI COORD Date 7/20/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/22/08 to 7/23/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

Kurt A. Ambler
Inspector's Signature

Commissions ND11863 A, N, I MN 004028-CO
National Board, Province and Endorsements

Date 7/23/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-019

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/23/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 9
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-356231
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System SNB, Spare Snubbers, Class unassigned
5. (a) Applicable Construction Code USAS B31.1, 1967E /No Add Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Main Cylinder | Bergen Paterson | 005A | n/a | 3 Kip | unknown | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Main Cylinder | Anchor/Darling | 005A | n/a | 3 Kip | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Valve Assembly | Bergen Paterson | 005A | n/a | 3 Kip | unknown | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Valve Assembly | Anchor/Darling | 005A | n/a | 3 Kip | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SEE | SUBSEQUENT | SHEETS | FOR | ADDITIONAL | ITEMS | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Individual components replaced during rebuild of spare Bergen-Paterson snubbers for 2009 RFO.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 9

Repair/Replacement Plan No.: 2008-24-019

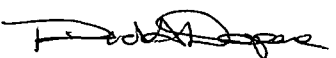
9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Functional test per procedure 0251.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed

, SECTION XI ISI COORD.

Date 7/23/2009

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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 8/22/08 to 7/24/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.


Inspector's Signature

Commissions NB 11863 AWP MW004028-CO
National Board, Province and Endorsements

Date 7/24/09

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 3 of 9

Work Performed By NSPM / Xcel Energy
 System SNB, Spare Snubbers
 Construction Code USAS B31.1, 1967

R/R Plan No. 2008-24-019
 WO No. 356231
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| Valve Assembly | Bergen Paterson | 006A | n/a | 3 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 006A | n/a | 3 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 403 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 403 | n/a | 10 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 013 | n/a | 10 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 013 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 013 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 013 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 028 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 028 | n/a | 10 Kip | 2008 | installed | | X |
| Piston Rod Nut | Bergen Paterson | 028 | n/a | 10 Kip | unknown | removed | | X |
| Piston Rod Nut | Bergen Paterson | 028 | n/a | 10 Kip | 2008 | installed | | X |
| Piston | Bergen Paterson | 028 | n/a | 10 Kip | unknown | removed | | X |
| Piston | Anchor Darling | 028 | n/a | 10 Kip | 2008 | installed | | X |
| Piston Rings | Bergen Paterson | 028 | n/a | 10 Kip | unknown | removed | | X |
| Piston Rings | Anchor Darling | 028 | n/a | 10 Kip | 2008 | installed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 4 of 9

Work Performed By NSPM / Xcel Energy
 System SNB, Spare Snubbers
 Construction Code USAS B31.1, 1967

R/R Plan No. 2008-24-019
 WO No. 356231
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| Main Cylinder | Bergen Paterson | 028 | n/a | 10 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 028 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 033 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 033 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 035 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 035 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 037 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 037 | n/a | 10 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 037 | n/a | 10 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 037 | n/a | 10 Kip | 2008 | installed | | X |
| Piston Rings | Bergen Paterson | 037 | n/a | 10 Kip | unknown | removed | | X |
| Piston Rings | Anchor Darling | 037 | n/a | 10 Kip | 2008 | installed | | X |
| Piston | Bergen Paterson | 037 | n/a | 10 Kip | unknown | removed | | X |
| Piston | Anchor Darling | 037 | n/a | 10 Kip | 2008 | installed | | X |
| Piston Rings | Bergen Paterson | 040 | n/a | 10 Kip | unknown | removed | | X |
| Piston Rings | Anchor Darling | 040 | n/a | 10 Kip | 2008 | installed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 5 of 9

Work Performed By NSPM / Xcel Energy
 System SNB, Spare Snubbers
 Construction Code USAS B31.1, 1967

R/R Plan No. 2008-24-019
 WO No. 356231
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| Valve Assembly | Bergen Paterson | 040 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 040 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 047 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 047 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 054-1 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 054-1 | n/a | 10 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 095 | n/a | 10 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 095 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 095 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 095 | n/a | 10 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 171 | n/a | 10 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 171 | n/a | 10 Kip | 2008 | installed | | X |
| Piston Rings | Bergen Paterson | 171 | n/a | 10 Kip | unknown | removed | | X |
| Piston Rings | Anchor Darling | 171 | n/a | 10 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 500 | n/a | 10 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 500 | n/a | 10 Kip | 2008 | installed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 6 of 9

Work Performed By NSPM / Xcel Energy
 System SNB, Spare Snubbers
 Construction Code USAS B31.1, 1967

R/R Plan No. 2008-24-019
 WO No. 356231
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| Piston | Bergen Paterson | 500 | n/a | 10 Kip | unknown | removed | | X |
| Piston | Anchor Darling | 500 | n/a | 10 Kip | 2008 | installed | | X |
| Piston Rod | Bergen Paterson | 500 | n/a | 10 Kip | unknown | removed | | X |
| Piston Rod | Bergen Power | 500 | n/a | 10 Kip | 2008 | installed | | X |
| Piston Rings | Bergen Paterson | 500 | n/a | 10 Kip | unknown | removed | | X |
| Piston Rings | Anchor Darling | 500 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 500 | n/a | 10 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 500 | n/a | 10 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 021A | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 021A | n/a | 20 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 099 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 099 | n/a | 20 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 105 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 105 | n/a | 20 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 116 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 116 | n/a | 20 Kip | 2008 | installed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 7 of 9

Work Performed By NSPM / Xcel Energy
 System SNB, Spare Snubbers
 Construction Code USAS B31.1, 1967

R/R Plan No. 2008-24-019
 WO No. 356231
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| Valve Assembly | Bergen Paterson | 117 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 117 | n/a | 20 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 119 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 119 | n/a | 20 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 120 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 120 | n/a | 20 Kip | 2008 | installed | | X |
| Piston Rings | Bergen Paterson | 130 | n/a | 20 Kip | unknown | removed | | X |
| Piston Rings | Bergen Paterson | 130 | n/a | 20 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 130 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 130 | n/a | 20 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 152 | n/a | 20 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 152 | n/a | 20 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 463 | n/a | 20 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 463 | n/a | 20 Kip | 2008 | installed | | X |
| Piston Rings | Bergen Paterson | 020 | n/a | 30 Kip | unknown | removed | | X |
| Piston Rings | Bergen Paterson | 020 | n/a | 30 Kip | 2008 | installed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 8 of 9

Work Performed By NSPM / Xcel Energy
 System SNB, Spare Snubbers
 Construction Code USAS B31.1, 1967

R/R Plan No. 2008-24-019
 WO No. 356231
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| Main Cylinder | Bergen Paterson | 020 | n/a | 30 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 020 | n/a | 30 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 020 | n/a | 30 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 020 | n/a | 30 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 005 | n/a | 30 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 005 | n/a | 30 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 100 | n/a | 30 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 100 | n/a | 30 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 100 | n/a | 30 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 100 | n/a | 30 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 101 | n/a | 30 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 101 | n/a | 30 Kip | 2008 | installed | | X |
| Valve Assembly | Bergen Paterson | 468 | n/a | 30 Kip | unknown | removed | | X |
| Valve Assembly | Anchor Darling | 468 | n/a | 30 Kip | 2008 | installed | | X |
| Main Cylinder | Bergen Paterson | 470 | n/a | 30 Kip | unknown | removed | | X |
| Main Cylinder | Anchor Darling | 470 | n/a | 30 Kip | 2008 | installed | | X |

Sheet 9 of 9

R/R Plan No. 2008-24-019
WO No. 356231
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

[illegible]

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-020

- Owner NSP-Minnesota, an Xcel Energy Company Date 8/3/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-319050
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp N/A
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. N/A
Address Expiration Date N/A
- Identification of System RHRSW, P-111D, Class 3
- (a) Applicable Construction Code B31.1, 1977E / W '78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) N/A
- Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Pump Bowl | Johnson Pump | 99JC1702S | N/A | None | 1999 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Pump Bowl | Johnson Pump | 99JC1407S | N/A | None | 1999 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Fasteners | Sulzer | N/A | N/A | None | 2009 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Fasteners | Sulzer | N/A | N/A | None | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replacement of pump bowl assembly, like for like
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☒ Pressure N/A psi Test Temp N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

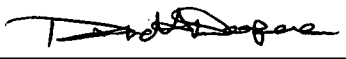
Repair/Replacement Plan No.: 2008-24-020

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*The bowl assembly is inaccessible to perform a VT-2 examination. A preservice functional test was performed to verify flow is not impaired and meets system requirements.
"Year Built" is the removal and the installation date for fasteners.
Mod 99Q050 is applicable.*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  T. D. Dugan, SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/16/08 to 8/13/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Kenneth A. Ruluck Commissions NS 11863 A, N, I, M, W, O, 4028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/13/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-021

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/29/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO 343959
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System EDG Emergency Service Water (EDG-ESW), Valve SW-102, Class 3
5. (a) Applicable Construction Code USAS B31.1, 1967E /No Add Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SW-102 | OIC Corp | 1573C-61-004 | n/a | n/a | 1969 | Repaired | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Removed / restored disc stem-to-nut tack weld to permit full inspection.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure N/A psi Test Temp N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |


Repair/Replacement Plan No.: 2008-24-021

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*No PSI or pressure testing required for valve internal components.
Check Valve Open/Close Test per 0255-11-IA-7.
Existing disc installed in 2005 per WO 307107.*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , ISI COORDINATOR Date 7/31/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/15/08 to 7/31/09 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, N, I MN 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 7/31/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-022, Rev.1

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO 322606
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System EFT Service Water (FSW), Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) na

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| ESW5-3"-HBD | NSP | n/a | n/a | n/a | 1981 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW5-3"-HBD | Xcel Energy | n/a | n/a | n/a | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Like for like replacement of piping components due to thinning.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 78.5 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-022, Rev.1

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Welds were examined by MT or PT for construction code.
System leakage test with VT-2 at nominal operating pressure.
Existing bolting materials were reused.*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed *Richard A. Deane*, SECTION XI ISI COORD. Date 7/31/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/24/08 to 7/31/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

Kurt A. Schubert Commissions NB11863 A, IV, I 14N004028-CD
Inspector's Signature National Board, Province and Endorsements
Date 7/31/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-023

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/27/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 5
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-320292
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Control Rod Drive (CRD), Class 1
5. (a) Applicable Construction Code ASME Section III, 1965 / No Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|--------------------------|
| | | | | | | | YES | NO |
| SEE | SUBSEQUENT | PAGES | - | - | - | - | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Removed selected CRDM's and replaced with previously in-service refurbished spares.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☒ Pressure *1003 psi Test Temp *189 °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 5

Repair/Replacement Plan No.: 2008-24-023


9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Drives exchanged per procedure 9309 and tested per procedure 9019.

**Pressure test not required per 4th Interval ISI Relief Req. #7, however, verified SAT w/ VT-2 per System Leakage Test 0255-20-IIC-2.*

CERTIFICATE OF COMPLIANCE


We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISICORD. Date 7/27/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/9/08 to 7/28/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, N, I MW 004028 -CO
Inspector's Signature National Board, Province and Endorsements
Date 7/28/09

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 3 of 5

Work Performed By NSPM / Xcel Energy
 System Control Rod Drive (CRD) Class 1
 Construction Code ASME III, 1965

R/R Plan No. 2008-24-023
 WO No. 320292
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| CRD 06-19 | General Electric | 411 | n/a | n/a | unknown | removed | | X |
| CRD 06-19 | General Electric | 1484 | n/a | n/a | 2009 | installed | | X |
| CRD 06-27 | General Electric | 537A | n/a | n/a | unknown | removed | | X |
| CRD 06-27 | General Electric | 351 | n/a | n/a | 2009 | installed | | X |
| CRD 06-35 | General Electric | 325 | n/a | n/a | unknown | removed | | X |
| CRD 06-35 | General Electric | 582 | n/a | n/a | 2009 | installed | | X |
| CRD 10-11 | General Electric | 73 | n/a | n/a | unknown | removed | | X |
| CRD 10-11 | General Electric | 795 | n/a | n/a | 2009 | installed | | X |
| CRD 10-43 | General Electric | 926 | n/a | n/a | unknown | removed | | X |
| CRD 10-43 | General Electric | 568A | n/a | n/a | 2009 | installed | | X |
| CRD 14-11 | General Electric | 459 | n/a | n/a | unknown | removed | | X |
| CRD 14-11 | General Electric | 722 | n/a | n/a | 2009 | installed | | X |
| CRD 14-19 | General Electric | 536 | n/a | n/a | unknown | removed | | X |
| CRD 14-19 | General Electric | 353 | n/a | n/a | 2009 | installed | | X |
| CRD 14-35 | General Electric | 793 | n/a | n/a | unknown | removed | | X |
| CRD 14-35 | General Electric | 954 | n/a | n/a | 2009 | installed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 4 of 5

Work Performed By NSPM / Xcel Energy
 System Control Rod Drive (CRD) Class 1
 Construction Code ASME III, 1965

R/R Plan No. 2008-24-023
 WO No. 320292
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| CRD 18-43 | General Electric | 695 | n/a | n/a | unknown | removed | | X |
| CRD 18-43 | General Electric | A6718 | n/a | n/a | 2009 | installed | | X |
| CRD 18-31 | General Electric | 152 | n/a | n/a | unknown | removed | | X |
| CRD 18-31 | General Electric | 613 | n/a | n/a | 2009 | installed | | X |
| CRD 22-03 | General Electric | 816 | n/a | n/a | unknown | removed | | X |
| CRD 22-03 | General Electric | 625 | n/a | n/a | 2009 | installed | | X |
| CRD 22-07 | General Electric | 553 | n/a | n/a | unknown | removed | | X |
| CRD 22-07 | General Electric | 1547 | n/a | n/a | 2009 | installed | | X |
| CRD 22-11 | General Electric | 388 | n/a | n/a | unknown | removed | | X |
| CRD 22-11 | General Electric | 603 | n/a | n/a | 2009 | installed | | X |
| CRD 22-43 | General Electric | 12 | n/a | n/a | unknown | removed | | X |
| CRD 22-43 | General Electric | 694 | n/a | n/a | 2009 | installed | | X |
| CRD 26-03 | General Electric | 531 | n/a | n/a | unknown | removed | | X |
| CRD 26-03 | General Electric | 831 | n/a | n/a | 2009 | installed | | X |
| CRD 26-47 | General Electric | 871 | n/a | n/a | unknown | removed | | X |
| CRD 26-47 | General Electric | 642 | n/a | n/a | 2009 | installed | | X |

Sheet 5 of 5

R/R Plan No. 2008-24-023
WO No. 320292
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-024

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/28/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 5
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-320292
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Control Rod Drive (CRD), Class 1
5. (a) Applicable Construction Code ASME Section III, 1965 / No Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|--------------------------|
| | | | | | | | YES | NO |
| SEE | SUBSEQUENT | PAGES | - | - | - | - | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replacement of flange fasteners (8 each) for 19 CRDM's exchanged with refurbished spares during outage.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in Items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 5

Repair/Replacement Plan No.: 2008-24-024

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Reference Alt.'s 00A026 and 02A040.

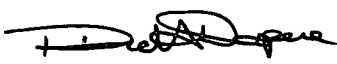
Drives exchanged per procedure 9309 and tested per procedure 9019.

VT-1 PSI performed on replacement capscrews. No pressure testing required.

* Capscrews from PO P007534 were built in 2002. Capscrews from PO 24579 were built in 2008.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD. Date 7/28/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 10/9/08 to 7/28/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions ND 11863 A, N.E. MW 04028-00
Inspector's Signature National Board, Province and Endorsements
Date 7/28/09

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 3 of 5

Work Performed By NSPM / Xcel Energy
 System Control Rod Drive (CRD) Class 1
 Construction Code ASME III, 1965

R/R Plan No. 2008-24-024
 WO No. 320292
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|----------------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| CRD 06-19 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 06-19 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 06-27 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 06-27 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 06-35 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 06-35 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 10-11 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 10-11 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 10-43 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 10-43 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 14-11 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 14-11 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 14-19 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 14-19 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 14-35 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 14-35 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 4 of 5

Work Performed By NSPM / Xcel Energy
 System Control Rod Drive (CRD) Class 1
 Construction Code ASME III, 1965

R/R Plan No. 2008-24-024
 WO No. 320292
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|----------------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| CRD 18-43 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 18-43 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 18-31 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 18-31 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 22-03 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 22-03 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 22-07 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 22-07 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 22-11 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 22-11 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 22-43 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 22-43 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 26-03 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 26-03 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |
| CRD 26-47 (8) Capscrews | Nova | n/a | n/a | n/a | unknown | removed | | X |
| CRD 26-47 (8) Capscrews | Nova | n/a | n/a | n/a | 2009 | installed | | X |

Sheet 5 of 5

R/R Plan No. 2008-24-024
WO No. 320292
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

[illegible]

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-025

- Owner NSP-Minnesota, an Xcel Energy Company Date 8/3/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Address
Sheet 1 of 2
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 Address
WO-343738
Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Address
Authorization No. n/a
Expiration Date n/a
- Identification of System RHR Service Water (RHRSW), CV-1728, Class 3
- (a) Applicable Construction Code B31.1, 77E / W78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Plug | Flowserve | 47907-001 | n/a | n/a | 2005 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Plug | Flowserve | 1 | n/a | Ht. Code 91772 | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Like-for-like replacement of plug and the integral stem due to stem galling.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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|-------------------------------------|--|---------------------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-025

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

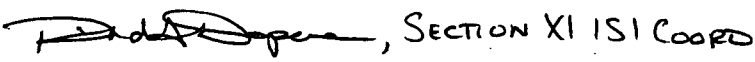
Design Change 87Z015 is applicable to valve.

Alteration 95A011 is applicable to plug.

IST performed per WO PMT Attachment: Stroke time open (STO) and position indication (PIT).

CERTIFICATE OF COMPLIANCE

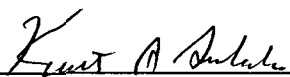
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 9/22/08 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NO 11863 A, N, F MW 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-026

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-346874
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Reactor Recirculation (REC), Class 1
5. (a) Applicable Construction Code B31.1, 77E / W78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Decon test assy | Guyon Alloys | 1N0177-3 | n/a | na | 1993 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Decon flange | Dubose | N090126-1-2 | n/a | na | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Remove decontamination test assembly and install blind flange.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
 Exempt ☐ Other ☐ Pressure 1003 psi Test Temp 189 °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-026


9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

The decontamination test assembly installed circa 1993 on P-200A was removed and replaced with a blind flange using the existing bolting materials.

VT-2 exam during Class 1 pressure test 0255-20-IIC-2 per work order PMT (reference WO-344337).

CERTIFICATE OF COMPLIANCE

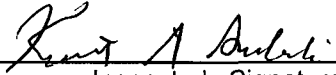
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD. Date 7/31/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/16/08 to 7/31/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, N, I MW 004028 CO
Inspector's Signature National Board, Province and Endorsements
Date 7/31/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-027

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-354743
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Auto Pressure Relief (APR) RV-2-71F, Class 1
5. (a) Applicable Construction Code ASME Section III, 1968E / W'68A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a
6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Main Disc | Target Rock | 593 | n/a | Body s/n 25 | 2008 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Main Disc | Target Rock | 605 | n/a | Body s/n 25 | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work The main disc replaced like for like with a refurbished spare from stock.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-027

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

GE Spec 21A9206 applies.

The valve test requirements were met by set point testing with steam per 4280-03-PM.

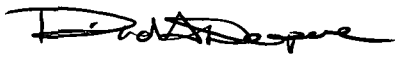
Post installation testing performed per procedure 0112.

The replacement disc was originally in valve assembly s/n 122.

"Year Built" is the removal and the installation date.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  SECTION XI ISI COORD Date 7/31/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/6/08 to 7/31/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions VB 11863 AJS MW 084028-CO
Inspector's Signature National Board, Province and Endorsements
Date 7/31/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-028

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-355111
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Core Spray (CSP), MO-1749, Class 2
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| MO-1749 | Anchor Darling | 4543-68* | n/a | n/a | 1969 | Corrected | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Welding on MO-1749 disc nut to disc for disassembly / reassembly.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE:

Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-028

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

The disc nut to disc tack weld was required to be removed and rewelded to permit disassembly and reassembly of the valve to accommodate maintenance activities for EC-10869.


** Valve serial number retrieved from work plan field observation. Disc markings recorded as HT 5208D.*

No pressure testing or PSI required.

Position indication testing (PIT) was performed per work order preoperational testing instructions.

CERTIFICATE OF COMPLIANCE

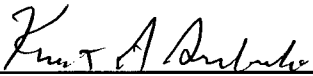
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , SECTION XI ISI COORD Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/17/09 to 8/4/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB11867 A, NJS 11W004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/4/09

| | | |
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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-029, Rev. 1

1. Owner NSP-Minnesota, an Xcel Energy Company Date 8/4/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-374028
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp N/A
Company Name Authorization No. N/A
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date N/A
Address
4. Identification of System RHR Service Water (RSW/ESW), Loop A, Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SW9-18"-GF | Navco | N/A | N/A | N/A | 1969 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SW9-18"-GF | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SW58-16"-GF | Navco | N/A | N/A | N/A | 1969 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SW58-16"-GF | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replace A-Loop RHRSW piping components due to MIC thinning.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 238 psi Test Temp N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-030

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/29/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-354410
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Emergency Service Water Loop A
5. (a) Applicable Construction Code B31.1, 77W78 Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| ESW1-4"-HBD | na | na | n/a | na | 1981 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-4"-HBD | Dubose Tioga | na | n/a | na | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| H-215 | na | na | n/a | na | 1981 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| H-215 | Dubose | na | n/a | na | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Like for like piping replacement and like for like partial replacement of one support.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
 Exempt ☐ Other ☐ Pressure 81 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

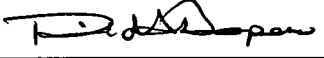
Repair/Replacement Plan No.: 2008-24-030

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Piping components and portion of one hanger (H-215) replaced in the intake structure.
VT-2 per work order PMT at normal operating pressure (81 psig).
STO and STC on ESW-20 per the WO PMT.
92Q610 is applicable.*

CERTIFICATE OF COMPLIANCE

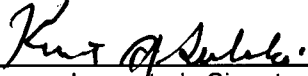
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , SECTION XI ISI COORD . Date 7/30/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/14/09 to 7/30/09 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NP 11863 A, N.I. 17N 004028-60
Inspector's Signature National Board, Province and Endorsements
Date 7/30/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-031

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-364432
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System Auto Pressure Relief (APR), SRV-MSB-195 / Slave-Spare, Class 1
- (a) Applicable Construction Code ASME Section III, 1968E / W'68A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Main Disc | Target Rock | 628 | n/a | SRV-MSB-195 | 2008 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Main Disc | Target Rock | 4732 | n/a | SRV-MSB-195 | 2008 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replaced main disc during refurbishment of SRV-MSB-195 Main Body Test
Slave per applicable steps of 4280-03-PM

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-031

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

This valve main body #SRV-MSB-195 is for steam testing topworks only, is not being refurbished for plant use at this time, and per the system engineer, does not require post-repair functional testing.

GE Spec 21A9206 applies.

"Year Built" is the removal and the installation date. The replacement disc was built in 2003.

CERTIFICATE OF COMPLIANCE

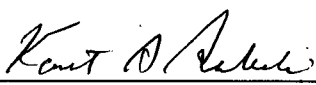
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 11/15/08 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions ND 11863 A.M. & MN 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-032

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362
Address
WO-355111, EC-10869
Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362
Address
Authorization No. n/a
Expiration Date n/a
- Identification of System Core Spray (CSP), MO-1749, Class 2
- (a) Applicable Construction Code B31.1, 1977E / W78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a
- Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| MO-1749 Bonnet Studs | Anchor Darling | n/a | n/a | n/a | 1969 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| MO-1749 Bonnet Studs | Nova | n/a | n/a | n/a | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| MO-1749 Bonnet Nuts | Anchor Darling | n/a | n/a | n/a | 1969 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| MO-1749 Bonnet Nuts | Nova | n/a | n/a | n/a | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Like for like replacement of (10) bonnet studs and (20) nuts (replacement studs/nuts built in 2008, installed in 2009).
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

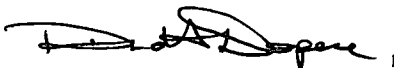
Repair/Replacement Plan No.: 2008-24-032

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Like for like replacement of bonnet nuts and studs during disassembly/reassembly for other scheduled valve work (reference EC-10869 for valve actuator replacement). Studs and nuts were preemptively replaced due to possibility of damage.
No PMT or PSI required for bolting replacement.*

CERTIFICATE OF COMPLIANCE


We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , SECTION XI ISI COORD Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/2/09 to 8/4/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 1186J A, M, I MN 004028-CD
Inspector's Signature National Board, Province and Endorsements
Date 8/4/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2008-24-033

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-355111, EC-10869
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Core Spray (CSP), Class 2
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| TWH-114 | Bergen Paterson | n/a | n/a | n/a | 1969 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| TWH-114 | Bergen Paterson | n/a | n/a | n/a | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Modify hanger TWH-114 by replacing existing clamp with a heavier clamp (new clamp built in 2008, installed in 2009).
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2008-24-033

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

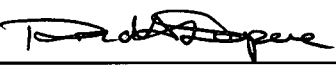
Hanger TWH-114 was modified due to revised piping loads (Reference EC-10869)

PSI VT-3 exam was performed.

Existing mod 83M026 also applies.

CERTIFICATE OF COMPLIANCE

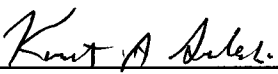
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  Todd J. Dwyer, SECTION XI ISI COORD. Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 1/20/09 to 8/4/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, M, I MN 004028-00
Inspector's Signature National Board, Province and Endorsements

Date 8/4/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-035

1. Owner NSP-Minnesota, an Xcel Energy Company Date 8/4/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 3
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-374028
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp N/A
Company Name Authorization No. N/A
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date N/A
Address
4. Identification of System RHR Service Water (RSW/ESW), Loop A, Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SR-399 | Navco | n/a | n/a | n/a | 1969 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-399 | Xcel Energy | n/a | n/a | n/a | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-469 | Navco | n/a | n/a | n/a | 1969 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-469 | Xcel Energy | n/a | n/a | n/a | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| See | subsequent | sheets | for | additional | items | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Removal and partial replacement of supports by welding to facilitate piping replacement.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 3

Repair/Replacement Plan No.: 2009-24-035

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)


Supports were removed and partially replaced by welding (SR-399, SR-469, and SR-105) to facilitate replacement of piping thinned due to MIC. Piping replacement was performed under a separate R/R Plan.

Additional supports (SR-397, SR-456, IS SWH-75, and IS SWH-76) were disassembled and reassembled to facilitate the piping replacement.

Weld Visual performed on welded supports. PSI VT-3 performed on all supports. Additionally, PSI VT-1 was performed on the integrally welded attachment of SR-105.

CERTIFICATE OF COMPLIANCE


We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/16/09 to 8/15/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, M, I MN 004028-CU
Inspector's Signature National Board, Province and Endorsements
Date 8/15/09

Sheet 3 of 3

R/R Plan No. 2009-24-035
WO No. WO 374028
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

[illegible]

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-036

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-362738, EC-11125
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Residual Heat Removal (RHR), Class 2
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| TWH-89 | Bergen-Paterson | n/a | n/a | n/a | 1969 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| TWH-89 | Anvil | n/a | n/a | n/a | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replace spring cans.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

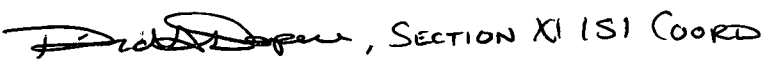
Repair/Replacement Plan No.: 2009-24-036

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Spring cans were replaced due to change in piping load (ref. EC11125).
PSI VT-3 exam was performed.*

CERTIFICATE OF COMPLIANCE


We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , SECTION XI ISI COORD Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/7/09 to 8/4/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions MB11863 A, M, I MN 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/4/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-037

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362
Address
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362
Address
- Identification of System Core Spray (CSP), Class 2
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a
- Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SR-113 | NSP | n/a | n/a | n/a | 1969 | Corrected | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Modified support.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |


Repair/Replacement Plan No.: 2009-24-037

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Bumper plates were added to existing support for additional restraint based on EC-11125).
Weld visual performed.*

CERTIFICATE OF COMPLIANCE

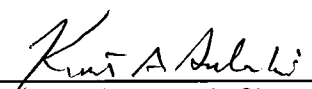
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD. Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 2/23/09 to 8/4/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 1186J A, N, I MIN 024028-10
Inspector's Signature National Board, Province and Endorsements
Date 8/4/09

| | | |
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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-039

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-362738, EC-11125
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Residual Heat Removal (RHR), Class 2
5. (a) Applicable Construction Code B31.1, 1977E / W78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| TWH-144 | Bergen-Paterson | n/a | n/a | n/a | 1969 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| TWH-144 | Anvil | n/a | n/a | n/a | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replaced spring can.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

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| Approval: <u>PCR 01148046</u> |
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M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-039

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Spring can was replaced due to change in piping load (ref. EC11125).
PSI VT-3 exam was performed.*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed

D. D. D. D. D., SECTION XI ISI COORD.

Owner or Owner's Designee, Title

Date 8/4/03

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/7/03 to 8/4/03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

Kurt A. Schubert

Inspector's Signature

Commissions NB 11863 A 1/1/1 MINN 004028-CO
National Board, Province and Endorsements

Date

8/4/03

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-040

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362
Address
WO-380817
Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362
Address
Authorization No. n/a
Expiration Date n/a
- Identification of System Reactor Core Isolation Cooling (RCIC), Steam Supply, Class 2
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| PS-17-3"ED | unknown | n/a | n/a | n/a | 2007 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| PS-17-3"ED | unknown | n/a | n/a | n/a | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Removed/reinstalled section of due to interference with adjacent work.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 955 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-040

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*A small section of piping in the steam chase was removed and reinstalled due to interference with adjacent MSIV AO-2-86D actuator maintenance activities. Pinned support PSH-114 and restored. Disassembled and reassembled associated support PSH-115.
RT performed following reinstallation of piping.
No PSI required.
System leakage test with VT-2 performed during RCIC System Leakage Test 0255-08-IIC-1.*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed *DeDeigne*, SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/27/09 to 8/3/09 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

Kurt A. Aulev Commissions NB 11863 A, N, I MN 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-041

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362
Address
WO-359136
Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362
Address
Authorization No. n/a
Expiration Date n/a
- Identification of System High Press Coolant Injection (HPC), MO-2035, Class 2
- (a) Applicable Construction Code B31.1, 1977E / W78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|---------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| MO-2036 Bonnet Bolt | unknown | n/a | n/a | n/a | 1978 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| MO-2036 Bonnet Bolt | Cardinal | n/a | n/a | Ht# 80768 | 1991 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Like for like replacement of one bonnet flange bolt on MO-2036. Bolt installed in 2009
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-041

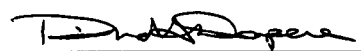
9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Like-for-like replacement of one bonnet bolt (A193 Gr. B7) for MO-2036 due to damage during valve disassembly.

No PMT required for bolting replacement.

CERTIFICATE OF COMPLIANCE

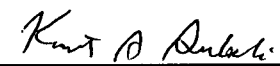
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  SECTION XI ISI COORD Date 8/2/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 3/31/09 to 8/2/09 and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, N, I MN 004028-C0
Inspector's Signature National Board, Province and Endorsements

Date 8/2/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-042

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/29/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-344367
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Primary Containment (PCT), Drywell Head, Class MC
5. (a) Applicable Construction Code ASME Section III, 1965E / 1967A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------------|-----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Drywell Head Flange Nut | Chicago Bridge & Iron | | n/a | n/a | 1969 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Drywell Head Flange Nut | Chicago Bridge & Iron | | n/a | Ht# 6390344 | 1975 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replaced 1 nut at location 55 on drywell head. Installed in 2009.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

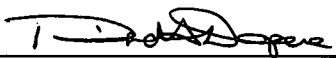
Repair/Replacement Plan No.: 2009-24-042

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Nut replaced due to a slight protrusion on the nut face that contacts the washer.
Preservice VT-1 performed per WO-344367 task 02 (reference ISI report 2009VT103).*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  T. D. Dwyer, SECTION XI ISI COORD. Date 7/29/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/20/09 to 7/30/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Kurt A. Schuch Commissions NB 11863 A.N.I. MW 004028-00
Inspector's Signature National Board, Province and Endorsements

Date 7/30/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-043

- Owner NSP-Minnesota, an Xcel Energy Company Date 8/3/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 3
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-381681
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp N/A
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. N/A
Address Expiration Date N/A
- Identification of System Emergency Service Water (FSW), SW30B-3"-HF, Class 3
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|---------------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| 3" Pipe and Fittings | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4" x 4" x 1/2" Tube Steel | Not specified | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3" x 3" x 1/4" Tube Steel | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1/2" Plate | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1/2" Lug | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- Description of Work Reroute portion of SW30B-3"-HF line due to HELB effect of FW5-4"-ED
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 77 psi Test Temp N/A °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 3

Repair/Replacement Plan No.: 2009-24-043

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

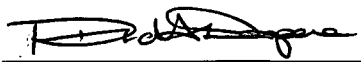
Some of the existing supports, i.e., SR-37, SWH-303, SWH-302, SR-37C, SR-38, SR-13, SR-13A, SWH-218, SR-14, SWH-219, SR-15 and SR-237 were abandoned in place.

Additional supports, i.e., SW30B-H1, SW30B-H2, SW30B-H3, and SW30B-H4, were required to be added for the rerouted pipe.

Tube and plate stock listed was used in fabrication of new supports. EC-14036 applies.

CERTIFICATE OF COMPLIANCE

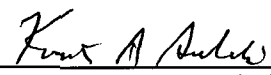
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI (S) COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/9/09 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions ND 11863 A, N, J MW 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 3 of 3

Work Performed By NSPM / Xcel Energy
 System FSW
 Construction Code B31.1, 1977E, W78A

R/R Plan No. 2009-24-043
 WO No. WO 381681
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| W4 x 13 Beam | Dubose | N/A | N/A | N/A | 2009 | Installed | | X |
| 5/8" Stud | Nova | N/A | N/A | N/A | 2009 | Installed | | X |
| SR-37 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SWH-303 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SWH-302 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SR-37C | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SR-38 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SR-13 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SR-13A | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SWH-218 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SR-14 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SWH-219 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SR-15 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SR-237 | NSP | N/A | N/A | N/A | 1969 | Abandoned in place | | X |
| SW30B-H1 | Xcel Energy | N/A | N/A | N/A | 2009 | Installed | | X |
| SW30B-H2 | Xcel Energy | N/A | N/A | N/A | 2009 | Installed | | X |
| SW30B-H3 | Xcel Energy | N/A | N/A | N/A | 2009 | Installed | | X |
| SW30B-H4 | Xcel Energy | N/A | N/A | N/A | 2009 | Installed | | X |

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-044

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-380817
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Main Steam "D" (MST), AO-2-86D, Class 1
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Studs (3) | Anchor/Darling | n/a | n/a | n/a | various | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Studs (3) | Anchor/Darling | n/a | n/a | Ht# 25748 | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Nuts (20) | Anchor/Darling | n/a | n/a | n/a | 1994 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Nuts (20) | Nova | n/a | n/a | Ht# 8898297 | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replaced fasteners damaged during disassembly for maintenance. Studs: A193 Gr. B7 built 1994, installed 2009; Nuts: A194 Gr.2H, built 2003, installed 2009.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

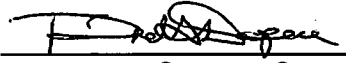
Repair/Replacement Plan No.: 2009-24-044

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Preservice VT-1 performed on replacement fasteners.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/3/09 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A.M.I. MA 004028-ED
Inspector's Signature National Board, Province and Endorsements

Date 8/3/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-045

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362
Address
WO-380817
Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System Main Steam "D" (MST), AO-2-86D, Class 1
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| DS Seat Ring | Anchor Darling | n/a | n/a | n/a | 1994 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| DS Seat Ring | Anchor Darling | PC #1 | n/a | Ht #C8789 | 2009 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Damaged downstream seat ring replaced with like for like seat ring.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-045

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Weld Visual of new seat ring to body weld.

Valve functional testing completed: Stroke time open / close (STO/STC), position indication (PIT), Appx J / LLRT (LT), Fail Close (FC). Partial Stoke (PS) is satisfied by STO/STC.

CERTIFICATE OF COMPLIANCE


We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  T. J. D. Jones, SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/4/09 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions AB 11863 A, M, J AM 004028-CO
Inspector's Signature National Board, Province and Endorsements

Date 8/3/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-046

1. Owner NSP-Minnesota, an Xcel Energy Company Date 8/4/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-381724
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System RHR Service Water (RHRSW/ESW), Loop A, Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SW9-18"-GF | Navco | n/a | n/a | n/a | 1969 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SW9-18"-GF | Dubose | n/a | n/a | n/a | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-457 | NSP | n/a | n/a | n/a | 1969 | Corrected | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Like-for-like replacement of piping and elbow due to MIC thinning. Also temporary lifting padeyes installed on, and removed from, SR-457.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 245 psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

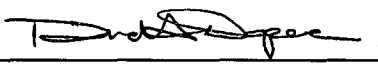
Repair/Replacement Plan No.: 2009-24-046

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Approx 100 ft of pipe and the downstream elbow replaced in the tunnel to the intake structure.
System leakage test with VT-2 per work order PMT at normal operating pressure.
PSI VT-3 performed on affected supports: SR-450, SR-451, SR-452, SR-453, SR-454, SR-455,
SR-457, and SWH-8. MT performed on SR-457 temporary padeye installation locations.*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/16/09 to 8/4/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, W, I MW 004028-C0
Inspector's Signature National Board, Province and Endorsements
Date 8/4/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-047

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-383235, EC-14055
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System RHR-SW B Loop (RSW), Class 3
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) N-661

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SW10-18"-GF | Navco | n/a | n/a | n/a | 1969 | Corrected | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Weld overlay repair for two MIC thinned areas per Code Case N-661.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☒ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-047

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Weld repair of two MIC thinned areas per Code Case N-661.

Pre and post overlay MT performed.

Post overlay UT thickness testing performed.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed T. D. Deane, SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/12/09 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Kenneth A. Anderson Commissions NB 11863 1, 2, 3 MW 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-048

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 3
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO 381679, EC 9174
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Main Steam (MST)); Loops A, B, C, D; Class 1
5. (a) Applicable Construction Code B31.1, 77W78 Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a
6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|------------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Strain Gage PS1-18"-ED | HITEC Product | na | na | na | 2007 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Strain Gage PS2-18"-ED | HITEC Product | na | na | na | 2007 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Strain Gage PS3-18"-ED | HITEC Product | na | na | na | 2007 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Strain Gage PS4-18"-ED | HITEC Product | na | na | na | 2007 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Install replacements for failed main steam line strain gages. See Remarks
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp na °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

Sheet 3 of 3

R/R Plan No. 2009-24-048
WO No. WO 381679
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

[illegible]

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-049

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-380817
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Main Steam "D", AO-2-86D, Class 1
5. (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| DS Disc | Anchor Darling | n/a | n/a | n/a | 2001 | Removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| DS Disc | Anchor Darling | n/a | n/a | n/a | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Damaged downstream disc replaced with like for like disc.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-049

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

The damaged downstream disc was replaced like for like. The upstream disc was also replaced, but is not pressure retaining. The new disc Heat numbers are 83828-1 and 83539-1. It is not known which disc is upstream or which is downstream.

Valve functional testing completed: Stroke time open / close (STO/STC), position indication (PIT), Appx J / LLRT (LT), Fail Close (FC). Partial Stoke (PS) is satisfied by STO/STC.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed *Donald Dopen*, SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/8/09 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

Kurt A. Dabalski Commissions 40 11867 A, N, J 41W004028-C0
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-050

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362
Address
WO-316178, EC12841
Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System RHR Service Water (RSW), Class 3
- (a) Applicable Construction Code B31.1, 77W78 Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| BS-1952 | Zurn | n/a | n/a | n/a | 1969 | Corrected | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Weld buildup and machining of eroded/corroded flange faces to restore sealing surfaces.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Exempt ☐ Other ☐ Pressure 230 psi Test Temp na °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-050

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*Weld build up area was magnetic particle examined.
A pressure test at normal operating pressure was performed.
EC12841 is applicable.*

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed *[Signature]*, SECTION XI ISI COORD. Date 7/30/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp. & Ins. Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/8/09 to 7/30/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions ND11863 A, N, I M, K 004028-00
Inspector's Signature National Board, Province and Endorsements
Date 7/30/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-051

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/26/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401
Address
Sheet 1 of 2
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362
Address
WO-326530
Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362
Address
Authorization No. n/a
Expiration Date n/a
- Identification of System Snubber (SNB) / Main Steam (MST), Class 1
- (a) Applicable Construction Code USAS B31.1, 1967 Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| PS1-H2 | Bergen Paterson | n/a | n/a | Part #942721 | unknown | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| PS1-H2 | Bergen Paterson | n/a | n/a | Part #942721 | 1986 | installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replaced flange mounting bolt - lost during snubber removal/reinstallation.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

| | | |
|-------------------------------------|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |


Repair/Replacement Plan No.: 2009-24-051

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Preservice VT-3 examination of snubber following re-installation, as required by procedure 4903.

CERTIFICATE OF COMPLIANCE

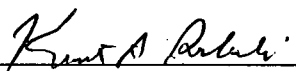
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 7/26/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 7/10/09 to 7/27/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NP11863 A, N, I MW 004028-CU
Inspector's Signature National Board, Province and Endorsements
Date 7/27/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-052

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-381679 and 383608
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Main Steam (MST), ASME Code Class 1
5. (a) Applicable Construction Code USAS B31.1, 1967 Edition / Addenda
 (b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
 (c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|----------------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Main Steam C PS3-18"-ED | Bechtel | n/a | n/a | n/a | 1967 | Corrected | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Removed surface indication on Main Steam C adjacent to strain gage removal area (location MSC-12). Indication removed in 2009.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
 Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

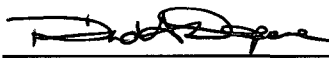
Repair/Replacement Plan No.: 2009-24-052

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

*The surface indication was removed by light grinding.
Pre and post UT thickness measurements were taken (reference report BOP-VE-09-036).
Post removal MT was performed (reference report BOP-MT-09-066).
EC-9174 applies to WO-381679 activities.*

CERTIFICATE OF COMPLIANCE

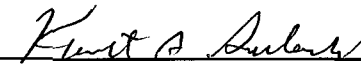
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD. Date 8/2/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/12/09 to 8/2/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, N, I 14W00402 2-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/2/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-053

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/31/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-381707, EC-14055
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System RHR-SW A Loop (RSW), Class 3
- (a) Applicable Construction Code B31.1, 1977E / W'78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) N-661

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SW9-18"-GF | Navco | n/a | n/a | n/a | 1969 | Corrected | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Weld overlay repair for MIC thinned area per Code Case N-661.
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☒ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-053

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)


Weld overlay repair of MIC thinned area per Code Case N-661.

Pre and post overlay MT performed.

Post overlay UT thickness performed.

CERTIFICATE OF COMPLIANCE

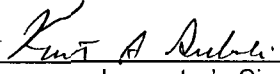
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , SECTION XI ISI COORD Date 8/3/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/20/09 to 8/3/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions LB1186J A, I, E 174004028-00
Inspector's Signature National Board, Province and Endorsements
Date 8/3/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-054

- Owner NSP-Minnesota, an Xcel Energy Company Date 8/3/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-381724
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp N/A
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. N/A
Address Expiration Date N/A
- Identification of System RHR Service Water (RHR SW/ESW), Class 3
- (a) Applicable Construction Code B31.1, 1977E / W '78A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) N/A

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SR-451 shim | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-452 shim | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-453 shim | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-454 shim | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| SR-455 shim | Dubose | N/A | N/A | N/A | 2009 | Installed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- Description of Work Added shims to pipe supports to meet required clearances following pipe replacement
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

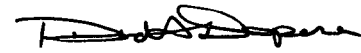
Repair/Replacement Plan No.: 2009-24-054

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Weld Visuals and PSI VT-3 performed.

CERTIFICATE OF COMPLIANCE

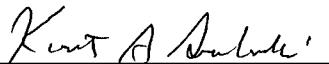
We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed  , SECTION XI ISI COORD Date 8/4/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/25/09 to 8/4/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NP 11863 A, N.I. MN 004028-CO
Inspector's Signature National Board, Province and Endorsements
Date 8/4/09

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-055, Rev. 1

1. Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 5
Address
2. Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-381724 Tasks 15 & 16, EC-14190
Address Repair Organization P.O. No., Job No. etc.
3. Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 West County Rd. 75, Monticello, MN 55362 Expiration Date n/a
Address
4. Identification of System Emergency Service Water (ESW), Class 3
5. (a) Applicable Construction Code B31.1, 1977 / W'78 Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| SW30A-3"-HF | NAVCO | n/a | n/a | n/a | 1969 | removed | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| see | subsequent | sheets | for | additional | items | downgraded | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work ASME Class 3 boundary moved, components downgraded to non-safety.
8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure n/a psi Test Temp n/a °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

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| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Sheet 2 of 5

Repair/Replacement Plan No.: 2009-24-055, Rev.1


9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

All pipe, fittings, and supports located downstream of valve ESW-61-1, which were previously abandoned in-place under mod 87Z028, were downgraded from Class 3 to non-safety. The new Class 3 boundary was moved to ESW-61-1, which is a manual valve that is kept in a "normally closed" position.

No post-maintenance testing was required for this code boundary change.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD. Date 7/30/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/25/09 to 7/30/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

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 Commissions NB11863 A, N, I MA 004028-C0
Inspector's Signature National Board, Province and Endorsements
Date 7/30/09

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 3 of 5

Work Performed By NSPM / Xcel Energy
 System Emergency Service Water (ESW)
 Construction Code B31.1, 1977 / W78

R/R Plan No. 2009-24-055, Rev.1
 WO No. 381724 Tasks 15 & 16
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| SWH-83 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-26 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-85 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-86 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-27 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-2B | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-2A | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-4 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-3 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-293 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-309 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-96 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-308 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-200 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-1 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-6 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |

NSP-Minnesota, an Xcel Energy Company
 414 Nicollet Mall, Minneapolis, MN 55401
 Monticello Nuclear Generating Plant – Unit 1
 2807 West County Road 75, Monticello, MN 55362

Sheet 4 of 5

Work Performed By NSPM / Xcel Energy
 System Emergency Service Water (ESW)
 Construction Code B31.1, 1977 / W78

R/R Plan No. 2009-24-055, Rev.1
 WO No. 381724 Tasks 15 & 16
 Section XI R/R Code 2001 Ed / No Add
 Section XI Code Case(s) None

Form NIS-2 Continuation Sheet

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|----------------------------------|-------------------|----|
| | | | | | | | Yes | No |
| SR-269 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-199A | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-3 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-201 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-4 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-202 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-203 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-5 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-204 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-280 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-205 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-205A | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-8 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-206 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SWH-207 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |
| SR-9 | NSP and Bechtel | n/a | n/a | n/a | 1969 | removed | | X |

Sheet 5 of 5

R/R Plan No. 2009-24-055, Rev. 1
WO No. 381724 Tasks 15 & 16
Section XI R/R Code 2001 Ed / No Add
Section XI Code Case(s) None

[illegible]

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 1 of 2 |

Repair/Replacement Plan No.: 2009-24-056

- Owner NSP-Minnesota, an Xcel Energy Company Date 7/30/2009
Name
414 Nicollet Mall, Minneapolis, MN 55401 Sheet 1 of 2
Address
- Plant Monticello Nuclear Generating Plant Unit 1
Name
2807 West County Road 75, Monticello, MN 55362 WO-344364
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NSPM / Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 West County Rd. 75, Monticello, MN 55362 Authorization No. n/a
Address Expiration Date n/a
- Identification of System Reactor Pressure Vessel (RPV), ASME Class 1
- (a) Applicable Construction Code ASME Section III, 1965E / S'66A Edition / Addenda
(b) Applicable Edition of Section XI Used for Repair/Replacement Activity 2001 Edition, No Addenda
(c) Applicable Section XI Code Case(s) n/a

6. Identification of Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Corrected, Removed, or Installed | ASME Code Stamped | |
|-----------------------------|-------------------------------|-------------------------|--------------------|----------------------|-------------|----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| <i>Spherical Washer Set</i> | <i>Washer Unknown</i> | <i>n/a</i> | <i>n/a</i> | <i>na</i> | <i>1965</i> | <i>Removed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>Spherical Washer Set</i> | <i>Pipe Machinery Company</i> | <i>2-S</i> | <i>n/a</i> | <i>Ht# 17501</i> | <i>1974</i> | <i>Installed</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Like-for-like replacement of 1 spherical washer set at stud #28. Installed in 2009.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Exempt ☐ Other ☐ Pressure _____ psi Test Temp _____ °F

NOTE: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form. (See 4 AWI-09.04.03 [ASME Section XI Repair/Replacement Program] for further documentation guidance.)

Approval: PCR 01148046

M/asc

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | FORM NIS-2 OWNER'S REPORT FOR REPAIR/REPLACEMENT ACTIVITY | Revision 5 |
| | | Page 2 of 2 |

Repair/Replacement Plan No.: 2009-24-056

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

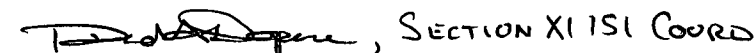
One spherical washer set replaced like-for-like at stud #28, due to potential damage of the existing set during reassembly.

Stud was retensioned per procedure 9267 on WO 344364.

Preservice VT-1 performed per WO-344364 task 05 (reference ISI report 2009VT134).

CERTIFICATE OF COMPLIANCE


We certify that the statements made in the report are correct and that this conforms to the requirements of the ASME Code, Section XI.

Signed , SECTION XI ISI COORD Date 8/2/09
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 the State or Province of Minnesota and employed by Hartford Steam Boiler Insp & Ins Company of Connecticut of Hartford, Connecticut have inspected the components described in this Owner's Report during the period 4/25/09 to 8/2/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 Commissions NB 11863 A, N, I MA 004028-CO
Inspector's Signature National Board, Province and Endorsements

Date 8/2/09

IV. Form NIS-1 Information

Page 1 of 2

Form NIS-1 Owner's Data Report for Inservice Inspections
(Supplement to Submittal for Cycle 23, 2007 RFO**)**
As required by the Provisions of the ASME Code Rules

-
-
1. **Owner:** Xcel Energy, LLC / Nuclear Management Company, LLC
Address: 800 Nicollet Mall, Mpls, MN 55402 / 700 1st St., Hudson WI 54016
2. **Plant:** Monticello Nuclear Generating Plant
Address: Monticello, MN 55362
3. **Plant Unit:** 1 4. **Owner (Certificate of Authorization):** N/A
5. **Commercial Service Date:** 6/30/71 6. **National Board No. for Unit:** N/A

7. **Components Inspected:**

| <u>Component or Appurtenance</u> | <u>Manufacturer or Installer</u> | <u>Manufacturer or Installer Serial No.</u> | <u>State or Province No.</u> | <u>National Board No.</u> |
|----------------------------------|----------------------------------|---|------------------------------|---------------------------|
| Reactor Pressure Vessel | Chicago Bridge & Iron | B-4697 | --- | --- |

(See appendices for components inspected during the cycle)

8. **Examination Dates:** 04/13/05 to 04/28/07.
9. **Inspection Interval:** 05/01/03 to 05/31/12.
10. **Applicable Edition of Section XI:** 1995 Addenda: 1996.
11. **Abstract of Examinations.** Include a list of examinations and a statement concerning status of work required for current interval.
- See Sections IV and V for supplemental Cycle 23 Form NIS-2 and NIS-1 Attachment (Appendix A)
12. **Abstract of Conditions Noted.**
- See Sections IV and V for supplemental Cycle 23 Form NIS-2 and NIS-1 Attachment (Appendix A)
14. **Abstract of Corrective Measures Recommended and Taken.**
- See Sections IV and V for supplemental Cycle 23 Form NIS-2 and NIS-1 Attachment (Appendix A)

IV. Form NIS-1 Information

Page 2 of 2

(**Supplement to Submittal for Cycle 23, 2007 RFO**)

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Certification of Authorization No. (if applicable) N/A Expiration Date N/A

Date August 6 20 09 Signed NSPM / XCEL ENERGY By T. [Signature]
Owner Section XI ISI Coordinator

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MINNESOTA and employed by HARTFORD STEAM BOILER & I OF CT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 4/13/05 to 8/6/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature
Endorsements

Commissions NB11863-AA, I MN 004028-CO
National Board, State, Province,

Date AUGUST 6 20 09

V. Form NIS-1 Information

(Supplement to Submittal for Cycle 23, 2007 RFO**)**

**Supplemental NIS-2 Form
for Cycle 23
2007 RFO Summary Report**

Revised Form NIS-2

| R/R ITEM NUMBER | WORK DOCUMENT | COMPONENT OR SYSTEM | WORK DESCRIPTION |
|----------------------------|--------------------------|--------------------------------|---|
| 2007-23-0070 | WO-325774 | ESW1-4"-HBD | Replaced approximately 6" section of pipe and adjacent 90 degree elbow |

(2 pages to follow)

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS - FORM NIS-2 | Revision 4 |
| | | Page 1 of 2 |

ITEM 2007-23-0070

NOTE 1: This form may not address all items needed for documentation of a repair/replacement program, see 4 AWI-09.04.03 (ASME SECTION XI REPAIR/REPLACEMENT PROGRAM) for further guidance.

NOTE 2: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

- Owner Xcel Energy Company Date 7/14/2007
Name
- Plant Monticello Nuclear Generating Plant Sheet 1 of 2
Name
2807 W. Cnty. Rd. 75, Monticello, Minnesota 55362 WO 325774
Address Repair Organization P.O. No., Job No. etc.
- Work Performed By NMC / Xcel Energy Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 W. Cty Rd 75, Monticello, MN 55362 Expiration Date n/a
Address
- Identification of System Emergency Service Water (ESW), Div I, Class 3
- (a) Applicable Construction Code ANSI B31.1, 1977 Edition
Year
Addenda Winter 1978 Addenda Code Case n/a
(b) Applicable Edition of Section XI Utilized for Repairs or Replacement 2001 Edition, No Addenda
- Identification of Components Repaired or Replaced and Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired, Replaced or Replacement | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|-----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| ESW1-4"-HBD Pipe | unknown | n/a | n/a | n/a | 1981 | Replaced | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-4"-HBD Pipe | Tioga Pipe | n/a | n/a | Ht# A03222 | 2007 | Replacement | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-4"-HBD Elbow | unknown | n/a | n/a | n/a | 1981 | Replaced | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| ESW1-4"-HBD Elbow | Consolidated Power | n/a | n/a | Ht# 7662 | 2007 | Replacement | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replaced approx 6 inches of A-106 Gr. B pipe and adjacent A-234 WPB elbow (line designation ESW1-4"-HBD) like-for-like by welding due to localized ID corrosion (replacement pipe built 2000, replacement elbow built 1991, both installed 2007).

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☒
Other ☐ Pressure 77 psi Test Temp n/a °F

* CORRECT HT #: A02824 RSD 8/5/09
KAS 8/5/09

APPROVED (Signatures available in Master File)

| | | |
|--|--|------------------------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS - FORM NIS-2 | Revision 4 |
| | | Page 3 of 2 2 RSD 7/14/07 |

ITEM 2007-23-0070

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)
System leakage tests in lieu of a hydro per IWA-4540(a)(2) per WO PMT attachments.

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules on the ASME Code, Section XI. REPAIR/ REPLACEMENT ACTIVITY
repair/replacement

Signed T. D. Dapera, SECT XI ISI COORD Date July 14, 2007
Owner or Owner's Designee, Title
T. D. Dapera, SECT XI ISI COORD August 5, 2009

8/5/09
RSD
8/5/09

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MINNESOTA and employed by HARTFORD STEAM BOILER ITS OF CONNECTICUT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 4/20/07 to 7/20/07, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

Kurt A. Dubinski Commissions 4B 11863 A, B, D HW 004028-CD
Inspector's Signature National Board, Province and Endorsements
Date JULY 20, 2007

APPROVED (Signatures available in Master File)

V. Form NIS-1 Information (continued)

(Supplement to Submittal for Cycle 23, 2007 RFO**)**

**NIS-1 Attachment (Appendix A)
for Cycle 23
2007 RFO Summary Report**

Revised Attachment

(1 page to follow)

NOTE: The header for all pages (1-19) of the NIS-1 Attachment (Appendix A) contained an editorial error. Cycle 22 should be corrected to indicate Cycle 23.

NIS-1 Attachment (Appendix A)
Cycle 23 Inservice Inspection Report (2007 RFO)

NIS-1 Attachment (Appendix A)
Cycle 22 Inservice Inspection Report (2007 RFO)

Owner: Xcel Energy, LLC, 800 Nicollet Mall, Minneapolis, MN 55402
Operator: Nuclear Management Company, LLC, 700 First Street, Hudson, WI 54016
Plant: Monticello Nuclear Generating Plant, Unit 1, 2807 West County Rd #75, Monticello, MN 55362

Owner Certificate of Authorization (If Req.): N/A
Commercial Service Date: 6/30/1971
National Board Number for Unit: N/A

| Summary No. | Comp ID | Comp Desc. | Category | Item | Procedure | Method/Sheet/Results | System | ISO Num | Exam Date |
|-------------|---------|------------|----------|------|-----------|----------------------|--------|---------|-----------|
|-------------|---------|------------|----------|------|-----------|----------------------|--------|---------|-----------|

Class 1 Category B-A, EXAMS PERFORMED FOR ISI (4th Interval, Period 2 Credited Exams) and PSI

| | | | | | | | | | |
|---|--------|-----------|--------------|--------------|----|---------------|----------------|-----------|-----------|
| 102543 | VLAA-2 | Long Seam | B3.12 ISI | PEI-02.03.15 | UT | 2007UT059 NRI | Reactor Vessel | ISI Fig 4 | 3/22/2007 |
| Comments: Limited exam, Supplemental for future ID exam, no relief request required at this time. | | | | | | | | | |

Class 1 Category B-D, EXAMS PERFORMED FOR ISI (4th Interval, Period 2 Credited Exams) and PSI

| | | | | | | | | | |
|---|----------|----------------------|---------------|-----------------|----|---------------|----------------|-----------|-----------|
| 102374 | N- 6A IR | N- 6A Inner Radius | B3.100 ISI | FP-PE-NDE-UT-03 | UT | 2007UT105 NRI | Reactor Vessel | ISI Fig 1 | 3/25/2007 |
| 102375 | N- 6A NV | Nozzle/Head Weld | B3.90 ISI | PEI-02.03.15 | UT | 2007UT104 NRI | Reactor Vessel | ISI Fig 1 | 3/25/2007 |
| Comments: Limited exam less than 90% coverage - Relief Request required | | | | | | | | | |
| 102657 | N- 2B IR | N- 2B Inner Radius | B3.100 ISI | FP-PE-NDE-UT-03 | UT | 2007UT057 NRI | Reactor Vessel | ISI Fig 5 | 3/21/2007 |
| 102658 | N- 2B NV | N- 2B Noz / Vsl Weld | B3.90 ISI | PEI-02.03.15 | UT | 2007UT058 NRI | Reactor Vessel | ISI Fig 5 | 3/21/2007 |
| Comments: Limited exam less than 90% coverage - Relief Request required | | | | | | | | | |
| 102667 | N- 2G IR | N- 2G Inner Radius | B3.100 ISI | FP-PE-NDE-UT-03 | UT | 2007UT060 NRI | Reactor Vessel | ISI Fig 5 | 3/22/2007 |
| 102668 | N- 2G NV | N- 2G Noz/Vsl Weld | B3.90 ISI | PEI-02.03.15 | UT | 2007UT061 NRI | Reactor Vessel | ISI Fig 5 | 3/22/2007 |
| Comments: Limited exam less than 90% coverage - Relief Request required | | | | | | | | | |

VI. Form NIS-1 Information

Page 1 of 2

Form NIS-1 Owner's Data Report for Inservice Inspections
(Supplement to Submittal for Cycle 22, 2005 RFO**)**
As required by the Provisions of the ASME Code Rules

-
-
1. **Owner:** Xcel Energy, LLC / Nuclear Management Company, LLC
Address: 800 Nicollet Mall, Mpls, MN 55402 / 700 1st St., Hudson WI 54016
2. **Plant:** Monticello Nuclear Generating Plant
Address: Monticello, MN 55362
3. **Plant Unit:** 1 4. **Owner (Certificate of Authorization):** N/A
5. **Commercial Service Date:** 6/30/71 6. **National Board No. for Unit:** N/A

7. **Components Inspected:**

| <u>Component or Appurtenance</u> | <u>Manufacturer or Installer</u> | <u>Manufacturer or Installer Serial No.</u> | <u>State or Province No.</u> | <u>National Board No.</u> |
|----------------------------------|----------------------------------|---|------------------------------|---------------------------|
| Reactor Pressure Vessel | Chicago Bridge & Iron | B-4697 | --- | --- |

(See appendices for components inspected during the cycle)

8. **Examination Dates:** 05/26/03 to 04/13/05.
9. **Inspection Interval:** 05/01/03 to 05/31/12.
10. **Applicable Edition of Section XI:** 1995 Addenda: 1996.
11. **Abstract of Examinations.** Include a list of examinations and a statement concerning status of work required for current interval.
- See Sections VI and VII for supplemental Form NIS-2 Cycle 22 information
12. **Abstract of Conditions Noted.**
- See Sections VI and VII for supplemental Form NIS-2 Cycle 22 information
15. **Abstract of Corrective Measures Recommended and Taken.**
- See Sections VI and VII for supplemental Form NIS-2 Cycle 22 information

VI. Form NIS-1 Information

Page 2 of 2

(**Supplement to Submittal for Cycle 22, 2005 RFO**)

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Certification of Authorization No. (if applicable) N/A Expiration Date N/A

Date August 6 20 09 Signed NSPM/XCEL ENERGY By [Signature]
Owner Section XI ISI Coordinator

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MINNESOTA and employed by HARTFORD STEAM BOILER F&I OF CT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 5/26/09 to 8/6/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB11863 A, N, I 17K 004028-CD
Inspector's Signature National Board, State, Province,
Endorsements

Date AUGUST 6 20 09

VII. Form NIS-2 Information

**Supplemental NIS-2 Form
for Cycle 22
2005 RFO Summary Report**

Additional comments added for CAP A/R 01107745

| R/R ITEM NUMBER | WORK DOCUMENT | COMPONENT OR SYSTEM | WORK DESCRIPTION |
|----------------------------|--------------------------|--------------------------------|--|
| 2004-22-0037 | WO-0311656 | RV-2-71H | Replace SRV Pilot Stage assembly (top works) with refurbished spare |

(2 pages to follow)

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS - FORM NIS-2 | Revision 4 |
| | | Page 1 of 2 |

ITEM 2004-22-0037

NOTE 1: This form may not address all items needed for documentation of a repair/replacement program, see 4 AWI-09.04.03 (ASME SECTION XI REPAIR/REPLACEMENT PROGRAM) for further guidance.

NOTE 2: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

1. Owner Xcel Energy Company Date 7/2/2005
Name

2. Plant Monticello Nuclear Generating Plant Sheet 1 of 2
Name
2807 W. Cnty. Rd. 75, Monticello, Minnesota 55362 WO-0311656 (see remarks)
Address Repair Organization P.O. No., Job No. etc.

3. Work Performed By NMC/Xcel Energy Co Type Code Symbol Stamp n/a
Company Name Authorization No. n/a
2807 W. Cty Rd 75, Monticello, MN 55362 Expiration Date n/a
Address

4. Identification of System Main Steam, Safety Relief Valve RV-2-71H, Class 1

5. (a) Applicable Construction Code ANSI B31.1, 1977 Edition
Year
Addenda Winter 1978 Code Case n/a

(b) Applicable Edition of Section XI Utilized for Repairs or Replacement 2001 Edition, No Addenda

6. Identification of Components Repaired or Replaced and Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired, Replaced or Replacement | ASME Code Stamped | |
|-------------------|----------------------|-------------------------|--------------------|----------------------|------------|-----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| Pilot Stage Ass'v | Target Rock | 122 | n/a | n/a | 2001 | replaced | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Pilot Stage Ass'v | Target Rock | 194 | n/a | n/a | 2005 | replacement | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

7. Description of Work Replace SRV Pilot Stage Ass'y (topworks) with a refurbished spare from stock.

8. Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☒ Pressure n/a psi Test Temp n/a °F

| | | | |
|---|-----------------|--------------------|-----------------|
| 3087 (DOCUMENT CHANGE, HOLD AND COMMENT FORM) incorporated: | | | |
| FOR ADMINISTRATIVE USE ONLY | Reso Subv: PRGE | Assoc Ref: PRGE | SR: N |
| | ARMS: 3613 | Doc Type: REF ONLY | Admin initials: |
| | | | Fred: 0 vrs |
| | | | Date: |

APPROVED (Signatures available in Master File)

| | | |
|-------------------------------------|---|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS - FORM NIS-2 | Revision 4 |
| | | Page 2 of 2 |

ITEM 2004-22-0037

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

GE Spec 21A1060 and 21A9206 including applicable referenced codes. Installed Topworks s/n 194 per procedure 4280-PM (3/17/05). Topworks 194 was previously refurbished, tested, and certified on 3/31/03 per WO 0200996 and 4280-03-PM. No PSI required. No Pressure testing required per Relief Request #7 (rotated spare previously in-service, no new mechanical joints made, e.g. welding in a new flange or installing a new component). Post installation functional testing performed per procedure 0112.

* TOPWORKS S/N 194 WAS INSTALLED AT LOCATION RV-2-71H WITH A NONCONFORMING INTERNAL BELLOWS SEAL WELD. THE WELD PROCEDURE USED WAS NOT ADEQUATELY QUALIFIED. TOPWORKS 194

WAS SUBSEQUENTLY REMOVED DURING THE 2009 RFO PER WORK ORDER 344394. (REFERENCE CAPA/R 01107745)

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this REPAIR/REPLACEMENT ACTIVITY conforms to the rules on the ASME Code, Section XI. repair/replacement

Signed J. Dehoda Daper, SECTION XI ISI COORD. Date JULY 2, 2005
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 the State or Province of MINNESOTA and employed by HARTFORD STEAM BOILER CO. OF CONNECTICUT of HARTFORD, CT have inspected the components described in this Owner's Report during the period AUG 20, 2004 to JULY 5, 2005, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

Kent A. Ancker Commissions NR 11863, NI 11864, NI 11865
Inspector's Signature National Board, Province and Endorsements

Date JULY 5, 2005

* J. Dehoda Daper SECTION XI ISI COORD. 8/6/2009
Kent A. Ancker 8/6/09

APPROVED (Signatures available in Master File)

VIII. Form NIS-1 Information

Page 1 of 2

Form NIS-1 Owner's Data Report for Inservice Inspections
(Supplement to Submittal for Cycle 21, 2003 RFO**)**
As required by the Provisions of the ASME Code Rules

1. **Owner:** Xcel Energy, LLC / Nuclear Management Company, LLC
Address: 800 Nicollet Mall, Mpls, MN 55402 / 700 1st St., Hudson WI 54016

2. **Plant:** Monticello Nuclear Generating Plant
Address: Monticello, MN 55362

3. **Plant Unit:** 1 4. **Owner (Certificate of Authorization):** N/A

5. **Commercial Service Date:** 6/30/71 6. **National Board No. for Unit:** N/A

7. **Components Inspected:**

| <u>Component or Appurtenance</u> | <u>Manufacturer or Installer</u> | <u>Manufacturer or Installer Serial No.</u> | <u>State or Province No.</u> | <u>National Board No.</u> |
|----------------------------------|----------------------------------|---|------------------------------|---------------------------|
| Reactor Pressure Vessel | Chicago Bridge & Iron | B-4697 | --- | --- |

(See appendices for components inspected during the cycle)

8. **Examination Dates:** 12/16/01 to 05/26/03.

9. **Inspection Interval:** 06/01/92 to 05/31/03. (3rd Interval)
05/01/03 to 05/31/12. (4th Interval)

10. **Applicable Edition of Section XI:** 1986 Addenda: (none). (3rd Interval)
1995 Addenda: 1996. (4th Interval)

11. **Abstract of Examinations.** Include a list of examinations and a statement concerning status of work required for current interval.

- See Sections VIII and IX for supplemental Form NIS-2 Cycle 21 information

12. **Abstract of Conditions Noted.**

- See Sections VIII and IX for supplemental Form NIS-2 Cycle 21 information

16. **Abstract of Corrective Measures Recommended and Taken.**

- See Sections VIII and IX for supplemental Form NIS-2 Cycle 21 information

VIII. Form NIS-1 Information

Page 2 of 2

(**Supplement to Submittal for Cycle 21, 2003 RFO**)

We certify that the statements made in this report are correct and the examinations and corrective measures taken conform to the rules of the ASME Code, Section XI.

Certification of Authorization No. (if applicable) N/A Expiration Date N/A

Date August 6 20 09 Signed NSPM/XCEL ENERGY By [Signature]
Owner Section XI ISI Coordinator

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MINNESOTA and employed by HARTFORD STEAM BOILER INS OF CT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 12/16/01 to 8/6/09, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measures described in this Owner's Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature] Commissions NB 11863 A.M.I. MN 004028-10
Inspector's Signature National Board, State, Province,
Endorsements

Date AUGUST 6 20 09

IX. Form NIS-2 Information

Supplemental NIS-2 Form
for Cycle 21
2003 RFO Summary Report

Additional comments added for CAP A/R 01107745

| R/R ITEM NUMBER | WORK DOCUMENT | COMPONENT OR SYSTEM | WORK DESCRIPTION |
|--------------------|----------------------------|-------------------------------|---|
| 2003-21-0397 | WO-0200996 (4280-03-PM) | Spare SRV Topworks s/n 194 | Replace Bellows; add weld metal (flange) to bellows & seal weld bellows to topworks body for spare Main Steam SRV Topworks 194. Replace s/n 131 with s/n 1. |

(2 pages to follow)

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS - FORM NIS-2 | Revision 4 |
| | | Page 1 of 2 |

ITEM 2003-21-0397

NOTE 1: This form may not address all items needed for documentation of a repair/replacement program, see 4 AWI-09.04.03 (ASME SECTION XI REPAIR/REPLACEMENT PROGRAM) for further guidance.

NOTE 2: Supplemental sheets in form of lists, sketches, or drawings may be used, provided (1) size is 8-1/2 in x 11 in, (2) information in items 1 through 6 on this report is included on each sheet, and (3) each sheet is numbered and the number of sheets is recorded at the top of this form.

- Owner Xcel Energy Company Date 8/4/03
Name
- Plant Monticello Nuclear Generating Plant Sheet 1 of 2
Name
2807 W. Cnty. Rd. 75, Monticello, Minnesota 55362 Address
Work Order 0200996 (4280-03-PM)
Repair Organization P.O. No., Job No. etc.
- Work Performed By NMC/Xcel Energy Type Code Symbol Stamp n/a
Company Name
2807 W. Cty Rd 75, Monticello, MN 55362 Address
Authorization No. n/a
Expiration Date n/a
- Identification of System Main Steam, Spare SRV Topworks, s/n 194, Class 1
- (a) Applicable Construction Code ASME Section III, 1968 Edition
Year
Addenda Winter 1968 Code Case n/a
(b) Applicable Edition of Section XI Utilized for Repairs or Replacement 1986, no addenda
- Identification of Components Repaired or Replaced and Replacement Components

| Name of Component | Name of Manufacturer | Manufacturer Serial No. | National Board No. | Other Identification | Year Built | Repaired, Replaced or Replacement | ASME Code Stamped | |
|-----------------------|----------------------|-------------------------|--------------------|----------------------|-----------------|-----------------------------------|--------------------------|-------------------------------------|
| | | | | | | | YES | NO |
| <i>Bellows/Flange</i> | <i>Target Rock</i> | <i>131</i> | <i>n/a</i> | <i>n/a</i> | <i>un-known</i> | <i>Replaced</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <i>Bellows/Flange</i> | <i>Target Rock</i> | <i>1</i> | <i>n/a</i> | <i>n/a</i> | <i>2003</i> | <i>Replacement</i> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> |

- Description of Work Replace Bellows and its Flange on spare SRV Topworks 194 during rebuild
- Tests Conducted: Hydrostatic ☐ Pneumatic ☐ Nominal Operating Pressure ☐
Other ☒ Pressure _____ psi Test Temp _____ °F

| | | | | |
|---|-----------------|--------------------|-----------------|-------------|
| 3087 (DOCUMENT CHANGE, HOLD AND COMMENT FORM) incorporated: _____ | | | | |
| FOR ADMINISTRATIVE USE ONLY | Reso Subv: PRGE | Assoc Ref: PRGE | SR: N | Freq: 0 yrs |
| | ARMS: 3613 | Doc Type: REF ONLY | Admin initials: | Date: |

APPROVED (Signatures available in Master File)

| | | |
|--|--|-------------|
| MONTICELLO NUCLEAR GENERATING PLANT | | 3613 |
| TITLE: | OWNER'S REPORT FOR REPAIRS OR REPLACEMENTS - FORM NIS-2 | Revision 4 |
| | | Page 2 of 2 |

ITEM 2003-21-0397

9. Remarks (Applicable Manufacturer's Data Reports to be Attached)

Bellows Flange changed per Alteration 99A043, Rev.2. High Pressure Nitrogen bench test of the bellows and Setpoint Pressure Test of the topworks using steam performed per procedure 4280-03-PM Dye Penetrant exam performed on seal weld. This is a spare topworks, installation testing and system leakage test will take place under separate work orders when installed in plant at later date.
~~THE BELLOW FLANGE SEAL WELD WAS INSTALLED WITH A WELD PROCEDURE THAT WAS NOT ADEQUATELY QUALIFIED. THE NONCONFORMING CONDITION WAS CORRECTED WHEN TOPWORKS 194 WAS REMOVED FROM SERVICE (LOCATION RV-2-71H, REMOVED PER WO-344394) (REFERENCE CAP A/R 01107745)~~ *

CERTIFICATE OF COMPLIANCE

We certify that the statements made in the report are correct and this conforms to the rules on the ASME Code, Section XI.

replacement
 repair/replacement

Signed [Signature], Section XI ISI Coordinator
 Owner or Owner's Designee, Title

Date August 4, 2003

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of MINNESOTA and employed by HARTFORD STEAM BOILER OF CONNECTICUT of HARTFORD, CT have inspected the components described in this Owner's Report during the period 2/27/03 to 8/4/03, and state that to the best of my knowledge and belief, the Owner has performed examinations and taken corrective measures described in this Owner's Report in accordance with the requirements of the ASME Code, Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the examinations and corrective measure described in the Owner's Report. Furthermore, neither the Inspector nor his employer **SHALL** be liable in any manner for any personal injury of property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
 Inspector's Signature

Commissions NB 11863 A.N.T. MW 004028-00
 National Board, Province and Endorsements

Date August 4, 2003

* [Signature], SECTION XI ISI COORD. 8/6/2009
Kurt A. Suterli A.I.I. 8/6/09

APPROVED (Signatures available in Master File)

APPENDIX A
(17 pages to follow)

(in order as listed below)

Class 1 Category B-D

- ISI Exams

Class 1 Category B-G-1

- PSI Exam

Class 1 Category B-G-2

- ISI and PSI Exams

Class 1 Category B-K

- ISI Exam

Class 1 Category B-M-2

- ISI Exams

Class 1 Category B-N-1

- ISI Exams

Class 1 Category B-N-2

- ISI Exams

Class 1 Category F-A

- ISI and PSI Exams

Class 1 Category R-A

- ISI Exams

Class 2 Category C-A

- ISI Exam

Class 2 Category C-B

- ISI Exam

Class 2 Category F-A

- ISI and PSI Exams

4. Owner Certificate of Authorization (If Req.): N/A
5. Commercial Service Date: June 30, 1971
6. National Board Number for Unit: N/A

[illegible]

4. Owner Certificate of Authorization (If Req.): N/A
5. Commercial Service Date: June 30, 1971
6. National Board Number for Unit: N/A

[illegible]

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--|----------|-------------|-------|---------------|-----------------------------|----------------|-----------|-----------|
| Class 1 Category B-G-1, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | | | |
| 102713 | Washers | 64 Washers | B6.50 | FP-PE-NDE-510 | PSI / VT / 2009VT134 / NRI | Reactor Vessel | ISI Fig 6 | 4/25/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
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3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
5. Commercial Service Date: June 30, 1971
6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|---|----------|---------------------|-------|---------------|--------------------------------|-----------------|----------------|-----------|
| Class 1 Category B-G-2, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | | | |
| Note for Cat. B7.80: MNGP performs exams on re-used and new bolting per B7.80 1995 Edition due to gap between 1995E / 1996A and 10CFR50.55a(b)(2)(xxi)(B) | | | | | | | | |
| 100674 | B- 3 | Flange Bolts @ W-16 | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT010 / NRI | Main Steam C | ISI-13142-35-A | 3/23/2009 |
| 100727 | B- 3 | Flange Bolts @ W-17 | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT011 / RI | Main Steam D | ISI-13142-36-A | 3/23/2009 |
| | | | | FP-PE-NDE-510 | ISI / VT / 2009VT148 / NRI | Main Steam D | ISI-13142-36-A | 4/16/2009 |
| Comments: 2009VT011: CAP 01174903, corrected during valve changeout per WO-344392, acceptable. Reference followup exam 2009VT148. | | | | | | | | |
| 100726 | B- 2 | Flange Bolts @ W-15 | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT068 / NRI | Main Steam D | ISI-13142-36-A | 3/23/2009 |
| 100728 | B- 4 | Flange Bolts @ W-19 | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT027 / NRI | Main Steam D | ISI-13142-36-A | 3/26/2009 |
| 100732 | B- 8 | Valve Bolts | B7.70 | FP-PE-NDE-510 | PSI / VT / 2009VT074 / RI | Main Steam D | ISI-13142-36-A | 4/3/2009 |
| | | | | FP-PE-NDE-510 | ISI / VT / 2009VT086 / NRI | Main Steam D | ISI-13142-36-A | 4/6/2009 |
| Comments: 2009VT074: Disassembly damage. Replaced under WO-380817. Reference PSI report 2009VT086. | | | | | | | | |
| 101491 | B- 1 | Flange Bolts | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT133 / NRI | Head Vent | ISI-782A-A | 4/21/2009 |
| 101850 | B- 3 | Flange Bolts @ W 11 | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT008 / NRI | RHR Return A | ISI-97003-A | 3/23/2009 |
| 101891 | B- 2 | Flange Bolts @ W-9 | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT009 / NRI | RHR Suction A | ISI-97003-B | 3/23/2009 |
| 101930 | B- 3 | Flange Bolts | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT007 / NRI | RHR Return B | ISI-97004-A | 3/23/2009 |
| 101972 | B- 3 | Flange Bolts @ W-17 | B7.50 | FP-PE-NDE-510 | ISI / VT / 2009VT073 / NRI | Recirculation A | ISI-97005-A | 3/23/2009 |
| 102404 | 06-19B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102408 | 06-27B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--------|----------|-------------------|-------|---------------|--------------------------------|--------|-----------|-----------|
| 102415 | 06-35B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102421 | 10-11B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102435 | 10-43B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102441 | 14-11B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102443 | 14-19B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102447 | 14-35B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102463 | 18-31B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102466 | 18-43B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102472 | 22-03B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102475 | 22-07B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102476 | 22-11B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102484 | 22-43B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102493 | 26-03B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102504 | 26-47B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102538 | 34-39B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102544 | 34-47B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |
| 102550 | 38-11B | CRD Housing Bolts | B7.80 | FP-PE-NDE-510 | PSI / VT / BOP-VT-09-001 / NRI | CRD | ISI FIG 2 | 3/5/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--|----------|---------------------|--------|--------------|-----------------------------|-----------|----------------|-----------|
| Class 1 Category B-K, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | | | |
| 101256 | H- 8 | Dbl Spring / 4 Lugs | B10.20 | PEI-02.02.01 | ISI / MT / 2009MT002 / NRI | Feedwater | ISI-13142-53-A | 4/14/2009 |

4. Owner Certificate of Authorization (If Req.): N/A
5. Commercial Service Date: June 30, 1971
6. National Board Number for Unit: N/A

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|-----|----------|-------------|------|-----------|-----------------------------|--------|---------|-----------|
|-----|----------|-------------|------|-----------|-----------------------------|--------|---------|-----------|

| | |
|----------------|--|
| Class 1 | Category B-M-2, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) |
| 100746 | V- 4 Valve Int Surfaces B12.50 FP-PE-NDE-530 ISI / VT / 2009VT087 / NRI Main Steam D ISI-13142-36-A 4/1/2009 |
| Comments: | Identified conditions outside of exam boundary. Addressed by CAPs 01176319, 01176198, and WO-01176319 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
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 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--|----------|--|--------|--------------|-------------------------------|----------------|-----------|-----------|
| Class 1 Category B-N-1, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | | | |
| 102716 | C- 1A | Top Guide (areas made access., fuel cell vacated) | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/17/2009 |
| Comments: Various exam dates, date shown is final review signature date | | | | | | | | |
| 107696 | C- 1C | Guide Rod Bracket @ 175 deg | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/2/2009 |
| 107697 | C- 1D | Guide Rod Bracket @ 355 deg | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/1/2009 |
| 102719 | C- 4A | Surveillance Sample Holder & Bracket @ 30 deg. | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/8/2009 |
| Comments: Previously reported, no change. Acceptable per CAP 038142 (TeamTrack) | | | | | | | | |
| 107678 | C- 4B | Surveillance Sample Holder & Bracket @ 120 deg. | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/8/2009 |
| 107679 | C- 4C | Surveillance Sample Holder & Bracket @ 300 deg. | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/1/2009 |
| 102723 | C- 8A | Stm Dryer Holddown Bracket @ 35 deg (in Closure Head) | B13.10 | PEI-02.05.05 | ISI / VT / 2009VT097 / NRI | Reactor Vessel | ISI Fig 0 | 4/14/2009 |
| 107723 | C- 8B | Stm Dryer Holddown Bracket @ 145 deg (in Closure Head) | B13.10 | PEI-02.05.05 | ISI / VT / 2009VT098 / NRI | Reactor Vessel | ISI Fig 0 | 4/14/2009 |
| 107724 | C- 8C | Stm Dryer Holddown Bracket @ 215 deg (in Closure Head) | B13.10 | PEI-02.05.05 | ISI / VT / 2009VT099 / NRI | Reactor Vessel | ISI Fig 0 | 4/14/2009 |
| 107725 | C- 8D | Stm Dryer Holddown Bracket @ 325 deg (in Closure Head) | B13.10 | PEI-02.05.05 | ISI / VT / 2009VT096 / NRI | Reactor Vessel | ISI Fig 0 | 4/14/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|---|----------|--|--------|--------------|-------------------------------|----------------|-----------|-----------|
| 102724 | C- 9A | Stm Dryer Holddown Bracket @ 35 deg | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/1/2009 |
| 107730 | C- 9B | Stm Dryer Holddown Bracket @ 145 deg | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/2/2009 |
| 107731 | C- 9C | Stm Dryer Holddown Bracket @ 215 deg | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/2/2009 |
| 107732 | C- 9D | Stm Dryer Holddown Bracket @ 325 deg | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/1/2009 |
| 107738 | C- 12A | Core Plate (areas made access., fuel cell vacated) | B13.10 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/17/2009 |
| Comments: Various exam dates, date shown is final review signature date | | | | | | | | |
| 107706 | C- 7B | Shroud Support Leg Weld @ 010 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/12/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107707 | C- 7C | Shroud Support Leg Weld @ 030 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107708 | C- 7D | Shroud Support Leg Weld @ 060 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107709 | C- 7E | Shroud Support Leg Weld @ 090 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |

6. National Board Number for Unit: N/A

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|---|----------|-----------------------------------|--------|--------------|------------------------------|----------------|-----------|-----------|
| 107710 | C- 7F | Shroud Support Leg Weld @ 120 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107711 | C- 7G | Shroud Support Leg Weld @ 150 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/10/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107712 | C- 7H | Shroud Support Leg Weld @ 170 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107713 | C- 7J | Shroud Support Leg Weld @ 190 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/9/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107714 | C- 7K | Shroud Support Leg Weld @ 210 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/9/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107715 | C- 7L | Shroud Support Leg Weld @ 240 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/10/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107716 | C- 7M | Shroud Support Leg Weld @ 270 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |
| 107717 | C- 7N | Shroud Support Leg Weld @ 300 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| Comments: Acceptable per CAP A/R 01177677 and Structural Integrity analysis | | | | | | | | |

6. National Board Number for Unit: N/A

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|---|----------|---|--------|--------------|-------------------------------|----------------|-----------|-----------|
| 107718 | C- 7P | Shroud Support Leg Weld @ 330 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| 107719 | C- 7Q | Shroud Support Leg Weld @ 350 deg | B13.30 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/11/2009 |
| 107739 | C- 12B | Core Plate (areas made access., fuel cell vacated) | B13.40 | PEI-02.05.05 | ISI / VT / AREVA Report / NRI | Reactor Vessel | ISI Fig 0 | 4/17/2009 |
| Comments: Various exam dates, date shown is final review signature date | | | | | | | | |
| 107746 | C- 18 | Ctrl Rod Guide Tube (CRGT) - Int (when access, fuel cell vacated) | B13.40 | PEI-02.05.05 | ISI / VT / AREVA Report / RI | Reactor Vessel | ISI Fig 0 | 4/17/2009 |
| Comments: Various exam dates, date shown is final review signature date Minor deformation identified in CRGT 26-11 and 18-07. Acceptable per CAP A/R 01176818 | | | | | | | | |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--|----------------------|--|--------|---------------|-----------------------------|-------------------|----------------|-----------|
| Class 1 | Category F-A, | EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | |
| 100427 | H- 1 | Restraint / Clamp | F1.10a | FP-PE-NDE-530 | ISI / VT / 2009VT017 / NRI | Core Spray B | ISI-13142-26-A | 3/24/2009 |
| 100496 | H- 2 | Spring / Clamp | F1.10c | FP-PE-NDE-530 | ISI / VT / 2009VT072 / NRI | Core Spray A | ISI-13142-31-A | 4/2/2009 |
| 100578 | H- 2 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT094 / NRI | Main Steam A | ISI-13142-33-A | 4/11/2009 |
| 100583 | H- 7 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT085 / NRI | Main Steam A | ISI-13142-33-A | 4/7/2009 |
| 100631 | H- 2 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT091 / NRI | Main Steam B | ISI-13142-34-A | 4/9/2009 |
| 101198 | H- 4 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT022 / RI | Feedwater | ISI-13142-52-A | 3/25/2009 |
| Comments: CAP 01175433, Engineer rotated mechanically, acceptable. | | | | | | | | |
| 101201 | H- 7 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT001 / NRI | Feedwater | ISI-13142-52-A | 3/21/2009 |
| 101253 | H- 5 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT023 / RI | Feedwater | ISI-13142-53-A | 3/25/2009 |
| Comments: CAP 01175436, Engineer rotated mechanically, acceptable. | | | | | | | | |
| 101255 | H- 7 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT002 / NRI | Feedwater | ISI-13142-53-A | 3/21/2009 |
| 101896 | H- 2 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT071 / NRI | RHR Suction A | ISI-97003-B | 4/2/2009 |
| 101935 | H- 3 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT088 / NRI | RHR Return B | ISI-97004-A | 4/8/2009 |
| 101936 | H- 4 | Snubber / Clamp | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT089 / NRI | RHR Return B | ISI-97004-A | 4/8/2009 |
| | | | | FP-PE-NDE-530 | ISI / VT / 2009VT090 / NRI | RHR Return B | ISI-97004-A | 4/8/2009 |
| 102018 | H- 1 | Restraint | F1.10a | FP-PE-NDE-530 | ISI / VT / 2009VT024 / NRI | Recirc Manifold A | ISI-97005-B | 3/25/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

| Summary | | | | | | | | |
|-----------|--|---------------------|--------|---------------|-----------------------------|-------------------|----------------|-----------|
| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
| 105022 | H-17 | Spring / Clamp | F1.10c | FP-PE-NDE-530 | PSI / VT / 2009VT025 / NRI | Head Vent | ISI-782A | 3/25/2009 |
| 105023 | H- 1 | Hanger | F1.10a | FP-PE-NDE-530 | PSI / VT / 2009VT136 / NRI | Head Vent | ISI-782A-A | 4/26/2009 |
| 105024 | H- 2 | Spring / Clamp | F1.10c | FP-PE-NDE-530 | PSI / VT / 2009VT135 / NRI | Head Vent | ISI-782A-A | 4/26/2009 |
| 105025 | H- 3 | Hanger | F1.10a | FP-PE-NDE-530 | PSI / VT / 2009VT137 / NRI | Head Vent | ISI-782A-A | 4/26/2009 |
| 107522 | H- 8 | Dbl Spring / 4 Lugs | F1.10c | FP-PE-NDE-530 | ISI / VT / 2009VT100 / NRI | Feedwater | ISI-13142-53-A | 4/14/2009 |
| 107528 | H- 8 | Snubber / Lugs | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT012 / RI | Recirculation A | ISI-97005-A | 3/24/2009 |
| Comments: | CAP 01175429, Engineer rotated mechanically, acceptable. | | | | | | | |
| 107530 | H- 2 | Snubber / Lugs | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT095 / NRI | Recirc Manifold A | ISI-97005-B | 4/13/2009 |
| 107540 | H- 7 | Snubber / Lugs | F1.40b | FP-PE-NDE-530 | PSI / VT / 2009VT003 / NRI | Recirc Pump A | ISI-97005-C | 3/21/2009 |
| 107541 | H- 8 | Snubber / Lugs | F1.40b | FP-PE-NDE-530 | PSI / VT / 2009VT014 / NRI | Recirc Pump A | ISI-97005-C | 3/24/2009 |
| 107542 | H- 9 | Snubber / Lugs | F1.40b | FP-PE-NDE-530 | PSI / VT / 2009VT013 / NRI | Recirc Pump A | ISI-97005-C | 3/24/2009 |
| 107547 | H- 8 | Snubber / Lugs | F1.10b | FP-PE-NDE-530 | PSI / VT / 2009VT004 / RI | Recirculation B | ISI-97006-A | 3/21/2009 |
| Comments: | CAP 01174890, Engineer rotated mechanically, acceptable. | | | | | | | |
| 107559 | H- 7 | Snubber / Lugs | F1.40b | FP-PE-NDE-530 | PSI / VT / 2009VT005 / NRI | Recirc Pump B | ISI-97006-C | 3/21/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--|----------|-----------------|---------|---------------|-------------------------------------|--------------|----------------|-----------|
| Class 1 Category R-A, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | | | |
| 101009 | W-17 | Pipe-to-Valve | R1.11-2 | FP-PE-NDE-401 | ISI / UT / 2009UT009 (Page 1) / NRI | HPCI Steam | ISI-13142-42-A | 3/20/2009 |
| | | | | FP-PE-NDE-401 | ISI / UT / 2009UT009 (Page 2) / GEO | HPCI Steam | ISI-13142-42-A | 3/20/2009 |
| Comments: Single sided exam - no scan on valve side due to configuration. Essentially 100% coverage. | | | | | | | | |
| 101286 | W-27 | Reducer-to-Pipe | R1.11-2 | FP-PE-NDE-401 | ISI / UT / 2009UT019 (Page 1) / NRI | Feedwater | ISI-13142-53-A | 3/25/2009 |
| | | | | FP-PE-NDE-401 | ISI / UT / 2009UT019 (Page 2) / NRI | Feedwater | ISI-13142-53-A | 3/26/2009 |
| 101875 | W-16 | Elbow-to-Pipe | R1.11-2 | FP-PE-NDE-401 | ISI / UT / 2009UT008 / NRI | RHR Return A | ISI-97003-A | 3/22/2009 |
| 101950 | W-11 | Elbow-to-Pipe | R1.11-2 | FP-PE-NDE-401 | ISI / UT / 2009UT007 / NRI | RHR Return B | ISI-97004-A | 3/22/2009 |
| 100502 | W-3 | Pipe-to-Pipe | R1.20-4 | FP-PE-NDE-401 | ISI / UT / 2009UT010 (Page 1) / NRI | Core Spray A | ISI-13142-31-A | 3/20/2009 |
| | | | | FP-PE-NDE-401 | ISI / UT / 2009UT010 (Page 2) / NRI | Core Spray A | ISI-13142-31-A | 3/20/2009 |
| Comments: Single sided exam - no scan on penetration side due to configuration. Essentially 100% coverage. | | | | | | | | |
| 100592 | W-4 | Pipe-to-Elbow | R1.20-4 | FP-PE-NDE-401 | ISI / UT / 2009UT034 (Page 1) / NRI | Main Steam A | ISI-13142-33-A | 4/11/2009 |
| | | | | FP-PE-NDE-401 | ISI / UT / 2009UT034 (Page 2) / NRI | Main Steam A | ISI-13142-33-A | 4/11/2009 |
| | | | | FP-PE-NDE-401 | ISI / UT / 2009UT034 (Page 3) / NRI | Main Steam A | ISI-13142-33-A | 4/11/2009 |
| 100715 | W-25 | Pipe-to-Elbow | R1.20-4 | FP-PE-NDE-401 | ISI / UT / 2009UT017 (Page 1) / NRI | Main Steam C | ISI-13142-35-A | 3/25/2009 |
| | | | | FP-PE-NDE-401 | ISI / UT / 2009UT017 (Page 2) / GEO | Main Steam C | ISI-13142-35-A | 3/26/2009 |
| 101218 | W-12 | Pipe-to-Elbow | R1.20-4 | FP-PE-NDE-401 | ISI / UT / 2009UT018 (Page 1) / NRI | Feedwater | ISI-13142-52-A | 3/25/2009 |
| | | | | FP-PE-NDE-401 | ISI / UT / 2009UT018 (Page 2) / NRI | Feedwater | ISI-13142-52-A | 3/26/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--|----------|-------------------|-------|---------------|-----------------------------|----------------------|--------------|-----------|
| Class 2 Category C-A, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | | | |
| 101602 | W-3 | Lower Head/Flange | C1.20 | FP-PE-NDE-401 | ISI / UT / 2009UT004 / NRI | RHR Heat Exchanger A | ISI-7905-32A | 3/21/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401
 2. Plant: Monticello Nuclear Generating Plant Unit 1
 3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A
 5. Commercial Service Date: June 30, 1971
 6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|--|----------|---------------|-------|--------------|-----------------------------|----------------------|--------------|-----------|
| Class 2 Category C-B, EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | | | |
| 101595 | N- 2 | Shell-Pad-Noz | C2.31 | PEI-02.02.01 | ISI / MT / 2009MT001 / NRI | RHR Heat Exchanger A | ISI-7905-32A | 3/27/2009 |

NIS-1 Attachment (Appendix A)
Cycle 24 Inservice Inspection Report (2009 RFO)
Interval 4, Period 2, M1_I4-P2_RF24

1. Owner: Xcel Energy Inc., NSPM, 414 Nicollet Mall, Minneapolis, MN 55401

2. Plant: Monticello Nuclear Generating Plant Unit 1

3. Plant Address: 2807 West County Road 75, Monticello, MN 55362

4. Owner Certificate of Authorization (If Req.): N/A

5. Commercial Service Date: June 30, 1971

6. National Board Number for Unit: N/A

Summary

| No. | Comp. ID | Comp. Desc. | Item | Procedure | Scope/Method/Report/Results | System | Dwg/ISO | Exam Date |
|---|----------------------|--|--------|---------------|-----------------------------|------------------------|----------------|-----------|
| Class 2 | Category F-A, | EXAMS PERFORMED FOR IS1 (4th Interval, Period 2 Credited Exams) | | | | | | |
| 100131 | H- 4 | Slide | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT092 / NRI | RHR Suction B | ISI-13142-17-C | 4/10/2009 |
| 100263 | H- 1 | Snubber / Clamp | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT019 / NRI | HPCI Steam Disch | ISI-13142-19-A | 3/23/2009 |
| 100264 | H- 2 | Dbl Snubber / Clamp | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT066 / NRI | HPCI Steam Disch | ISI-13142-19-A | 3/28/2009 |
| 100987 | H-11 | Snubber / Clamp | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT020 / NRI | HPCI Steam | ISI-13142-42-A | 3/23/2009 |
| | | | | FP-PE-NDE-530 | PSI / VT / 2009VT063 / NRI | HPCI Steam | ISI-13142-42-A | 3/28/2009 |
| 101139 | H- 1 | Snubber / Dbl Strut | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT067 / NRI | RHR A | ISI-13142-51-A | 4/1/2009 |
| 101685 | DVMX Supp D | DVMX Pump Support | F1.40a | FP-PE-NDE-530 | ISI / VT / 2009VT006 / NRI | HPCI Pumps | ISI-8292-42A | 3/22/2009 |
| 101713 | H-12 | Snubber/ Clamp | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT015 / NRI | CRD Scram Header A | ISI-93268-1A | 3/24/2009 |
| 101715 | H-14 | Snubber / Clamp | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT016 / NRI | CRD Scram Header A | ISI-93268-1A | 3/24/2009 |
| 106810 | H- 1 | Double Snubber | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT069 / NRI | RCIC Steam Discharge | ISI-13142-19-B | 4/2/2009 |
| | | | | FP-PE-NDE-530 | PSI / VT / 2009VT070 / NRI | RCIC Steam Discharge | ISI-13142-19-B | 4/2/2009 |
| 106851 | H-1B | Restraint Hanger | F1.20a | FP-PE-NDE-530 | PSI / VT / 2009VT065 / RI | Core Spray A Discharge | ISI-13142-31-B | 4/1/2009 |
| Comments: Acceptable per CAP-01175351 Condition Evaluation. | | | | | | | | |
| 106949 | H- 4 | Restraint Hanger | F1.20a | FP-PE-NDE-530 | PSI / VT / 2009VT102 / NRI | RHR B | ISI-13142-51-C | 4/10/2009 |
| 106972 | H- 2 | Restraint Hanger | F1.20a | FP-PE-NDE-530 | PSI / VT / 2009VT101 / NRI | RHR B | ISI-13142-51-D | 4/12/2009 |
| 107049 | H- 2 | Snubber | F1.20b | FP-PE-NDE-530 | PSI / VT / 2009VT018 / RI | RHR A | ISI-13142-37-E | 3/23/2009 |
| | | | | FP-PE-NDE-530 | PSI / VT / 2009VT093 / NRI | RHR A | ISI-13142-37-E | 4/9/2009 |
| Comments: 2009VT018: RI -- New retainer clip installed per WO-325070-03. Reference NRI report 2009VT093 | | | | | | | | |
| 107582 | Support B | Support B,E200A 180° | F1.40a | FP-PE-NDE-530 | ISI / VT / 2009VT084 / NRI | RHR Heat Exchanger A | ISI-7905-32A | 4/5/2009 |

APPENDIX B

Reactor Vessel IVVI Examinations

(9 pages to follow)

Monticello Nuclear Generating Station
2009 RFO-24 Refuel Outage
In-Vessel Visual Examination Summary Report

1.0 In-Vessel Visual Examination Project Overview:

During the 2009 Monticello Nuclear Generating Station RFO-24 comprehensive visual examinations of reactor vessel internal components were conducted to ensure the continued integrity of the RPV internal components. These examinations were conducted in accordance with Monticello procedure PEI-02.05.05, Revision 1 including TCN-001-B. Additionally, all enhanced visual inspections (EVT-1) were performed in accordance with the Examination Recommendations of TR-105696-R10 (BWRVIP-03) Revision 10. Details of the examinations performed can be found in the individual component data sheets contained in Section 3.0 of this report. A synopsis of the components examined, the methods utilized, and the examination results are provided below.

1.1 Scope

The following table lists the scope of In-Vessel Visual Examinations, along with the examination method used.

| Component | Scope of Work | Inspection Method |
|--|---|-------------------|
| Jet Pump Assemblies 11-15 | Adapter to Shroud Baffle Plate (AD-2) | EVT-1 |
| | Diffuser to Backing Ring (AD-3a) | EVT-1 |
| | Diffuse weld (DF-1) | EVT-1 |
| | Diffuse weld (DF-2) | EVT-1 |
| Jet Pump Assemblies 11-14 | Inlet Mixer weld (MX-1) | EVT-1 |
| | Inlet Mixer weld (MX-2) | EVT-1 |
| | Inlet Mixer weld (MX-4) | EVT-1 |
| Recirc Riser Welds @ 30°, 60°, 90° | Thermal Sleeve to Elbow (RS-1) | EVT-1 |
| | Elbow to riser Pipe (RS-2) | EVT-1 |
| | Riser Pipe to Transition Piece (RS-3) | EVT-1 |
| Recirc Riser Welds @ 210°, 240° | Restrainer Bkt to Riser Pipe (RS-4) | EVT-1 |
| | Restrainer Bkt to Riser Pipe (RS-5) | EVT-1 |
| Shroud Support Legs | Monitor indication in Shroud Support Leg Upper Weld (H-10) @ 210° | VT-3 |
| | H -10, H -11 and H -12 on all 14 Support Legs | VT-3 |
| Core Spray Header and Downcomers welds on Div II | Clamp Assemblies on Tee Box Junctions at 90° | VT-3 |
| | Measure previous known indication P3A | EVT-1 |
| | Bkt & Att welds at 30° and 150° | VT-3, EVT-1 |
| | Welds P1-90, P2-90, P3A, P3B, P4-B-a, P4-B-b, P4-B-c, P4-B-d, P5-A, P6-A, P7-A, P8-A-a, P8-A-b, P5-B, P6-B, P7-B, P8-B-a, P8-B-b, | EVT-1 |

| | | |
|---|--|-------------|
| Core Spray Header and Downcomers welds on Div I | Clamp Assemblies on Tee Box Junctions at 270° | VT-3 |
| | Bkt & Att welds at 210° and 330° | VT-3, EVT-1 |
| | Welds P1-270, P2-270, P3C, P3D, P5-C, P6-C, P7-C, P8-C-a, P8-C-b, P5-D, P6-D, P7-D, P8-D-a, P8-D-b, | EVT-1 |
| Lower Core Spray Sparger 'B' | Welds S1-B, S2-B-1, S2-B-2, S4-B-1, S4-B-2 | EVT-1 |
| | BS3C-1, BS3C-2, BS3A, BS3B, | VT-1 |
| Upper Core Spray Sparger 'C' | Welds S1-C, S2-C-1, S2-C-2, S4-C-1, S4-C-2 | EVT-1 |
| | CS3C-1, CS3C-2, CS3A, CSB, | VT-1 |
| Core Spray Sparger Brackets | CS-SB @ 93°, 126°, 166°, 193°, 234°, and 267°, | VT-1 |
| Top Guide (B-N-1) | Accessible Bolting and Hardware, Grid Beams: 06-19, 06-27, 06-35, 10-11, 10-43, 14-07, 14-11, 14-15, 14-19, 14-35, 18-07, 18-31, 18-43, 22-03, 22-07, 22-11, 22-23, 22-31, 22-43, 26-03, 26-11, 26-47, 30-23, 30-31, 34-07, 34-15, 34-39, 34-47, 38-07, 38-11, 38-15, 42-11, 42-15 | VT-3 |
| Core Plate (B-N-1, B-N-2) | Accessible surfaces including the tops of FSC (when available) and anti-rotation pins: 06-19, 06-27, 06-35, 10-11, 10-43, 14-07, 14-11, 14-15, 14-19, 14-35, 18-07, 18-31, 18-43, 22-03, 22-07, 22-11, 22-23, 22-31, 22-43, 26-03, 26-11, 26-47, 30-23, 30-31, 34-07, 34-15, 34-39, 34-47, 38-07, 38-11, 38-15, 42-11, 42-15 | VT-3 |
| Steam Dryer | Dryer OD Previously Identified Ind. V3 @ 90°, V10 @ 90°, V10 @ 270°, Jacking Bolt @ 325°, Vertical Guide @ 215° | VT-1 |
| | Dryer ID Previously Identified Ind. DC-F- Cover Plate @ 0° | VT-1 |
| Top Head | Steam Dryer Hold Down Brackets @ 35°, 145°, 215°, and 325° | VT-3 |

1.2 Examination Results

The examinations re-affirmed previously reported indications. Thorough evaluations concluded there were no discernable changes in the indications from the original discovery. The previously reported indications included:

- Crack indication in the 90° core spray t-box to header weld in the 80° side header.
- Crack indication in 325° Jacking Bolt tack weld
- Crack indication in Dryer Weld V3 90
- Crack indication in Dryer Weld V10 90
- Crack indication in Dryer Weld V10 270
- Crack indication in 215° Vertical Guide
- Crack indication in DC-F- Cover Plate @ 0°

Current RFO-24 IVVI examinations identified the following new indications and/or conditions:

- During the Guide Tube examinations two new indications were found on two separate Guide Tubes, cell locations 18 - 07 and 26 -11. These two new indications consisted of one minor indentation each in the Guide Tubes located in the area immediately above the CRGT-3 weld at the bottom of the Guide Tubes.
- During the re-examination of the previously known indication located on the Shroud Support Leg in the H -10 weld at 210 degrees a new indication was discovered on the 200 degree side of this support at H -10. This prompted the requirement of an additional sampling of another Support Leg which also showed an additional new indication. Subsequently this resulted in all 14 Shroud Support legs being examined, welds H-10, H -11 and H -12. These further examinations revealed all but two Support Legs, at 90 degrees and 350 degrees, showing new crack indications. All cracking was confined to the H -10 welds, Shroud Support to Shroud Support Cylinder.

1.3 Equipment

The equipment used during the Monticello RFO-24 In-Vessel Visual Examinations is as follows:

◆ Camera Systems

- IST-DOTCAM
 - ◆ IST-DOTCAM with 6 LED lights, total wattage output of .43 watts
 - ◆ Single 35 watt UL210
- RJ Electronics RJ-8110 Color Camera System
 - ◆ RJ-8110 Camera with Pan, Tilt, & Zoom
 - ◆ RJ Electronics CCU
 - ◆ RJ Electronics Twin 35 Watt Light Unit
- IST-Rees ETV-1250 Black and White Camera System
 - ◆ ETV-1250 Camera
 - ◆ IST-Reese Cable
 - ◆ IST-Reese CCU
 - ◆ Twin 50W Lighting System
- REES R93 Black and White Camera System
 - ◆ R93 Camera
 - ◆ R93 Cable
 - ◆ R93 CCU
 - ◆ Single 35 watt or Dual 20 watt lights
- AREVA NP ROV ROCKY ID (Camera Delivery System)
 - ◆ VIT-4.5 Color Camera with Pan, Tilt, & Zoom
 - ◆ Twin 35 Watt Lights
 - ◆ VIT CCU
 - ◆ 100' Cable

◆ **ACCURATE Inspection Station**

- Intel Xeon E5405 2.00GHz CPU
 - ◆ 1.96 GB of RAM
 - ◆ 465 GB HD (system drive)
 - ◆ 500 GB HD (IVVI data drive)
 - ◆ Ethernet NIC
 - ◆ Matrox Vio Video Capture/Display
 - ◆ ROBOT MV99e Video Multiplexer (optional)
 - ◆ Microsoft Windows XP (Service Pack 2)
 - ◆ Microsoft Excel 2003
 - ◆ MySQL (Version 5.0)
 - ◆ Matrox Imaging Library – MIL 8.08 Lite
 - ◆ Microsoft Media Player
 - ◆ Areva IVVI Software
 - ◆ ACD Systems Canvas
 - ◆ (2) 20" LCD Flat-Panel Color Monitors
 - ◆ Communication Headsets

◆ **ACCURATE Level III and Server Stations**

- Intel Xeon E5405 2.00GHz CPU
 - ◆ 1.96 GB of RAM
 - ◆ 465 GB HD (system drive)
 - ◆ 500 GB HD (IVVI data drive)
 - ◆ Ethernet NIC
 - ◆ Matrox Vio Video Capture/Display
 - ◆ ROBOT MV99e Video Multiplexer (optional)
 - ◆ Microsoft Windows XP (Service Pack 2)
 - ◆ Microsoft Excel 2003
 - ◆ MySQL (Version 5.0)
 - ◆ Matrox Imaging Library – MIL 8.08 Lite
 - ◆ Microsoft Media Player
 - ◆ Areva IVVI Software
 - ◆ ACD Systems Canvas
 - ◆ 3 - 20" LCD Flat-Panel Color Monitors
 - ◆ Communication Headsets
 - ◆ HP Color Laser Jet 2600n Printer

◆ **Cleaning Equipment**

- 10,000 PSI Hydro Laser Supplied by XcelEnergy with AREVA NP Supplied Foot Pedal, Wands, and Weights
- 12 volt Rotary Power Brushing System

◆ **Underwater Lights and Power Supply**

- PS-160 Power Supply
- Birns 500w Light w/cable
- Variac variable power supply



- ◆ ***Sensitivity, Resolution and Contrast Standards***

- S/N 7001346 (DB# 14098)

- ◆ ***Support Equipment***

- AREVA 1" dia. Double Locking Handling Poles (various lengths)
- Various Cables

Monticello Nuclear Generating Station
2009 RFO-24 Refuel Outage
In-Vessel Visual Examination Indication History

The following table provides a history of the indications that have been identified prior to and during RFO-24 in the reactor vessel internal components at the Monticello Nuclear Generating Station.

| Component | Indication | Associated Engineering Evaluations |
|------------------|--|--|
| Steam Dryer | Steam Impingement Wear in Dryer Head in Areas of all Four Main Steam Nozzles | CR20000209 |
| | Crack Indication in 325 ⁰ Jacking Bolt Tack Weld - Unrepaired | CR98000794 |
| | Crack Indication at the top of weld V3 90 | CAP 037603 |
| | Crack Indication at the top of weld V10 90 | CAP 037603 |
| | Crack Indication on Dryer Support Bracket Guide weld at 215 | CAP 037603 |
| | Crack Indication at the top of weld V10 270 | CAP 037603 |
| | Crack Indications adjacent to Drain Channel 'F' Cover Plate Weld on Dryer ID | Ref. INR-R23-03 |
| Jet Pumps | Crack Indication in Jet Pump #10 vessel Side Tack Weld - Unrepaired | CR20000209 |
| | Crack Indication in Jet Pump #14 Vessel Side Tack Weld - Repaired | SRI 94-019 |
| | Crack indication in Jet Pump #15 Vessel Side Tack Weld - Repaired | SRI 94-019 |
| | Crack indication in Jet Pump #18 Vessel Side Tack Weld - Repaired | SRI 94-019 |
| | Crack indication in Jet Pump #14 Beam Bolt retainer Tack Weld - Unrepaired | CR98000794 |
| | Crack indication in Jet Pump #19 Beam Bolt retainer Tack Weld - Unrepaired | CR98000794 |
| | Crack Indication in Jet Pump #8 Secondary Riser Brace Lower Leaf to Block Weld in Leaf Material - Unrepaired | SRI-89-028 |
| | Crack Indication in Jet Pump #19 Secondary Riser Brace Lower Leaf to Block Weld in Block Material - Unrepaired | CR20000209 |
| | Small 0.25 Inch Crack Indication Extending from Arc Strike in Jet Pump #20 Diffuser Weld DF-2 - Unrepaired | Evaluated by NSP as Oxide Layer Break (Non-Relevant) |

Monticello Nuclear Generating Station
2009 RFO-24 Refuel Outage
In-Vessel Visual Examination Indication History

| Component | Indication | Associated Engineering Evaluations |
|----------------------------|--|---|
| Shroud Support Legs | Crack indication in 210° Shroud Support Leg to Shroud Support Cylinder Weld - Unrepaired | CAP 01177677 |
| | Crack indication in 210° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 240° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 150° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 010° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 030° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 030° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 060° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 120° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 120° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 150° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 170° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 190° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 270° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| | Crack indication in 300° Shroud Support Leg to Shroud Support Cylinder Weld (New Ind.) | CAP 01177677 |
| Core Spray | Crack Indication in 90° Tee Box Junction to Header - Repaired | SRI-93-006 |
| N11A and N11B Nozzles | Removal of Typical Oxides from Nozzle Areas Due to Steam Flashing or Other Phenomena | CR20000209 |
| Surveillance Sample Holder | Bent Alignment Bracket on the 30 degree Surveillance Sample Holder (Removed during RFO-23) | CAP 038142 |



Monticello Nuclear Generating Station
2009 RFO-24 Refuel Outage
In-Vessel Visual Examination Indication History

| Component | Indication | Associated Engineering Evaluations |
|-------------------------|--|---|
| Control Rod Guide Tubes | Core Location 26 -11, minor deformation in the area of CRGT-3 (New Ind.) | CAP 01176818 |
| | Core Location 18 - 07 minor deformation in the area of CRGT-3 (New Ind) | CAP 01176818 |

APPENDIX C

Page 1 of 1

System Pressure Test Examinations credited to Period 2

| Test Number | Test Title | Class | Date | Results |
|-----------------|--|---------|-----------------------|--------------|
| 0255-02-IIC-1 | Standby Liquid Control System Leakage Test | 2 | 4/18/2009 | Satisfactory |
| 0255-02-IIC-2 | Standby Liquid Control Suction Piping System Leakage Test | 2 | 4/26/2009 | Satisfactory |
| 0255-03-IIC-1 | Core Spray System Leakage Test – Loop A | 2 | 12/22/2008 | Satisfactory |
| 0255-03-IIC-2 | Core Spray System Leakage Test – Loop B | 2 | 11/19/2008 | Satisfactory |
| 0255-04-IIC-1 | RHR System Leakage Test – Loop A | 2 | 4/6/2009 | Satisfactory |
| 0255-04-IIC-2 | RHR System Leakage Test – Loop B (supplemented by Work Order-344201) | 2 | 4/15/2009 5/3/2009 | Satisfactory |
| 0255-04-IIC-3 | RHR Shutdown Cooling Suction Piping System Leakage Test | 2 | 4/6/2009 | Satisfactory |
| 0255-05-IIC-1 | RHR Service Water System Leakage Test - Loop A | 3 | 4/5/2009 5/3/2009 | Satisfactory |
| 0255-05-IIC-2 | RHR Service Water System Leakage Test - Loop B | 3 | 3/22/2009 | Satisfactory |
| 0255-11-IIC-1 | Emergency Service Water System Leakage Test Loop A | 3 | 3/31/2009 | Satisfactory |
| 0255-11-IIC-2 | Emergency Service Water System Leakage Test Loop B | 3 | 4/13/2009 | Satisfactory |
| 0255-11-IIC-3-1 | EDG-ESW System Leakage Test Loop A Accessible Pressure Boundary Components | 3 | 10/15/2008 | Satisfactory |
| 0255-11-IIC-3-2 | EDG ESW System Leakage Test - Loop A Buried Piping (subtask to test/procedure 1404-01) | 3 | 7/14/2008 | Satisfactory |
| 0255-11-IIC-4-1 | EDG-ESW System Leakage Test Loop B Accessible Pressure Boundary Components | 3 | 10/29/2008 | Satisfactory |
| 0255-11-IIC-4-2 | EDG ESW System Leakage Test - Loop B Buried Piping (subtask to test 1404-02 and procedure 1404-01) | 3 | 7/28/2008 | Satisfactory |
| 0255-12-IIC-1 | Feedwater System Leakage Test - Loop A | 2 | 3/22/2009 | Satisfactory |
| 0255-12-IIC-2 | Feedwater System Leakage Test - Loop B | 2 | 3/22/2009 | Satisfactory |
| 0255-16-IIC-1 | Drywell Floor Drain Sump System Leakage Test | 2 | 4/24/2009 | Satisfactory |
| 0255-16-IIC-2 | Drywell Equipment Drain Sump System Leakage Test | 2 | 4/28/2009 | Satisfactory |
| 0255-20-IIC-2 | Reactor Coolant Pressure Boundary Leakage Test (includes Class 1 system Recirc Seal Injection per test 0255-09-IIB-1, and Class 2 systems Control Rod Drive Hydraulic, Recirc Seal, and Reactor Water Cleanup) | 1 and 2 | 4/27/2009 | Satisfactory |

APPENDIX D

Page 1 of 1

Snubber Functional Testing

The following snubbers were tested during Cycle 24 and the 2009 RFO to meet Technical Specifications, ASME Section XI requirements and verification testing as a result of replacement. There are 147 safety related snubbers at Monticello. The snubbers are placed into two groups: One main group of 146 (Bergen Paterson) and a second group of 1 (Lisega-Snubber SS-707). Fifteen snubbers from the main group and the single snubber from the second group resulted in 16 snubbers being tested per plant procedure 0251 during the 2009 RFO.

All snubbers were tested under one work order, 366382. Below is listed each individual work order that controlled removal, replacement, and re-installation if required.

| No. | Snubber Location | Size | Snubber Work Order No. | Snubber Serial No. | Test Results |
|-----|------------------|------|------------------------|--------------------|--------------|
| 1 | PS2-H2 | 30 | 326521 | 516 | Passed |
| 2 | SS-312-1 | 30 | 326527 | 522 | Passed |
| 3 | SS-6AR | 20 | 326531 | 464 | Passed |
| 4 | SS-306 | 30 | 326533 | 517 | Passed |
| 5 | SS-191 | 20 | 326577 | 112 | Passed |
| 6 | SS-36A | 10 | 326584 | 509 | Passed |
| 7 | SS-560 | 10 | 326592 | 486 | Passed |
| 8 | SS-707(Lisega) | 3 | 343935 | 701 | Passed |
| 9 | RV-26A-H2 | 10 | 326590 | 505 | Passed |
| 10 | RV-25A-NS1 | 20 | 326588 | 172 | Passed |
| 11 | RV-26-NS1B | 20 | 326581 | 306 | Passed |
| 12 | RV-27A-NS3A | 20 | 326580 | 480 | Passed |
| 13 | SS-367 | 130 | 326526 | 180 | Passed |
| 14 | SS-365 | 130 | 326525 | 187 | Passed |
| 15 | CRD-H247 | 3 | 326524 | 458 | Passed |
| 16 | RV-24A-NS1 | 20 | 326579 | 150 | Passed |

APPENDIX E

**Engineering Evaluations per Subsection IWB-3144 and 3142.4
(1995 Edition with 1996 Addenda)**

1. CAP 01177677 Indications discovered in shroud support legs
 - Condition Evaluation (01177677-02), 5 pages
 - Final Documentation of SIA Evaluation (sans vendor proprietary information) (01177677-02), 11 pages

(16 pages to follow)

CAP Number: 01177677

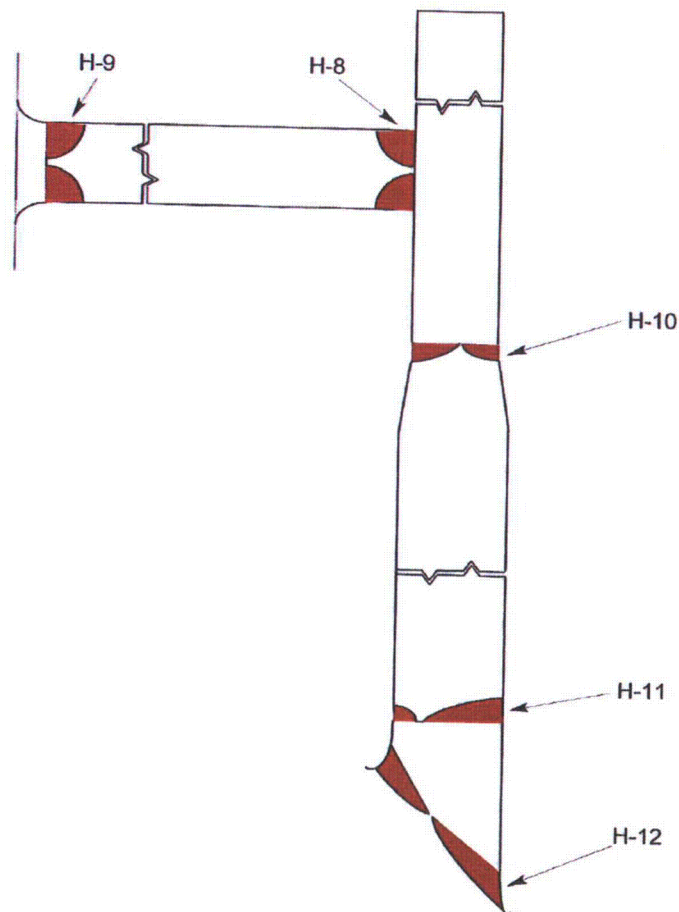
Condition Evaluation Number: CE-01177677

Description of problem:

During the 2009 RFO IVVI window, several shroud support legs were noted to have indications. The initial scope of inspection was the shroud leg at 210 degrees. The inspection of the 210 degree leg was a result of a requirement of the ASME section XI code which requires examination of unremoved indications for three successive periods. Upon inspection of the 210 degree leg, additional indications were identified which requires scope expansion in accordance with ASME Section XI. The 240 degree leg was selected for scope expansion and it too had indications. The ASME section XI code therefore requires scope expansion to 100% of the population of that weld location.

Evaluation Details:

Inspection of 100% of the accessible weld legs were performed by inserting a camera through the jet pumps. The inspection locations were H10, H11 and H12.

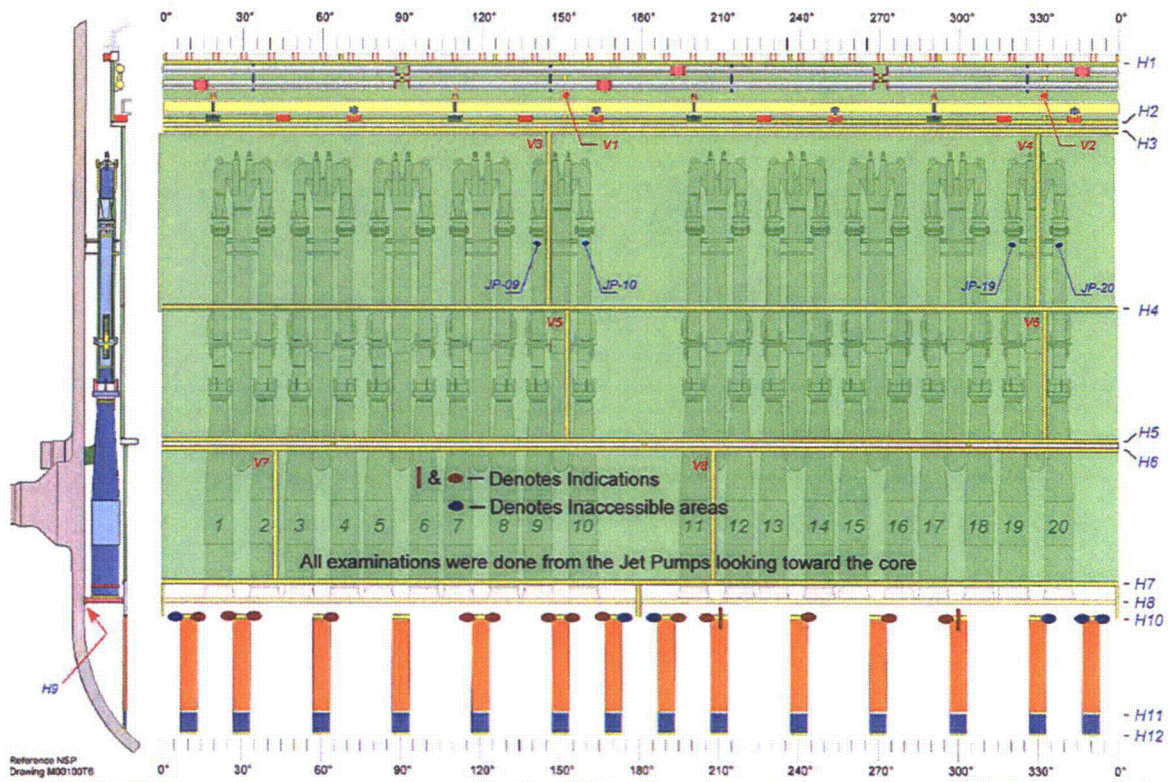


These are the shroud support ring to leg weld, the lower leg to transition piece, and transition piece to vessel weld, respectively. No indications were noted on the H11 and H12 welds using the same technique as those identifying indications at H10. Below is a table of inspection results for the H10 weld:

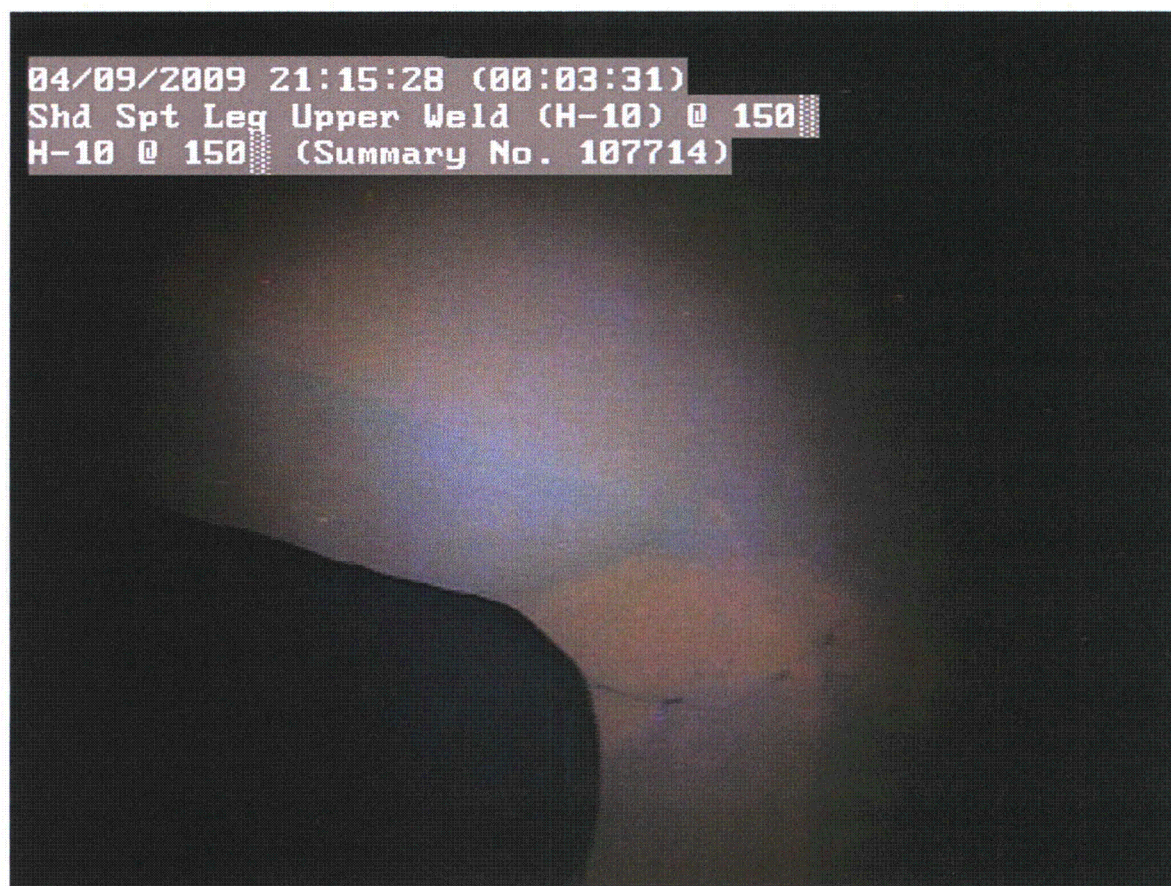
| Location (Degrees) | Inspection Notes |
|--------------------|---|
| 10 | 0 degree side inaccessible, 20 degree side has indication |
| 30 | Both sides have indications |
| 60 | 50 degree side has no indications, 70 degree side has indication |
| 90 | No indications on either side |
| 120 | Both sides have indications |
| 150 | Both sides have indications |
| 170 | 160 degree side has indication, 180 degree side in accessible |
| 190 | 180 degree side inaccessible, 200 degree side has indication |
| 210 | 200 degree side has indication, 220 degree side has no indications |
| 240 | 230 degree side has no indications, 250 degree side has indication |
| 270 | 260 degree side has no indications, 280 degree side has indication |
| 300 | 290 degree side has indication, there is a vertical indication in the center of the weld, 310 degree side as no indications |
| 330 | 320 degree side has no indications, 340 degree side inaccessible |
| 350 | Both sides inaccessible |

Monticello Nuclear Generating Plant Inservice Inspection

Cycle 24 Summary Report 2009 Refueling Outage



Below is an picture of a “typical” indication identified in the 2009 RFO.



The 2009 inspection report has indication notifications for all locations.

As can be seen in the inspection documentation, the indications are all in the fillet weld applied after the double bevel weld is completed across the width of the weld. The fillet weld is used to reduce the stress riser created by the corner at the H10 weld. It is believed that the flaws are induced in the fillet weld due to the heavily restrained nature of the weld. The double bevel weld provides great structural rigidity to the H10 from a lateral perspective. Application of the fillet weld on such a thick weldment will result in high residual stresses. These high residual stresses are believed to be the cause of the cracking.

Because the weld face (across the double bevel weld) is free of indications, it is reasonable to conclude that the back surface (which is inaccessible without significant core disassembly including the removal of fuel, fuel support piece, control rods, and control rod guide tubes) is free of defects.

In 2000, all accessible regions of the shroud legs were inspected as a result of the discovery of the vertical flaw on the 210° leg. Many of the same types of indications were noted during the 2000 inspections as were noted in 2009 but were dispositioned as surface conditions left from construction (i.e. weld overlap, grinding ridges, et cetera). From the review of the 2000 data (which is archived on Super VHS tapes) indicates no change in flaw geometry. This may be the result of the excellent protection the lower plenum via hydrogen water chemistry.

Even though these flaws are postulated to be either construction surface conditions or cracking due to high residual stresses which may have resolved themselves during the first operating cycle, it is not uncommon for these types of indications to be initiation points for Intergranular Stress Corrosion Cracking (IGSCC). Therefore, flaw growth needs to be considered in future evaluations.

Noting that the evaluation was performed in support of an ASME inspection, ASME Section XI was reviewed to determine if any guidance was present associated with flaw evaluation for a category B-N-2 exam. By following the guidance of the ASME code, the following is presented in paragraph IWB-3142.4:

“A component containing relevant conditions is acceptable for continued service if an analytical evaluation demonstrates the component’s acceptability . The evaluation analysis and evaluation acceptance criteria shall be specified by the owner. A component accepted for continued service based upon analytical evaluation shall be subsequently examined in accordance with IWB-2420 (b) and (c).”

With this all considered, the results of the examination were sent to Structural Integrity Associates. Following flaw evaluation guidance in BWRVIP-38 and using standard flaw evaluation methods, the current condition of the shroud support legs is considered acceptable for several cycles. The letter attached in Sharepoint is a summary document from the approved vendor calculation. Because the calculation was requested to be performed under SIA’s appendix B program, the results of the calculation are considered appropriate for clearing the mode restraint and closing the CE. The results of the calculation indicates that the flaws can reduce the cross sectional area of all legs by 70% and code allowable margins will still be maintained. The fillet portion of the welds where the cracking has been predominantly located, was not consider part of the structural portion of the weld. Therefore, from a structural margin perspective, the weld are fully intact with the exception of the leg at 210 degrees which was evaluation as not being able to carry any load (consistent with the assumptions made in the 2000 evaluation).

Actions:

- 1. Formally accept the final report from Structural Integrity Associates filling out appropriate information associated with flaw evaluation and “use as is” documentation.**
- 2. Revise the ISI plan and/or schedule to indicate follow up inspection IAW IWB-2420 (b) and (c).**
- 3. Set up an appropriate component inspection schedule to maintain the flaw growth assumptions of the SIA evaluation.**

Preparer’s Name: David Potter

Date: 4/17/2009

This cover sheet constitutes an alternative cover sheet for a vendor prepared document that will be incorporated into Xcel's EC process at MNGP. Per FP-E-MOD-11 section 5.4.5.2 an alternative coversheet to can be used to document the reviews within Xcel. This coversheet is for EC14116 titled: "Evaluation of the Monticello Shroud Support Leg Indications: 2009 Inspection"

| | | |
|----------------------------------|-----------------|----------------------------|
| Prepared By: | By Vendor (SIA) | |
| Reviewed By (owners acceptance): | David J Potter | <i>[Signature]</i> 4/28/09 |
| Approved By: | Michelle Kelly | <i>[Signature]</i> 4-28-09 |



Structural Integrity Associates, Inc.

CALCULATION PACKAGE

File No.: 0900485.301

Project No.: 0900485

Quality Program: ☒ Nuclear ☐ Commercial

PROJECT NAME:

Monticello Shroud Support Leg Flaw Evaluation

CONTRACT NO.:

00001005, Rev. 00008

CLIENT:



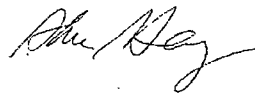
XCEL Energy

PLANT:

Monticello Nuclear Generating Plant

CALCULATION TITLE:

Evaluation of the Monticello Shroud Support Leg Indications: 2009 Inspection

| Document Revision | Affected Pages | Revision Description | Project Manager Approval Signature & Date | Preparer(s) & Checker(s) Signatures & Date |
|-------------------|--|----------------------|---|---|
| 0 | 1 - 10 A-1 - A-13 Computer Files | Initial Issue |  Marcos L. Herrera 04/24/09 | Preparer:  Peihua Jing 04/24/09 Checker:  Stan S. Tang 04/24/09 |

Contains Vendor Proprietary Information

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1.0 OBJECTIVE

During the Spring 2009 inspections of the reactor internals at Monticello, Xcel Energy visually discovered indications in 11 of the 14 shroud support legs. Indications were observed in one or both ends of the H10 welds at the top end of the support legs at the following azimuths: 20°, 30°, 60°, 120°, 150°, 170°, 190°, 210°, 240°, 270°, and 300°. Visual photographs obtained from the examination performed by Xcel Energy are documented in Reference 1.

A crack-like indication at the 240° support leg is shown in Figure 1 as an example. Per Figure 1, the indication runs across the Alloy 182 weld. It is noteworthy that the flaw runs in a fillet weld applied to reduce stress between the H10 weld and support cylinder.

The objective of this calculation is to evaluate the indications in the shroud support legs found during the Spring 2009 inspection. A similar analysis was performed in 2000 in support of inspections at the time. At that time, only one leg was found to have an indication. The approach used then assumed one complete leg was cracked and that the support legs took the entire load without taking credit for the load sharing with the H8 and H9 welds. The results are documented in Reference 8. For the current calculation, cases were evaluated that conservatively bound the actual inspection results. One case was evaluated that assumed 50% of each leg width (in circumferential direction) was flawed through-wall and one leg was cracked 100% (consistent with the Reference 8 evaluation). In the second case, 72.5% of the leg width was assumed cracked through-wall along with one leg cracked 100%. These are very conservative assumptions regarding the flaw length given the observed indications that appear to be limited to a fillet weld applied to reduce the stress concentration between the H10 weld and the bottom of the shroud support cylinder.

2.0 DESIGN INPUTS

2.1 Shroud Support Leg Design

The shroud support design implemented at Monticello is the Chicago Bridge & Iron Nuclear (CBIN) flat plate design with support legs that connect to the reactor pressure vessel (RPV) bottom head. A stub is welded to an attachment pad on the inside of the RPV lower head, and the leg is welded to the top of the stub and to the bottom face of the shroud support cylinder (refer to Figure 2.9.2.4 of Reference [3]). There are fourteen support legs, each with a thickness of 1.75 inches [4], located 20° or 30° apart (see Table 1). The legs are fabricated from Alloy 600 material ($S_m = 23.3$ ksi) with multiple Alloy 182 welds joining the various leg sections to each other, and joining the legs to the low alloy steel RPV and the Alloy 600 shroud support cylinder. The weld of interest for this analysis, as designated in BWRVIP-15 [3], is the weld attaching the leg to the shroud support cylinder (weld H10).

All of the relevant geometry, load, and material information for the Monticello support legs are summarized in Table 1 for upset and faulted conditions [4]. The loads shown in Table 1 also apply to power rerate conditions, as confirmed by the Reference 5 report. Also included in this

table are primary stresses calculated for use in the structural evaluation of the support legs. The methodology used to compute these stresses is described in detail below. It should be noted that these loads do not consider the Extend Power Uprate planned to occur during the next operating cycle.

3.0 METHODOLOGY

3.1 Shroud Support Leg Safety Factor Evaluation

Access to the shroud support legs is severely limited because of their location in the RPV bottom head region beneath the shroud support structure. For this reason, the structural analyses performed as a basis for the "BWR Shroud Support Inspection and Flaw Evaluation Guidelines (BWRVIP-38)" [6] conservatively assumed the presence of 50% through-wall cracking in all shroud support legs. This philosophy eliminates the need for support leg inspection, given that shroud support welds H8 and H9 are structurally adequate.

However, Xcel Energy has performed a visual inspection of the legs via access through the jet pump assemblies. Provision for inspecting the support legs in lieu of a detailed inspection of welds H8 and H9 was also addressed in BWRVIP-38. Flaw tolerance evaluations are provided in Section A.2.7 of BWRVIP-38 that can be used to structurally evaluate the support legs. The methodology conservatively assumes that all of the applied loading is structurally taken by the legs. Therefore, welds H8 and H9 are not structurally required, other than to maintain the support structure configuration (i.e., jet pump support, shroud repair, etc.). As a result, analyses similar to those shown in Section A.2.7 of BWRVIP-38 were performed for Monticello to confirm the structural adequacy of the support legs, for upset and faulted conditions, conservatively including assumptions regarding the support leg flaws. Structural acceptability was demonstrated by maintaining minimum ASME Code, Section XI safety factors, as per the recommended approach documented in Section A.2.7 of BWRVIP-38.

The shroud support legs are located sufficiently below the core such that they do not receive significant amounts of radiation. Therefore, linear elastic fracture mechanics (LEFM) techniques are not necessary, and limit load techniques are valid due to material ductility. Since the shroud support legs are essentially "a cylindrical shell with holes," a limit load solution applicable to cylinders may be used. Therefore, the ANSC computer program [7] was selected for use. The ANSC program was used because of its ability to analyze cracks in cylindrical structures without taking benefit of the cracks taking compression. This was important for this evaluation since the spaces between legs, which are effectively treated as flaws in this analysis, have no capability to take compression.

Consistent with limit load techniques, two stresses were computed for use in the analysis: (1) the primary membrane stress, P_m , and (2) the primary bending stress, P_b . Consistent with BWRVIP-38 methodology, calculation of these stresses was based on the stresses for the shroud H7 weld, as those stresses were readily available from past shroud evaluations. The determination of each of these stresses is detailed below:

$$P_m: \quad P_{m\text{-legs}} = P_{m\text{-shroud}} (t/t_{\text{legs}})$$

where: P_{m-legs} = primary membrane stress in the legs (psi).
 $P_{m-shroud}$ = primary membrane stress in the shroud at weld H7 (psi).
 t = shroud thickness at weld H7 (inches).
 t_{legs} = support legs minimum thickness (inches).

$$P_b: \quad P_{b-legs} = (P_{b-shroud} + M_s/Z) (t/t_{legs})$$

where: P_{b-legs} = primary bending stress in the legs (psi).
 $P_{b-shroud}$ = primary bending stress in the shroud at weld H7 (psi).
 M_s = additional moment for legs due to the shear load applied at weld H7 (inch-lbs).
 F_s = $F_s H$
 F_s = shear load at weld H7 (lbs).
 H = "lever arm" between shroud weld H7 and limiting leg cross section (inches).
 Z = section modulus for unflawed shroud cross section (inches³).
 Z = $\pi R^2 t$
 R = shroud mean radius (inches).
 t = shroud thickness at weld H7 (inches).
 t_{legs} = support legs minimum thickness (inches).

The calculated values for each of the above stresses are included in Table 1. It should be noted that the shear term in the calculation of P_b was conservatively taken to the bottom of the shroud support legs (weld H11) versus weld H10. This is consistent with the BWRVIP-38 methodology.

Also included in Table 1 are the computed azimuths for each support leg. This information, combined with the appropriate stress information, was input to ANSC to determine whether the assumed leg configuration maintains minimum required ASME Code, Section XI safety factors (2.77 for upset conditions, 1.39 for faulted conditions [6]). Evaluations were performed for both the upset and faulted conditions, and the resulting ANSC output is included in Appendix A. It is noted from the output that through-wall flaws were placed in the spaces between the legs and the leg with the indication to represent the fact that there is actually no material present in these regions.

From the ANSC results, the safety factor was calculated using the following relationship:

$$\text{Safety Factor, SF} = \frac{P_b' + P_m}{P_b + P_m}$$

where: P_b' = minimum failure bending stress from ANSC output (psi).

The resulting safety factors are shown in Table 2 and 3. In Table 2, it was evaluated that assumed 50% of each leg width (in circumferential direction) was flawed through-wall and one leg was cracked 100% (consistent with the Reference 8 evaluation). In Table 3, 72.5% of the leg width

was assumed cracked through-wall along with one leg cracked 100%. These are very conservative assumptions regarding the flaw length given the observed indications that appear to be limited to a fillet weld applied to reduce the stress concentration between the H10 weld and the bottom of the shroud support cylinder.

3.2 Future Crack Growth Predictions

An evaluation of current operating conditions at Monticello was performed relative to predicted growth of the identified indication, with the results documented in Appendix B of Reference 8. The current water chemistry conditions in the Monticello lower plenum were considered, and it is concluded that growth of the identified indication should be bounded by a crack growth rate of 5×10^{-6} inches/hour, or 0.086" for one twenty-four month operating cycle. Use the leg width of 7" from Table 1, and conservatively assume that crack grows from both ends of a leg, the number of years cracks can grow before they reach 72.5% of the total width is given as:

$$72.5\% \quad 7" / (5 \times 10^{-6} \text{ inches/hour} \times 2) = 57.9 \text{ years}$$

4.0 CONCLUSIONS

Based on the safety factors shown in Table 2, it is seen that there is margin assuming 50% of the leg width was cracked along with one leg cracked 100%. In fact, as shown in Table 3, the safety factor limited was reached when 72.5% of the leg width was assumed cracked through-wall along with one leg cracked 100%. These results are considered to be extremely conservative because no structural support from welds H8 and H9 was considered. Therefore, if some structural support from welds H8 and H9 is considered (as a result of inspection of these welds), it is expected that significantly larger margins would be obtained.

Based on the results of this conservative evaluation, up to 72.5% of each support leg H10 weld may be flawed and still meet the required safety factors of BWRVIP-38. The current indications are relatively small and essentially not propagating. Even if crack growth is postulated (@ 5×10^{-6} in/hr) per Reference 8, the required safety factors would be met for several operating cycles.

5.0 REFERENCES

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Vendor Proprietary Information
16 pages
(available for NRC review upon request)



External Design Document Suitability Review Checklist

External Design Document Being Reviewed: EC14116

Title: **Evaluation of the Monticello Shroud Support Leg Indications: 2009 Inspection**

Number: 0900485.301

Rev: 0

Date: 4/24/2009

This design document was received from:

Organization Name: Structural Integrity
Associates

PO or DIA Reference: Contract Req 65115

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The reviewer should use the criteria below as a guide to assess the overall quality, completeness and usefulness of the design document. The reviewer is not required to check calculations in detail.

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Completed by: David Potter

A handwritten signature in black ink, appearing to read 'David Potter'.

Date: 4/28/2009