



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

February 6, 2013

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

**SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT - NRC INTEGRATED  
INSPECTION REPORT 05000263/2012005**

Dear Mr. Schimmel:

On December 31, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Monticello Nuclear Generating Plant. The enclosed report documents the inspection results, which were discussed on January 9, 2013, with J. Grubb and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

One self-revealed finding of very low safety significance (Green) was identified during this inspection.

This finding was determined to involve a violation of NRC requirements. The NRC is treating this violation as a non-cited violation (NCV) consistent with Section 2.3.2 of the Enforcement Policy. Additionally, a licensee-identified violation is listed in Section 4OA7 of this report.

If you contest the subject or severity of this NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, - Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Monticello Nuclear Generating Plant. In addition, if you disagree with a cross-cutting aspect assigned to any finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region III, and the NRC Resident Inspector at the Monticello Nuclear Generating Plant.

M. Schimmel

-2-

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

***/RA/***

Kenneth Riemer, Branch Chief  
Branch 2  
Division of Reactor Projects

Docket No. 50-263  
License No. DPR-22

Enclosure: Inspection Report 05000263/2012005;  
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ™

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-263  
License No: DPR-22

Report No: 05000263/2012005

Licensee: Northern States Power Company, Minnesota

Facility: Monticello Nuclear Generating Plant

Location: Monticello, MN

Dates: October 1 through December 31, 2012

Inspectors: S. Thomas, Senior Resident Inspector  
P. Voss, Resident Inspector  
J. Bozga, Reactor Inspector, DRS  
M. Learn, Reactor Engineer, DNMS  
P. Zurawski, Prairie Island Resident Inspector  
M. Phalen, Senior Health Physicist  
J. Laughlin, Emergency Preparedness Inspector  
D. McNeil, Senior Operations Engineer  
M. A. Jones Jr., Reactor Engineer

Approved by: K. Riemer, Branch Chief  
Branch 2  
Division of Reactor Projects

Enclosure

## TABLE OF CONTENTS

SUMMARY OF FINDINGS .....	1
REPORT DETAILS .....	3
Summary of Plant Status.....	3
1. REACTOR SAFETY .....	3
1R01 Adverse Weather Protection (71111.01) .....	3
1R04 Equipment Alignment (71111.04) .....	4
1R05 Fire Protection (71111.05) .....	5
1R06 Flooding (71111.06).....	6
1R11 Licensed Operator Requalification Program (71111.11).....	6
1R12 Maintenance Effectiveness (71111.12) .....	9
1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13).....	10
1R15 Operability Determinations and Functional Assessments (71111.15) .....	13
1R18 Plant Modifications (71111.18) .....	13
1R19 Post-Maintenance Testing (71111.19).....	14
1R22 Surveillance Testing (71111.22).....	15
1EP4 Emergency Action Level and Emergency Plan Changes (71114.04).....	16
2RS2 Occupational As-Low-As-Is-Reasonably-Achievable Planning and Controls (71124.02) .....	16
4. OTHER ACTIVITIES .....	17
4OA1 Performance Indicator Verification (71151) .....	17
4OA2 Identification and Resolution of Problems (71152) .....	18
4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153).....	20
4OA5 Other Activities.....	22
4OA6 Management Meetings .....	24
4OA7 Licensee-Identified Violations .....	24
SUPPLEMENTAL INFORMATION .....	1
KEY POINTS OF CONTACT .....	1
LIST OF ITEMS OPENED, CLOSED AND DISCUSSED .....	2
LIST OF DOCUMENTS REVIEWED .....	3
LIST OF ACRONYMS USED .....	8

## SUMMARY OF FINDINGS

Inspection Report (IR) 05000263/2012005; 10/01/2012 – 12/31/2012; Monticello Nuclear Generating Plant; Maintenance Risk Assessment and Emergent Work Control.

This report covers a three-month period of inspection by resident inspectors and announced baseline inspections by regional inspectors. One Green finding was identified by the inspectors. The finding was considered a non-cited violation (NCV) of NRC regulations. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### A. NRC-Identified and Self-Revealed Findings

#### **Cornerstone: Mitigating Systems**

- Green. A self-revealed finding of very low safety significance and non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when the licensee failed to properly restore the reactor core isolation cooling (RCIC) system to an operable status subsequent to completing planned maintenance on the system. Specifically, to facilitate the removal of foreign material from the breaker cubicle, operators manipulated two electrical breakers, (D311-11 and D311-12), without procedural guidance or approval of shift supervision, subsequent to closing those breakers in accordance with clearance restoration instructions. Once identified, the licensee took prompt action to ensure that the affected breakers were in their appropriate positions. Additional immediate corrective actions taken by the licensee included disqualification of the operators that were involved and conducting an operations department standdown. As part of the standdown and prior to performing equipment manipulations, all operators participated in a discussion, lead by shift supervision, associated with the requirements and expectations contained in Fleet Procedure FP-OP-COO-17, "Conduct of Operations: Equipment Manipulations and Status Control." The licensee will also perform a root cause evaluation to review this event in more detail. This event was entered into the licensee's corrective action program (CAP 01358924).

The inspectors determined that operators manipulating safety-related equipment without the appropriate procedures or guidance was a performance deficiency, because it was the result of the failure to meet the requirements of FP-OP-COO-17, "Conduct of Operations," a procedure affecting quality; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors screened the performance deficiency per Inspection Manual Chapter (IMC) 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted the Human Performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone's objective to ensure the availability reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors applied IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," to this finding. The inspectors evaluated the issue under the Mitigating

Systems Cornerstone, and utilized Exhibit 2, “Mitigating Systems Screening Questions,” to screen the finding. The inspectors answered “No” to all the questions in Section A, “Mitigating SSCs and Functionality,” and Section B, “External Event Mitigating Systems,” and determined the finding to be of very low safety significance. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross-cutting area of Human Performance, having decision-making components, and involving aspects associated with making safety-significant or risk-significant decisions using a systematic process, especially when faced with uncertain or unexpected plant conditions, to ensure safety is maintained [H.1(a)]. (Section 1R13).

**B. Licensee-Identified Violation**

One violation of very low safety significance that was identified by the licensee has been reviewed by inspectors. Corrective actions planned or taken by the licensee have been entered into the licensee’s corrective action program. This violation and corrective action tracking numbers are listed in Section 4OA7 of this report.

## REPORT DETAILS

### Summary of Plant Status

Monticello operated at or near full power for the entire inspection period with the exception of brief reductions in power to support the performance of planned surveillances or control rod adjustments.

#### 1. REACTOR SAFETY

##### **Cornerstone: Initiating Events, Mitigating Systems, and Barrier Integrity**

#### 1R01 Adverse Weather Protection (71111.01)

##### .1 Winter Seasonal Readiness Preparations

###### a. Inspection Scope

The inspectors conducted a review of the licensee's preparations for winter conditions to verify that the plant's design features and implementation of procedures were sufficient to protect mitigating systems from the effects of adverse weather. Documentation for selected risk-significant systems was reviewed to ensure that these systems would remain functional when challenged by inclement weather. During the inspection, the inspectors focused on plant specific design features and the licensee's procedures used to mitigate or respond to adverse weather conditions. Additionally, the inspectors reviewed the Updated Safety Analysis Report (USAR) and performance requirements for systems selected for inspection, and verified that operator actions were appropriate as specified by plant specific procedures. Cold weather protection, such as heat tracing and area heaters, was verified to be in operation where applicable. The inspectors also reviewed corrective action program (CAP) items to verify that the licensee was identifying adverse weather issues at an appropriate threshold and entering them into their CAP in accordance with station corrective action procedures. Specific documents reviewed during this inspection are listed in the Attachment to this report. The inspectors' reviews focused specifically on the following plant systems due to their risk significance or susceptibility to cold weather issues:

- emergency diesel generators (EDGs);
- 13 diesel generator; and
- condensate storage tank.

This inspection constituted one winter seasonal readiness preparations sample as defined in Inspection Procedure (IP) 71111.01-05.

###### b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

.2 Quarterly Partial System Walkdowns (71111.04Q)

a. Inspection Scope

The inspectors performed partial system walkdowns of the following risk-significant systems:

- fuel oil system during planned maintenance on 11 EDG and diesel oil service pump;
- Division I residual heat removal service water (RHRSW) system during Division II residual heat removal (RHR) system maintenance; and
- Division I emergency service water (ESW) system during planned Division II ESW system maintenance.

The inspectors selected these systems based on their risk significance relative to the Reactor Safety Cornerstones at the time they were inspected. The inspectors attempted to identify any discrepancies that could impact the function of the system and, therefore, potentially increase risk. The inspectors reviewed applicable operating procedures, system diagrams, USAR, Technical Specification (TS) requirements, outstanding work orders (WOs), condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have rendered the systems incapable of performing their intended functions. The inspectors also walked down accessible portions of the systems to verify system components and support equipment were aligned correctly and operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no obvious deficiencies. The inspectors also verified that the licensee had properly identified and resolved equipment alignment problems that could cause initiating events or impact the capability of mitigating systems or barriers and entered them into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

These activities constituted three partial system walkdown samples as defined in IP 71111.04-05.

b. Findings

No findings were identified.

.3 Semi-Annual Complete System Walkdown (71111.04S)

a. Inspection Scope

During the week of December 15, 2012, the inspectors performed a complete system alignment inspection of the accessible portions of the reactor core isolation cooling (RCIC) system to verify the functional capability of the system. This system was selected because it was considered both safety significant and risk significant in the licensee's probabilistic risk assessment. The inspectors walked down the system to review mechanical and electrical equipment lineups; electrical power availability; system pressure and temperature indications, as appropriate; component labeling; component

lubrication; component and equipment cooling; hangers and supports; operability of support systems; and to ensure that ancillary equipment or debris did not interfere with equipment operation. A review of a sample of past and outstanding WOs was performed to determine whether any deficiencies significantly affected the system function. In addition, the inspectors reviewed the CAP database to ensure that system equipment alignment problems were being identified and appropriately resolved. Documents reviewed are listed in the Attachment to this report.

These activities constituted one complete system walkdown sample as defined in IP 71111.04-05.

b. Findings

No findings were identified.

1R05 Fire Protection (71111.05)

.1 Routine Resident Inspector Tours (71111.05Q)

a. Inspection Scope

The inspectors conducted fire protection walkdowns which were focused on availability, accessibility, and the condition of firefighting equipment in the following risk-significant plant areas:

- Fire Zone 13-B; reactor feedpump and lube oil reservoir room;
- Fire Zone 16 and 17; turbine building east and west (elevations 911' and 931') and north cable corridors;
- Fire Zone 31-B; emergency filtration train (EFT) building 1<sup>st</sup> floor (Division II);
- Fire Zone 1-F; torus area – elevation 896' and 923'; and
- Fire Zone 1-C; RCIC room.

The inspectors reviewed areas to assess if the licensee had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant; effectively maintained fire detection and suppression capability; maintained passive fire protection features in good material condition; and implemented adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems, or features in accordance with the licensee's fire plan.

The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights; their potential to impact equipment which could initiate or mitigate a plant transient; or their impact on the plant's ability to respond to a security event.

Using the documents listed in the Attachment to this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's CAP.

These activities constituted five quarterly fire protection inspection samples as defined in IP 71111.05-05.

b. Findings

No findings were identified.

1R06 Flooding (71111.06)

.1 Internal Flooding

a. Inspection Scope

The inspectors reviewed selected risk important plant design features and licensee procedures intended to protect the plant and its safety-related equipment from internal flooding events. The inspectors reviewed flood analyses and design documents, including the USAR; engineering calculations; and abnormal operating procedures to identify licensee commitments. In addition, the inspectors reviewed licensee drawings to identify areas and equipment that may be affected by internal flooding caused by the failure or misalignment of nearby sources of water, such as the fire suppression or the circulating water systems. The inspectors also reviewed the licensee's corrective action documents with respect to past flood-related items identified in the CAP to verify the adequacy of the corrective actions. The inspectors performed a walkdown of the following plant area to assess the adequacy of watertight doors and verify drains and sumps were clear of debris and were operable, and that the licensee complied with its commitments:

- RHR corner rooms.

This inspection constituted one internal flooding sample as defined in IP 71111.06-05.

b. Findings

No findings were identified.

1R11 Licensed Operator Regualification Program (71111.11)

.1 Resident Inspector Quarterly Review of Licensed Operator Regualification (71111.11Q)

a. Inspection Scope

On October 16, 2012, the inspectors observed a crew of licensed operators in the plant's simulator during licensed operator regualification training to verify that operator performance was adequate; evaluators were identifying and documenting crew performance problems; and training was being conducted in accordance with licensee procedures. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;

- correct use and implementation of abnormal and emergency procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions and Emergency Plan actions and notifications.

The crew's performance in these areas was compared to pre-established operator action expectations and successful critical task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator requalification program simulator sample as defined in IP 71111.11.

b. Findings

No findings were identified.

.2 Resident Inspector Quarterly Observation of Heightened Activity or Risk (71111.11Q)

a. Inspection Scope

On November 17, 2012, the inspectors observed operators in the control room perform Procedure 8397, "Fuel Channel Distortion Testing," Part B, "Periodic Settle Testing at Rated Pressure." This was an activity that required heightened awareness or was related to increased risk. The inspectors evaluated the following areas:

- licensed operator performance;
- crew's clarity and formality of communications;
- ability to take timely actions in the conservative direction;
- prioritization, interpretation, and verification of annunciator alarms;
- correct use and implementation of procedures;
- control board manipulations;
- oversight and direction from supervisors; and
- ability to identify and implement appropriate TS actions.

The performance in these areas was compared to pre-established operator action expectations, procedural compliance, and task completion requirements. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly licensed operator heightened activity/risk sample as defined in IP 71111.11.

b. Findings

No findings were identified.

.2 Annual Operating Test Results (71111.11A)

a. Inspection Scope

The inspectors reviewed the overall pass/fail results of the Annual Operating Test, administered by the licensee from September 24, 2012, through November 14, 2012, required by 10 CFR 55.59(a). The results were compared to the thresholds established in Inspection Manual Chapter (IMC) 0609, Appendix I, "Licensed Operator Requalification Significance Determination Process (SDP)," to assess the overall adequacy of the licensee's program to meet the requirements of 10 CFR 55.59.

This inspection constitutes one biennial licensed operator requalification inspection sample as defined in IP 71111.11-05.

b. Findings

No findings were identified.

.3 Conformance with Examination Security Requirements (10 CFR 55.49)

a. Inspection Scope

The inspectors conducted an assessment of the licensee's processes related to examination integrity (e.g., control of licensed operators during operating tests) to verify compliance with 10 CFR 55.49, "Integrity of Examinations and Tests." The inspectors reviewed the facility licensee's examination security error and compared it to NRC requirements.

b. Findings

During breakdown of exam security on October 23, 2012, it was noted that one of the computers located in the simulator computer room was unlocked with an exam security sign over the screen. This was unexpected as the setup checklist locks out this computer monitor. Investigation revealed that the source selectors for monitors within the simulator control room are able to access this computer. Prior to starting the last scenario of the day, one of the simulator control room computers was found with a locked screen. When the computer was unlocked and an appropriate Safety Parameter Display System screen brought up for the crew, the screen in the computer room was also unlocked because the selection had been changed to select that computer. Locking the computer screen in the computer room per the security setup checklist is an additional exam security barrier that exists because this room was not originally within the physical confines of the exam security boundary. The setup checklist has been modified to add the computer room to the exam security boundary. There was no exam compromise as the primary barrier of chains/signs outside of this room was in place.

The PAB 2 meeting room was reserved in September to be used during the Licensed Operator Requalification NRC exam for sequestering operators during in-plant job performance maintenance. The room was reserved each Wednesday from seven to three for sequestering from September 19 to October 31. At 10:00 on October 17, 2012, a group of managers informed the sequesterer and operators that they were conducting a meeting in the room and the individuals who had the room reserved would have to leave. This resulted in temporarily having to sequester the operators in the break room

until an office was procured. This presented a significant risk to maintaining exam security as other operators who were not being examined were also using the break room. No exam compromise occurred.

1R12 Maintenance Effectiveness (71111.12)

.1 Routine Quarterly Evaluations (71111.12Q)

a. Inspection Scope

The inspectors evaluated degraded performance issues involving the following risk-significant system:

- EFT

The inspectors reviewed events such as where ineffective equipment maintenance had resulted in valid or invalid automatic actuations of engineered safeguards systems and independently verified the licensee's actions to address system performance or condition problems in terms of the following:

- implementing appropriate work practices;
- identifying and addressing common cause failures;
- scoping of systems in accordance with 10 CFR 50.65(b) of the Maintenance Rule;
- characterizing system reliability issues for performance;
- charging unavailability for performance;
- trending key parameters for condition monitoring;
- ensuring 10 CFR 50.65(a)(1) or (a)(2) classification or re-classification; and
- verifying appropriate performance criteria for structures, systems, and components (SSCs)/functions classified as (a)(2), or appropriate and adequate goals and corrective actions for systems classified as (a)(1).

The inspectors assessed performance issues with respect to the reliability, availability, and condition monitoring of the system. In addition, the inspectors verified maintenance effectiveness issues were entered into the CAP with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one quarterly maintenance effectiveness sample as defined in IP 71111.12-05.

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)

.1 Maintenance Risk Assessments and Emergent Work Control

a. Inspection Scope

The inspectors reviewed the licensee's evaluation and management of plant risk for the maintenance and emergent work activities affecting risk-significant and safety-related equipment listed below to verify that the appropriate risk assessments were performed prior to removing equipment for work:

- unexpected loss of crossflow system results in false core thermal power indication;
- inadequate clearance restoration leads to unplanned RCIC system inoperability;
- clean and inspect Y81 uninterruptible power supply; and
- yellow risk for No. 12 EDG maintenance window.

These activities were selected based on their potential risk significance relative to the Reactor Safety Cornerstones. As applicable for each activity, the inspectors verified that risk assessments were performed as required by 10 CFR 50.65(a)(4) and were accurate and complete. When emergent work was performed, the inspectors verified that the plant risk was promptly reassessed and managed. The inspectors reviewed the scope of maintenance work; discussed the results of the assessment with the licensee's probabilistic risk analyst or shift technical advisor; and verified plant conditions were consistent with the risk assessment. The inspectors also reviewed TS requirements and walked down portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met. Specific documents reviewed during this inspection are listed in the Attachment to this report.

These maintenance risk assessments and emergent work control activities constituted four samples as defined in IP 71111.13-05.

b. Findings

Introduction

A self-revealed finding of very low safety significance and non-cited violation (NCV) of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," was identified when the licensee failed to properly restore the RCIC system to an operable status subsequent to completing planned maintenance on the system. Specifically, to facilitate the removal of foreign material from the breaker cubicle, operators manipulated two electrical breakers, (D311-11 and D311-12), without procedural guidance or approval of shift supervision, subsequent to closing those breakers in accordance with clearance restoration instructions.

Description

On November 12, 2012, the licensee completed a planned maintenance activity on the RCIC system. The following is a timeline which documents the status of the RCIC system for the next several hours after the maintenance was completed:

- 11/12/2012 (14:24): Clearance isolation lifted, RCIC declared available, and core damage frequency (CDF) changed from Yellow to Green.
- 11/12/2012 (17:23): RCIC declared operable and applicable TS actions exited.
- 11/13/2012 (02:04): RCIC declared inoperable, with applicable TS actions entered, to perform planned surveillance testing.
- 11/13/2012 (03:10): RCIC pump discharge inboard isolation valve would not open as required by the surveillance. A subsequent investigation revealed the valve's motor power supply breaker (D311-12) was in the OFF position. RCIC declared unavailable and CDF changed from Green to Yellow.
- 11/13/2012 (04:12): D311-12 was positioned to ON. RCIC declared available and CDF was changed back to Green.

The clearance isolation that supported the initial RCIC planned maintenance activity included two breakers D311-12 (RCIC pump discharge outboard isolation) and D311-11 (RCIC pump discharge inboard isolation). Upon completion of the RCIC work window, two licensed operators were tasked with lifting the associated clearance order. This activity included the restoration of both the D311-11 and D311-12 breakers to the ON position. After completing the restoration of these two breakers to the ON position, the operators noted some foreign material caught between the D311-11 and D311-12 cubicle doors. Without procedural guidance or approval of shift supervision, the operator returned both breakers to the OFF position and opened the breaker cubicle doors to retrieve the material. Again, without procedural guidance or approval of shift supervision, the operators repositioned D311-11 to the ON position, but did not return D311-12 to the ON position. This configuration control issue was not discovered until MO-2016 would not operate as required during RCIC surveillance testing that was performed several hours later. The impacts of this configuration control issue included:

- RCIC inappropriately being declared available with one of its pump discharge isolation valve closed and the power to its motor operator de-energized (approximately 13 hours);
- Operations inappropriately reducing the CDF risk classification from Yellow to Green, based on the belief that RCIC was available (approximately 13 hours); and
- not entering the applicable TS action associated with RCIC being inoperable (approximately 8.5 hours).

Once identified, the licensee took prompt action to restore breaker D311-12 to the ON position. The licensee also verified that the high pressure coolant injection (HPCI) system remained operable during the period of RCIC unavailability. Additional immediate corrective actions taken by the licensee included disqualification of the operators that were involved and conducting an operations department standdown. As part of the standdown and prior to performing equipment manipulations, all operators participated in a discussion, lead by shift supervision, associated with the requirements and expectations contained in Fleet Procedure FP-OP-COO-17, "Conduct of Operations: Equipment Manipulations and Status Control." The licensee will also perform a root cause evaluation to review this event in more detail. This event was entered into the licensee's corrective action program (CAP 01358924).

## Analysis

The inspectors determined that operators manipulating safety-related equipment without the appropriate procedures or guidance was a performance deficiency, because it was the result of the failure to meet the requirements of FP-OP-COO-17, "Conduct of Operations," a procedure affecting quality; the cause was reasonably within the licensee's ability to foresee and correct; and should have been prevented. The inspectors determined that the contributing cause that provided the most insight into the performance deficiency was associated with the cross-cutting area of Human Performance, having work having decision-making components, and involving aspects associated with making safety-significant or risk-significant decisions using a systematic process, especially when faced with uncertain or unexpected plant conditions, to ensure safety is maintained [H.1(a)].

The inspectors screened the performance deficiency per IMC 0612, "Power Reactor Inspection Reports," Appendix B, and determined that the issue was more than minor because it impacted the Human Performance attribute of the Mitigating Systems Cornerstone and affected the cornerstone's objective to ensure the availability reliability, and capability of systems that respond to initiating events to prevent undesirable consequences (i.e. core damage). The inspectors applied IMC 0609, Appendix A, "The Significance Determination Process (SDP) for Findings At-Power," to this finding. The inspectors evaluated the issue under the Mitigating Systems Cornerstone, and utilized Exhibit 2, "Mitigating Systems Screening Questions," to screen the finding. The inspectors answered "No" to all the questions in Section A, "Mitigating SSCs and Functionality," and Section B, "External Event Mitigating Systems," and determined the finding to be of very low safety significance (Green).

## Enforcement

Title 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality shall be prescribed by documented procedures, of a type appropriate to the circumstances, and shall be accomplished in accordance with these procedures. Contrary to this requirement, on November 11, 2012, the licensee failed to follow Step 5.2.1 of FP-OP-COO-17, "Conduct of Operations," a procedure affecting quality, during the restoration of the RCIC system following a planned maintenance activity. Specifically, when operators manipulated electrical breakers D311-11 and D311-12 subsequent to closing those breakers per a clearance restoration step, the licensee failed to ensure that all equipment manipulations were performed by qualified personnel in accordance with procedures and/or were approved by shift supervision. Because the violation was of very low safety significance and was entered into the licensee's corrective action program (CAP 01358924), this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy. (**NCV 05000263/2012005-01; Manipulation of Safety Related Equipment without Appropriate Guidance or Approval of Shift Supervision**)

1R15 Operability Determinations and Functional Assessments (71111.15)

.1 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following issues:

- HPCI room cooler leaking service water.

The inspectors selected these potential operability issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the evaluations to ensure that TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TS and USAR to the licensee's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations. Additionally, the inspectors reviewed a sampling of corrective action documents to verify that the licensee was identifying and correcting any deficiencies associated with operability evaluations. Documents reviewed are listed in the Attachment to this report.

This operability inspection constituted one sample as defined in IP 71111.15-05.

b. Findings

No findings were identified.

1R18 Plant Modifications (71111.18)

.1 Plant Modifications

a. Inspection Scope

The inspectors reviewed the following modification:

- EC 19929; T-Mod for T-44, diesel fuel oil tank cleaning and inspection.

The inspectors reviewed the configuration changes and associated 10 CFR 50.59 safety evaluation screening against the design basis, the USAR, and the TS, as applicable, to verify that the modification did not affect the operability or availability of the affected system. The inspectors, as applicable, observed ongoing and completed work activities to ensure that the modifications were installed as directed and consistent with the design control documents; the modifications operated as expected; post-modification testing adequately demonstrated continued system operability, availability, and reliability; and that operation of the modifications did not impact the operability of any interfacing systems. As applicable, the inspectors verified that relevant procedure, design, and licensing documents were properly updated. Lastly, the inspectors discussed the plant

modification with operations, engineering, and training personnel to ensure that the individuals were aware of how the operation with the plant modification in place could impact overall plant performance. Documents reviewed in the course of this inspection are listed in the Attachment to this report.

This inspection constituted one temporary modification sample as defined in IP 71111.18-05.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19)

.1 Post-Maintenance Testing

a. Inspection Scope

The inspectors reviewed the following post-maintenance (PM) activities to verify that procedures and test activities were adequate to ensure system operability and functional capability:

- K61D and K62D plant protection system Agastat relay replacement;
- 14 RHRSW pump replacement;
- 12 EDG/EDG-ESW following maintenance window;
- HPCI comprehensive test following work window; and
- core spray comprehensive and breaker test following work window.

These activities were selected based upon the SSCs ability to impact risk. The inspectors evaluated these activities for the following (as applicable): the effect of testing on the plant had been adequately addressed; testing was adequate for the maintenance performed; acceptance criteria were clear and demonstrated operational readiness; test instrumentation was appropriate; tests were performed as written in accordance with properly reviewed and approved procedures; equipment was returned to its operational status following testing (temporary modifications or jumpers required for test performance were properly removed after test completion); and test documentation was properly evaluated. The inspectors evaluated the activities against TSSs, the USAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with PM tests to determine whether the licensee was identifying problems and entering them in the CAP and that the problems were being corrected commensurate with their importance to safety. Documents reviewed are listed in the Attachment to this report.

These inspections constituted five PM testing samples as defined in IP 71111.19-05.

b. Findings

No findings were identified.

## 1R22 Surveillance Testing (71111.22)

### .1 Surveillance Testing

#### a. Inspection Scope

The inspectors reviewed the test results for the following activities to determine whether risk-significant systems and equipment were capable of performing their intended safety function and to verify testing was conducted in accordance with applicable procedural and TS requirements:

- 0003; drywell high pressure scram and group 2, 3, and secondary containment isolation test and calibration procedure (routine);
- 0255-18-IC; traversing in-core probe (TIP) explosive valve testing and monitoring (routine);
- 0255-05-III-4A; 14 RHRSW comprehensive pump and valve test (inservice test (IST));
- 0255-04-III-1A; RHR 'B' comprehensive pump and valve tests (routine);
- 0138; drywell personnel airlock pressure and leak test (routine); and
- 0533; containment sump flow measurement instrumentation (reactor coolant system (RCS) leakage).

The inspectors observed in-plant activities and reviewed procedures and associated records to determine the following:

- did preconditioning occur;
- were the effects of the testing adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- were acceptance criteria clearly stated, demonstrated operational readiness, and consistent with the system design basis;
- plant equipment calibration was correct, accurate, and properly documented;
- as-left setpoints were within required ranges; and the calibration frequency was in accordance with TSs, the USAR, procedures, and applicable commitments;
- measuring and test equipment calibration was current;
- test equipment was used within the required range and accuracy; applicable prerequisites described in the test procedures were satisfied;
- test frequencies met TS requirements to demonstrate operability and reliability; tests were performed in accordance with the test procedures and other applicable procedures; jumpers and lifted leads were controlled and restored where used;
- test data and results were accurate, complete, within limits, and valid;
- test equipment was removed after testing;
- where applicable for IST activities, testing was performed in accordance with the applicable version of Section XI, American Society of Mechanical Engineers code, and reference values were consistent with the system design basis;
- where applicable, test results not meeting acceptance criteria were addressed with an adequate operability evaluation or the system or component was declared inoperable;
- where applicable for safety-related instrument control surveillance tests, reference setting data were accurately incorporated in the test procedure;

- where applicable, actual conditions encountering high resistance electrical contacts were such that the intended safety function could still be accomplished;
- prior procedure changes had not provided an opportunity to identify problems encountered during the performance of the surveillance or calibration test;
- equipment was returned to a position or status required to support the performance of its safety functions; and
- all problems identified during the testing were appropriately documented and dispositioned in the CAP.

Documents reviewed are listed in the Attachment to this report.

This inspection constituted four routine surveillance testing samples, one IST sample, and one RCS leakage sample as defined in IP 71111.22, Sections -02 and -05.

b. Findings

No findings were identified.

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04)

a. Inspection Scope

Nuclear Security and Incident Response (NSIR) headquarters staff performed an in-office review of the latest revisions of the Emergency Plan and various Emergency Plan Implementing Procedures (EPIPs) located under ADAMS accession numbers ML12065A158, ML12121A240, ML121850657, and ML12205A056 as listed in the Attachment.

The licensee transmitted the EPIP revisions to the NRC pursuant to the requirements of 10 CFR 50, Appendix E, Section V, "Implementing Procedures." The NRC review was not documented in a safety evaluation report and did not constitute approval of licensee-generated changes; therefore, this revision is subject to future inspection. The specific documents reviewed during this inspection are listed in the Attachment to this report.

b. Findings

No findings were identified.

**2. RADIATION SAFETY**

2RS2 Occupational As-Low-As-Is-Reasonably-Achievable Planning and Controls (71124.02)

These inspection activities supplement those documented in NRC Inspection Report 05000263/2012004 and constitute a partial sample as defined in IP 71124.02-05.

.1 Radiation Worker Performance (02.05)

a. Inspection Scope

The inspectors observed radiation worker and radiation protection technician performance during work activities being performed in radiation areas, airborne

radioactivity areas, or high radiation areas. The inspectors evaluated whether workers demonstrated the as-low-as-is-reasonably-achievable (ALARA) philosophy in practice, (e.g., workers are familiar with the work activity scope and tools to be used, workers used ALARA low-dose waiting areas), and whether there were any procedure compliance issues, (e.g., workers are not complying with work activity controls). The inspectors observed radiation worker performance to assess whether the training and skill level was sufficient with respect to the radiological hazards and the work involved. Work reviewed was specific to the contamination control coating of the old steam dryer on the refuel floor.

b. Findings

No findings were identified.

**4. OTHER ACTIVITIES**

**Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, and Emergency Preparedness**

40A1 Performance Indicator Verification (71151)

.1 Mitigating Systems Performance Index - Residual Heat Removal System

a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index (MSPI) - RHR System performance indicator (PI) for the period from the 4<sup>th</sup> Quarter of 2011 through the 3<sup>rd</sup> Quarter of 2012. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, dated October 2009, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated Inspection Reports for this period to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified.

This inspection constituted one MSPI RHR system sample as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Mitigating Systems Performance Index - Cooling Water Systems

a. Inspection Scope

The inspectors sampled licensee submittals for the MSPI - Cooling Water Systems PI for the period from the 4<sup>th</sup> Quarter of 2011 through the 3<sup>rd</sup> Quarter of 2012. To determine the

accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, dated October 2009, were used. The inspectors reviewed the licensee's operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated Inspection Reports for this period to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's issue report database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified.

This inspection constituted one MSPI cooling water system sample as defined in IP 71151-05.

b. Findings

No findings were identified.

40A2 Identification and Resolution of Problems (71152)

**Cornerstones: Initiating Events, Mitigating Systems, Barrier Integrity, Emergency Preparedness, Public Radiation Safety, Occupational Radiation Safety, and Physical Protection**

.1 Routine Review of Items Entered into the Corrective Action Program

a. Inspection Scope

As part of the various baseline inspection procedures discussed in previous sections of this report, the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that they were being entered into the licensee's CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. Attributes reviewed included: identification of the problem was complete and accurate; timeliness was commensurate with the safety significance; evaluation and disposition of performance issues, generic implications, common causes, contributing factors, root causes, extent-of-condition reviews, and previous occurrences reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue. Minor issues entered into the licensee's CAP as a result of the inspectors' observations are included in the Attachment to this report.

These routine reviews for the identification and resolution of problems did not constitute any additional inspection samples. Instead, by procedure, they were considered an integral part of the inspections performed during the quarter and documented in Section 1 of this report.

b. Findings

No findings were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the licensee's CAP. This review was accomplished through inspection of the station's daily condition report packages.

These daily reviews were performed by procedure as part of the inspectors' daily plant status monitoring activities and, as such, did not constitute any separate inspection samples.

b. Findings

No findings were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector CAP item screening discussed in Section 40A2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the six month period of July 1, 2012, through December 31, 2012, although some examples expanded beyond those dates where the scope of the trend warranted.

The review also included issues documented outside the normal CAP in major equipment problem lists; repetitive and/or rework maintenance lists; departmental problem/challenges lists; system health reports; quality assurance audit/surveillance reports; self assessment reports; and Maintenance Rule assessments. The inspectors compared and contrasted their results with the results contained in the licensee's CAP trending reports. Corrective actions associated with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy.

This review constituted a single semi-annual trend inspection sample as defined in IP 71152-05.

b. Findings

No findings were identified.

.4 Selected Issue Follow-Up Inspection: AR 1290843, "Spent Fuel Cask Height Restriction is not in USAR," dated June 16, 2011

a. Inspection Scope

The inspectors performed a review to assess adequacy of the incorporation of spent fuel cask lift height restrictions into the licensing basis. The inspectors reviewed site

procedures and evaluations as well as related condition reports to assess the adequacy of the licensee extent-of-condition for incorporation of spent fuel cask lift height restrictions into the licensing basis.

b. Observations

The inspectors reviewed historical correspondence between the licensee and the NRC, and the licensee's USAR to ensure that the spent fuel cask lift restrictions were incorporated into the license basis. The inspectors reviewed the site procedures to ensure that the licensee had incorporated spent fuel cask lift height restrictions. The inspectors reviewed calculations performed by the licensee to establish cask lift heights for the Transnuclear transfer cask (TC).

The inspectors reviewed the licensee's extent of condition assessment regarding the reactor building overhead crane (RBOC) and TC licensing basis. Specifically the inspectors reviewed correspondence between the licensee and the NRC, which formulated the licensee's control of heavy loads program licensing basis, to ensure regulatory commitments were included as necessary into the licensee's USAR. The inspectors reviewed the licensee's licensing basis for utilization of the RBOC to lift the TC throughout the reactor building. The inspectors reviewed the aforementioned information and consulted with technical staff from the office of Nuclear Reactor Regulation (NRR) and Nuclear Material Safety and Safeguards (NMSS) to assess the adequacy of the extent of condition.

This review constituted one in-depth problem identification and resolution sample as defined in IP 71152-05.

c. Findings

No findings of significance were identified.

40A3 Follow-Up of Events and Notices of Enforcement Discretion (71153)

.1 (Closed) Licensee Event Report (LER) 05000263/2012-001: Degraded Voltage Transfer Not in Compliance with TS. 3.3.8.1

On May 8, 2012, it was determined that the licensee did not meet the requirements of TS 3.3.8.1, "Limiting Condition for Operation," because the requirement for the 4.16 kV essential bus degraded voltage function time delay relay transfer to the EDGs of less than or equal to 9.2 seconds could not be met under all postulated conditions. The degraded voltage transfer scheme had the ability to transfer to the 1AR transformer which, under a degraded voltage condition, would delay the transfer to the EDGs an additional five seconds. This issue was identified by the inspectors during a Component Design Basis Inspection (CDBI) performed at Monticello during March 19, 2012 to May 30, 2012.

Interim corrective action taken by the licensee was to remove the 1AR transformer from service, which disabled the additional five second degraded time delay relay, and restored TS compliance. Additionally, the licensee requested, and received, a license amendment which recognized the removal of the five second time delay for the 1AR transformer and the direct transfer of the essential buses to the EDGs under a degraded voltage conditions. Subsequent to receiving the approved licensee

amendment, the licensee implemented a temporary modification which bypassed the five second time delay relays and facilitated the direct transfer of the essential buses to the EDGs under degraded voltage conditions. Once completed, the 1AR transformer was returned to service.

A detailed discussion of the issue and associated NCV 05000263/2012007-03, "Failure to Maintain the Degraded Voltage Function Time Delay Design Documents," was documented in the CDBI NRC Inspection Report 05000263/2012007. This LER is closed.

This event follow-up review constituted one sample as defined in IP 71153-05.

.2 (Closed) Licensee Event Report (LER) 05000263/2012-003: Automatic Reactor Scram during Maintenance on 4160V 12-Bus Ammeter

a. Inspection Scope

This event, which occurred on September 25, 2012, involved a reactor scram which was caused by maintenance activities associated with a 4160V 12-bus ammeter. During maintenance on a 4160V bus 12 ammeter, a bus 12 lockout occurred. At the time of the lockout, the station was powered from the 1R reserve transformer to support work activities on the 2R auxiliary transformer.

When bus 12 deenergized, power was lost to 12 reactor feed pump and 12 reactor recirculation pump. The subsequent transient resulted in reactor water level increasing to the reactor water level hi hi setpoint (+48"). The main turbine and 11 reactor feed pump tripped as designed, and a reactor scram occurred. Reactor water level began to drop, and C.4.A, "Abnormal Procedure," for a scram was used to restart the 11 reactor feed pump and recover water level. The reactor low level SCRAM signal and Group 2 primary containment isolation occurred at +9 inches as designed. The reactor plant was stabilized in Mode 3 while the licensee investigated the cause of the bus 12 lockout.

The root cause of the event was determined to be that fleet work management guidance did not require the appropriate level of detail in work plans needed to allow identification of the potential impacts when applying energy sources to plant equipment. Specifically, during a 12-bus maintenance activity, when workers used test equipment to apply an electrical current to the circuit being worked on, protective relays detected a mismatch in currents between the electrical phases, and actuated to lock out bus 12. The licensee determined that the work plan did not contain the appropriate amount of detail in the steps to prevent the test equipment from causing this protective relay actuation. The inspectors reviewed the licensee's conclusions and corrective actions associated with the event. No findings were identified in this report. One finding was documented in 3<sup>rd</sup> Quarter NRC Integrated Inspection Report 05000263/2012004, for the lack of appropriate procedural guidance associated with the maintenance activity. Documents reviewed as part of this inspection are listed in the Attachment to this report. This LER is closed.

This event follow-up review constituted one sample as defined in IP 71153-05.

#### 4OA5 Other Activities

.1 (Closed) NRC Temporary Instruction 2515/177: Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems (NRC Generic Letter 2008-01)

a. Inspection Scope

During an earlier inspection period, the inspectors verified the licensee implemented or was in the process of implementing the commitments, modifications, and programmatically controlled actions described in the licensee's response to NRC Generic Letter (GL) 2008-01, "Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems." This earlier activity was conducted in accordance with Temporary Instruction (TI) 2515/177 and was documented in NRC Inspection Report 05000263/2012007(DRS). The TI remained opened for Monticello because, at the conclusion of the inspection period, questions remained unresolved regarding the licensee's interactions with the boiling water reactor (BWR) Owner's Group to resolve the design deficiency and to address the potential license concern related to the Note in TS 3.5.1.

During this inspection period, the inspectors reengaged the licensee regarding the status of the Owners' Group's analysis and the status of their corrective actions. Based on the results documented in NRC Inspection Report 05000263/2012007 and follow-up interviews with the licensee, inspectors have determined the continuing efforts to resolve the TS 3.5.1, "Emergency Core Cooling System (ECCS)," operating issue in combination with the initiated compensatory actions appropriately addresses the immediate concern; therefore this TI is considered closed for MNGP.

The documents reviewed are listed in the Attachment to this report.

b. Findings

One licensee-identified violation is documented in Section 4OA7, addressing the lack of supporting analysis for low pressure coolant injection (LPCI) subsystem operability in Mode 3, in accordance with TS 3.5.1 "Note" that allows the manual realignment of LPCI.

.2 (Discussed) NRC Temporary Instruction 2515/187: Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns

a. Inspection Scope

Inspectors observed the licensee on a sampling basis, during their flooding procedure walkthrough, to verify that the licensee's walkdown activities were conducted using the methodology endorsed by the NRC. These walkdown activities are being performed at all sites in response to a letter from the NRC to licensees, entitled "Request for Information Pursuant to Title 10 of the *Code of Federal Regulations* 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident," dated March 12, 2012 (ADAMS Accession No. ML12053A340).

Enclosure 4 of the letter requested licensees to perform external flooding walkdowns using an NRC-endorsed walkdown methodology (ADAMS Accession No. ML12056A050). Nuclear Energy Institute Document 12-07 titled, "Guidelines for Performing Verification Walkdowns of Plant Protection Features," (ADAMS Accession No. ML12173A215) provided the NRC-endorsed methodology for assessing external flood protection and mitigation capabilities to verify that plant features, credited in the current licensing basis for protection and mitigation from external flood events, are available, functional, and properly maintained.

b. Findings

Findings or violations associated with the flooding walkdowns, if any, will be documented in the 1<sup>st</sup> or 2<sup>nd</sup> Quarter 2013 Integrated Inspection Reports.

.3 (Closed) NRC Temporary Instruction (TI) 2515/188: Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns

As documented in NRC Integrated Inspection Report 05000263/2012004, the inspectors completed the specified actions required by TI 2515/188. No findings were identified during that inspection effort. This TI is being closed in this report.

.4 (Closed) Unresolved Item (URI) 05000263/2012002-04: Monticello Susceptibility to Degraded Voltage and Under Voltage Conditions Identified by January 30, 2012, Event at the Byron Station

The licensee's position, as documented in OPR 01325199-01 is as follows. "The failure of phase C insulator at Byron Station that resulted in an open circuit condition caused an imbalanced voltage condition at their essential buses. At both Byron Station and Monticello Nuclear Generating Plant (MNGP), neither the degraded bus voltage nor the loss of voltage logic was designed to provide isolation due to an open phase connection resulting from a component failure. The degraded voltage logic is designed to monitor voltage at the 4kV essential buses to ensure that when connected to the offsite source, the voltage is adequate to provide for proper operation of safety related components. The design and licensing bases requirements do not require analysis of imbalanced voltage conditions resulting from equipment or component failures. Therefore, the degraded voltage relaying scheme is capable of responding to degraded grid conditions as described in the Monticello TS 3.3.8.1, Amendment 147, "LOP Instrumentation."

The inspectors reviewed the licensee's response to NRC Bulletin 2012-01, "Design Vulnerability in Electric Power Systems." Again, the licensee stated, in part, that "Since MNGP did not credit the engineered safety feature (ESF) bus protection scheme as being capable of detecting and automatically responding to a single phase open circuit condition, an open phase fault was not included in the design criteria for either the loss of voltage, or degraded voltage relay (DVR) design criteria." The inspectors also reviewed interim actions taken by the licensee, which provided guidance to the operators to aid in the diagnosis and response to single-phase open circuit events. Longer term corrective actions being considered by the licensee included more detailed modeling of their existing electrical distribution system and the addition of instrumentation that could detect and warn the operators of single-phase open circuit conditions.

Currently, the Agency is evaluating this as a generic industry issue. Based on the information licensees will submit in response to NRC Bulletin 2012-01, the Agency will determine whether additional actions are needed to ensure compliance with existing regulatory requirements and whether enhancements to the existing regulations or guidance, or both, are necessary. This issue is closed.

#### 40A6 Management Meetings

##### .1 Exit Meeting Summary

On January 9, 2013, the inspectors presented the inspection results to J. Grubb, and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

##### .2 Interim Exit Meetings

Interim exits were conducted for:

- The inspection results for the area of ALARA Planning and Controls by teleconference, with Mr. A. Zelig, Radiation Protection Manager, on November 13, 2012;
- The review of the licensee's results of the Annual Operating Test (IP 71111.11A) with Mr. P. Norgaard, Supervisor Operations Continuing Training, on November 18, 2012;
- The inspection results for the TI 2515/177 with Mr. M. Schimmel, Site Vice President, on December 7, 2012, and
- The results for the Spent Fuel Cask Height Restriction review to the Regulatory Affairs Manager, Peter Kissinger, and other members of the licensee's staff via telephone on December 18, 2012. Licensee personnel acknowledged the inspection results inspected.

The inspectors confirmed that none of the potential report input discussed was considered proprietary. Proprietary material received during the inspection was returned to the licensee.

#### 40A7 Licensee-Identified Violations

The following violation of very low significance (Green) was identified by the licensee and is a violation of NRC requirements, which meets the criteria of the NRC Enforcement Policy for being dispositioned as a NCV.

- A finding of very low safety significance (Green) and associated violation of 10 CFR Part 50, Appendix B, Criterion III "Design Control" was identified by the licensee for the failure to ensure the ECCS mode of operation of RHR would be capable of performing its mitigating function in Mode 3 following RHR realignment from its shutdown cooling mode of operation to the LPCI mode of operation while greater than 212 degrees Fahrenheit. Specifically, the operability requirements of RHR in Mode 3, as defined by TS 3.5.1, were not translated into applicable procedures or specifications of the system in that the procedures nor the design prevented the condition that would lead to steam void

formation during a loss of coolant accident (LOCA) that initiates at this mode resulting in steam binding of the systems pumps and/or an adverse water hammer. The performance deficiency was determined to be more than minor because it was associated with the Mitigating System Cornerstone attribute of equipment performance and affected the cornerstone objective of ensuring the capability of systems that respond to initiating events to prevent undesirable consequences. A Phase II SDP was conducted using IMC 0609, Appendix G. The finding screened as very low safety significance. The licensee entered this concern into its CAP as AR 01286645 and initiated a condition evaluation for "TS 3.5.1 ECCS Operating may be non-conservative". In the interim, the licensee has implemented procedure changes to address the potential flashing and water hammer concern, until an analysis is made available that supports LPCI operability in this scenario or until other corrective actions are taken. The licensee plans to evaluate the BWR Owners Group analysis of the postulated Mode 3 LOCA scenario and implement permanent procedural, design and/or licensing basis changes as necessary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

M. Schimmel, Site Vice President  
J. Grubb, Plant Manager  
W. Paulhardt, Operations Manager  
N. Haskell, Site Engineering Director  
K. Jepson, Assistant Plant Manager  
S. Mattson, Maintenance Manager  
M. Holmes, Chemistry Manager  
A. Zelig, Radiation Protection Manager  
P. Kissinger, Regulatory Affairs Manager  
T. Hedges, ALARA Supervisor  
P. Norgaard, Supervisor Operations Continuing Training  
R. Loeffler, Senior Licensing Engineer  
B. Halvorson, System Engineering  
C. Fosaaen, Licensing Engineer  
T. Erickson, Engineering Supervisor

#### Nuclear Regulatory Commission

K. Riemer, Chief, Reactor Projects Branch 2

## LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

### Opened

05000263/2012005-01	NCV	Manipulation of Safety Related Equipment without Appropriate Guidance or Approval of Shift Supervision (Section 1R13)
---------------------	-----	---

### Closed

05000263/2012005-01	NCV	Manipulation of Safety Related Equipment without Appropriate Guidance or Approval of Shift Supervision (Section 1R13)
05000263/2012-001-00	LER	Degraded Voltage Transfer Not in Compliance with T.S. 3.3.8.1 (Section 4OA3.1)
05000263/2012-003-00	LER	Automatic Reactor Scram during Maintenance on 4160V 12-Bus Ammeter (Section 4OA3.2)
2515/177	TI	Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems (NRC Generic Letter 2008-01) (Section 4OA5.1)
2515/188	TI	Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns (Section 4OA5.3)
05000263/2012-002-04	URI	Monticello Susceptibility to Degraded Voltage and Under Voltage Conditions Identified by January 30, 2012, Event at the Byron Station (Section 4OA5.4)

### Discussed

2515/187	TI	Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns (Section 4OA5.2)
----------	----	---

## LIST OF DOCUMENTS REVIEWED

The following is a partial list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspector reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

### Section 1R01

1151; Winter Checklist; Revision 74  
WO 543435; 1151 Winter Checklist; September 14, 2012  
CAP 1359337; AVBS-2 Auxiliary Heater Failed After Seasonal Startup  
CAP 1361491; Mech Maint Needs to Change Air Filters  
CAP 1263437; Winter Readiness Opportunity Missed for CT Hoists  
CAP 1353672; GFCI for Gearbox Heater will not Reset C.4-B.08.03.A; Loss of Heating Boiler A.6; Acts of Nature; Revision 43  
CAP 1267853; 1151 Winter Checklist Completed with a Missing Signoff  
CAP 1307646; WW 1140 Adherence Affected by 1151 Winter Checklist  
CAP 1326405; Poor Configuration Control of RCHW Valves Following 1151  
CAP 1351523; Step 17 of 1151 Winter Checklist Actions Unclear  
8136-04; Secondary Containment Penetration Work Control Checklist; Revision 17

### Section 1R04

2154-14; Fuel Oil System Prestart Valve Checklist; Revision 16  
2154-34; ESW System Prestart Valve Checklist; Revision 27  
2154-23; RHRSW System Prestart Valve Checklist; Revision 30  
MNGP System Health Report; RCIC; December 11, 2012  
2154-13; RCIC System Prestart Valve Checklist; Revision 25

### Section 1R05

Operations Manual B.08.05-01; Fire Protection—Function and General Description of System; Revision 10  
Operations Manual B.08.05-05; Fire Protection—System Operation; Revision 57  
Strategy A.3-13-B; Rx Feed Pump and Lube Oil Reservoir Room; Revision 11  
Strategy A.3-31-B; EFT Building 1<sup>st</sup> Floor (Div II); Revision 12  
Strategy A-3-16; Corridor, Turbine Building East and West (Elevations 911' and 931'); Revision 12  
Strategy A-3-17; Turbine Building (N. Cable Corridor); Revision 5  
Strategy A.3-01-C; RCIC Room; Revision 5  
Strategy A.3-01-F; Torus Area – Elevation 896' and 923'; Revision 7

### Section 1R06

1252 RHR Pump Room Sump Pump Surveillance Procedure; Revision 11  
DBD T.08; Design Basis Document for Internal Flooding

## Section 1R11

Simulator Guide RQ-SS-103

8397; Fuel Channel Distortion Monitoring; Revision 2

Monticello NRC Exam Results; November 14, 2012

CAP 01356131; Identification of a Gap with the Simulator Exam Security Checklist

CAP 01355427; Annual Operating Examination Sequestration Issue

## Section 1R12

NUMARC 93-01; Monitoring the Effectiveness of Maintenance at Nuclear Power Plants;  
Revision 4A

System Basis Document; Control Room H and V- EFT System; Revision 2

CAP 1326137; EFT Heater Trouble Alarm Following Start of V-ERF-11

CAP 1293262; Time Spent in TS Action Statement for 'A' EFT Extended

CAP 1338336; 50 Percent TS Action Time Exceeded on EFT LCO Due to Issue

CAP 1338570; V-ERF-11 and 12 (EFT Emergency Filter Fans) Reduced Flow Margin

CAP 1277363; V-ERF-12 Filter DP Observed to be Higher than Expected

0466-01; 'A' EFT Filter Efficiency and Leak Tests; Revision 34

CAP 1261978; Unable to Calibrate V-FE-11 Flow Indicator Within as Left

CAP 1351292; V-FE-11, Negative DP during 0472-01 Testing

CAP 1351955; V-FE-11 Indicated Flow Concerns

CAP 1338150; 'A' EFT Filter Fan Tripped Shortly After Start

CAP 1309870; B-EFT Train—Incorrect Temperature Cutout Switches Used

CAP 1319333; Found Grease in Motor Windings in V-ERF-14A and V-ERF-11

CAP 1352255; Acceptable but Lower than Typical V-FE-11 Heater Power

## Section 1R13

CAP 01356341; Loss of Crossflow Results in False Core Thermal Power Value

0187-02A; 12 EDG/ 12 ESW Comprehensive Pump and Valve Tests; Revision 28

4561-02-PM; Uninterruptible Power Supply (Y81); Revision 18

High Risk Plan for WO 463828-1; 44561-02-PM, Uninterruptible Power Supply (Y81)

WO 407330; Mech- C-94 Replace Missing Bolt; October 29, 2012

WO 454214; Elec—K-98, Routine Motor Lubrication- Div II; October 29, 2012

WO 454223; Elec—DG2/SSP2 Replace Switch; October 29, 2012

WO Mech-V-SF-9/MTR; Mechanical Offline Motor PM; October 29, 2012

OVI-02.01; Operations Shift Turnover; Revision 23

3151; Control Room Supervisor's Outage Turnover Checklist; Revision 7

3139; Control Room Shift Turnover Checklist; Revision 34

CAP 1352839; Outage and On-line Risk Management Procedures not Aligned

CAP 1357142; Control Room Duty Crew Unclear on CDF Color

CAP 1356863; CDF Change not Logged Appropriately

FP-OP-RSK-01; Risk Monitoring and Risk Management; Revision 2

SWI-14.01; Risk Management for Outage and On-line Activities; Revision 5

## Section 1R15

CAP 01354406; V-AC-8A Leaking Service Water into HPCI Room; October 8, 2012

ODMI 1354406; Operational Decision Making Evaluation Checklist – V-AC-8A Significant

Leakage from Service Water; Revision 1

USAR-06.02; Section 6.2.4 – HPCI System; Revision 29P  
DBD-B.03.02; Design Basis Document: HPCI; Revision 5  
CAP 01295222; Complete HPCI Insulation per EC 16751; July 19, 2011  
WO 420673; HPCI Water Piping Insulation Addition per EC 16751; Revision 0  
EC 16751; HPCI Water Piping Insulation Addition; Revision 0  
Calculation 96-020; HPCI Room Transient Temperature; Revision 5  
EC 20921; Code Case N-513-3 Evaluation of Cooling Coil V-AC-8A Leaking Flaw; Revision 0

### Section 1R18

EC 19929; T-Mod for T-44, Diesel Fuel Oil Tank Cleaning and Inspection

### Section 1R19

WO 400284-01; Replace K61D and K62D PPS Agastat Relays; Revision 8  
WO 400284-03; PM Test – K61D and K62D Agastat Relay Replacement  
Equivalency Evaluation 15847; Replace K61A thru D and K62A thru D with New Agastat  
004 Model; Revision 0  
WO 455179; Rebuild/replace 14 RHRSW Pump; November 5, 2012  
0255-05-IA-1-2; 'B' RHRSW Quarterly Pump and Valve Tests; Revision 75  
4214-PM; RHR Service Water Pump Replacement; Revision 9  
0187-02A; 12 EDG/12 ESW Comprehensive Pump and Valve Tests; Revision 28  
4 AWI-09.04.01; IST Program; Revision 41  
CAP 01357002; Pump DP Fell in Alert Range during 0187-02A  
CAP 01358000; Inconsistent Use of OBD Desig for Equip in IST Alert Range  
0255-03-III-1A; Core Spray Comprehensive Pump and Valve Tests; Revision 20  
Operations Manual B.09.06-05; Core Spray System—System Operation; Revision 37  
WO 461949; TD-152-505/AM, Ammeter has Intermittent Contact; December 18, 2012  
WO 459007; OPS-CSP, 0255-03-III-1A 11 CS Comprehensive Pump and Valve Tests;  
December 18, 2012  
WO 459005; OPS-CSP, 1203-01 Sys Leak Ck Procd 'A' Loop Core Spray; December 18, 2012  
0255-06-III-1; HPCI Comprehensive Pump and Valve Test; Revision 20  
Type 2 ODMI 1362728-01; HPCI Comprehensive Pump and Valve Test, Flowrate Stability Issue  
Associated with Re-baselining; December 12, 2012  
CAP 1362728; HPCI Pump Vibration Data Collection Unable to be Performed  
CAP 1317348; HPCI Vibration Point Entered Alert Range  
CAP 1313514; HPCI Pump Vibration Resolution  
Historical HPCI Main Pump Vibration Amplitudes Data; prepared December 12, 2012  
0255-06-III-1; HPCI Comprehensive Pump and Valve Test; Revision 20B

### Section 1R22

0003; Drywell High Pressure Scram and Group 2, 3, and Secondary Containment Isolation Test  
and Calibration Procedure; Revision 30  
0255-18-IC; TIP Explosive Valve Testing and Monitoring; Revision 19  
0255-05-III-4A; Comprehensive 14 RHRSW Pump and Valve Tests—Test Plan; Revision 8  
0255-05-III-4A; Comprehensive 14 RHRSW Pump and Valve Tests—Test Plan; Revision 1  
CAP 01329586; Ineffective Communication of Cumulative RHRSW Pump Issues  
CAP 01358452; Low 14 RHRSW Pump Preservice Test Results  
CAP 01329584; Three RHRSW Pump In or Near Alert Range  
CAP 01347905; P-109D, 14 RHRSW Pump D/P in Alert Range

0255-05-III-4A; Comprehensive 14 RHR SW Pump and Valve Tests; Revision 22  
WO 455179; Rebuild/replace 14 RHR SW Pump; November 5, 2012  
0255-04-III-1A; RHR Comprehensive Pump and Valve Tests; Revision 13  
NH-36246; P&ID RHR System; Revision 81  
0255-04-IA-1-2; RHR Loop 'B' Quarterly Pump and Valve Tests; Revision 84  
Operations Manual B.03.04-03; RHR System—Instrumentation and Controls; Revision 17  
Operations Manual B.03.04-02; RHR System—Description of Equipment; Revision 18  
0533; Containment Sump Flow Measurement Instrumentation; Revision 21  
CAP 01364513; Lack of Documentation on TS Airlock Door Test  
EWI-08.06.01; Primary Containment Leak Rate Testing Program; Revision 15  
0138; Drywell Personnel Airlock Pressure and Leak Test; Revision 23

#### Section 1EP4

A.2-101; Classification of Emergencies; Revision 45 and 46  
A.2-110; Response to a Security Threat; Revisions 9 and 10  
A.2-204; Off-Site Protective Action Recommendations; Revision 25  
A.2-213; Responsibilities of the Emergency Director; Revision 25  
A.2-406; Off-Site Dose Projection; Revision 23  
A.2-501; Communications during an Emergency; Revisions 22, 23, and 24  
A.2-504; Emergency Communicator Duties in the TSC and Operations Support Center (OSC);  
Revision 14  
A.2-802; Activation and Operation of the Emergency Operations Facility (EOF); Revision 15  
A.2-803; Emergency Communications at the EOF; Revision 12 and 13  
A.2-807; Off-Site Dose Assessment and Protective Action Recommendations; Revision 21  
Emergency Plan; Revision 36 and 37

#### Section 2RS2

MNGP Old Steam Dryer Removal – Comprehensive Radiation Protection Plan; Revision 00  
Procedure R.01.04; Control of Personnel in High Radiation and Airborne Areas; Revision 25  
RWP 1686; Old Steam Dryer Paint Activities; November 6, 2012  
RWP 1687; Bag and Transfer OSD from D/S Pit to Shipping Cask; November 6, 2012

#### Section 4OA1

PRA-CALC-05-003; MSPI Basis Document; Revision 2  
FP-PA-PI-02; NRC/INPO/WANO PI Reporting; Revision 6  
MSPI Derivation Reports (UAI, URI, and PLE) for the RHR System  
MSPI Derivation Reports (UAI, URI, and PLE) for the Cooling Water System

#### Section 4OA2

EC 18741; Evaluation of Spent Fuel Cask Lift Height Restrictions; November 15, 2011  
50.59 Screening 11-0523; Spent Fuel Cask Lift Height Restrictions; November 9, 2011  
CR 01290843; Spent Fuel Cask Height Restriction is not in USAR; June 16, 2011  
CR 01292150; Quarantine Procedure 9502, Rev 4 \*\*\*B Level CAP\*\*\*; June 27, 2011  
CR 01292154; Quarantine Procedure 9503, Rev 4 \*\*\*B Level CAP\*\*\*; June 27, 2011  
CR 01292158; Quarantine Procedure 9505, Rev 5 \*\*\*B Level CAP\*\*\*; June 27, 2011  
CR 01292160; Quarantine Procedure 9506, Rev 4 \*\*\*B Level CAP\*\*\*; June 27, 2011  
CR 01292162; Quarantine Procedure 9507, Rev 6 \*\*\*B Level CAP\*\*\*; June 27, 2011

CR 01292168; Quarantine Procedure 9508, Rev 6 \*\*\*B Level CAP\*\*\*; June 27, 2011  
CR 01292169; Quarantine Procedure 9510, Rev 5 \*\*\*B Level CAP\*\*\*; June 27, 2011  
CR 01299961; Revise USAR 12.2 Cranes and Heavy Loads for Rx Bldg Crane;  
August 18, 2011  
CR 01305843; 9502 Rev. 4 Remove from Quarantine; September 28, 2011  
CR 01305868; 9503 Rev. 4 Remove from Quarantine; September 28, 2011  
CR 01305896; 9505 Rev. 6 Remove from Quarantine; September 28, 2011  
CR 01305975; 9506 Rev. 5 Remove from Quarantine; September 29, 2011  
CR 01306041; 9507, Rev 7 (ISFSI) - Remove from Quarantine; September 29, 2011  
CR 01336458; 9508, Rev 7 (ISFSI) - Remove from Quarantine; May 4, 2012  
CR 01306062; 9510 Rev 6 (ISFSI) - Remove from Quarantine; September 29, 2011  
CR 01304094; NRC Severity Level IV NCV of 10.CFR 50.71(e); September 16, 2011  
AEC letter to NSP; RE: License No. DPR-22; February 4, 1974  
NSP letter to AEC; Submittal of Analyses of the Spent Fuel Shipping Cask Drop Accident;  
October 1, 1974  
NRC letter to NSP; Request for Additional Information Northern States Power Company  
MNGP Docket No. 50-263; January 31, 1975  
NSP letter to NRC; Response to Request for Additional Information Northern States Power  
MNGP Docket No. 50-263; February 17, 1975  
NSP letter to NRC; Status Report on Plans for Off-Site Shipment of Spent Fuel; May 30, 1975  
NSP letter to NRC; Off Site Shipment of Spent Fuel; January 22, 1976  
NSP letter to NRC; Off Site Shipment of Spent Fuel; February 13, 1976  
NSP letter to NRC; Off-Site Shipment of Spent Fuel; October 27, 1976  
NSP letter to NRC; Design Report for Redundant Reactor Building Crane; November 22, 1976  
NRC letter to NSP; Safety Evaluation by the Office of NRR Supporting Use of 25 Ton Spent  
Fuel Shipping Casks NFS-4 and NAC-1 Northern States Power Company MNGP Docket  
No. 50-263; January 25, 1977  
NRC letter to NSP; Northern States Power Company MNGP Docket No. 50-263 Request for  
Additional Information; February 11, 1977  
NSP letter to NRC; Responses to Request for Additional Information; February 28, 1977  
NRC letter to NSP; Safety Evaluation by the Office of Nuclear Reactor Regulation Supporting  
Approval of Crane Modifications and Use of 70 Ton Spent Fuel Shipping Cask IF-300  
Northern States Power Company MNGP Docket No. 50-263; May 19, 1977  
NSP letter to NRC; Reactor Building Redundant Crane; June 24, 1977  
Regulatory Guide 1.104; Overhead Crane Handling Systems for Nuclear Power Plants;  
February 1976

### Section 4OA3

EC 20076; Removal of the 1AR Transformer Essential Bus Auto Transfer  
WO 00460262; Install T-Mod for Bus 15 Degraded Voltage Auto Transfer  
CAP 01334146; CDBI TS Degraded Voltage Time Value  
CAP 01352773; Reactor Scram Number 130  
CAP 01352778; Lockout of 4 kV Bus 12 during WO 446500-1  
CAP 01352904; Perform Simulator Transient Analysis – Scram 130  
WO 00446500-01; TD-Verify 152-201/AS2-7 for Functionality  
NE-36399-3A; MNGP No. 12 and 13 4.16KV Lockout Relay; Revision J  
2165; Scram Report (for Reactor Scram 130); Revision 29

### Section 4OA5

AR 01286645; TS 3.5.1 ECCS Operating May be Non-conservative; May 19, 2011

## LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access Management System
ALARA	As-Low-As-Is-Reasonably-Achievable
BWR	Boiling Water Reactor
CAP	Corrective Action Program
CDBI	Component Design Basis Inspection
CDF	Core Damage Frequency
CFR	Code of Federal Regulations
d/p	Differential Pressure
DNMS	Division of Nuclear Materials Safety and Safeguards
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
DVR	Degraded Voltage Relay
ECCS	Emergency Core Cooling System
EDG	Emergency Diesel Generator
EFT	Emergency Filtration Train
EPIP	Emergency Plan Implementing Procedure
ESF	Engineered Safety Feature
ESW	Emergency Service Water
HPCI	High Pressure Coolant Injection
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Inspection Report
IST	Inservice Test
kV	Kilovolt
LER	Licensee Event Report
LOCA	Loss of Coolant Accident
LPCI	Low Pressure Coolant Injection
MNGP	Monticello Nuclear Generator Plant
MSPI	Mitigating Systems Performance Index
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NMSS	Office of Nuclear Material Safety and Safeguards
NRC	U.S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NSIR	Nuclear Security and Incident Response
NUMARC	Nuclear Management and Resources Council
PARS	Publicly Available Records System
PI	Performance Indicator
PM	Post-Maintenance
RBOC	Reactor Building Overhead Crane
RCIC	Reactor Core Isolation Cooling
RHR	Residual Heat Removal
RHRSW	Residual Heat Removal Service Water
SDP	Significance Determination Process
SSC	Structure, System and Component
TC	Transfer Cask
TI	Temporary Instruction
TIP	Transversing In-core Probe

TS	Technical Specification
USAR	Updated Safety Analysis Report
URI	Unresolved Item
WO	Work Order

M. Schimmel

-2-

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

**/RA/**

Kenneth Riemer, Branch Chief  
Branch 2  
Division of Reactor Projects

Docket No. 50-263  
License No. DPR-22

Enclosure: Inspection Report 05000263/2012005;  
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ™

**DISTRIBUTION:**

John Cassidy  
RidsNrrDorLp13-1 Resource  
RidsNrrPMMonticello  
RidsNrrDirslrib Resource  
Chuck Casto  
Cynthia Pederson  
Steven Orth  
Allan Barker

Christine Lipa  
Carole Ariano  
Linda Linn  
DRPIII  
DRSIII  
Tammy Tomczak  
[ROPreports.Resource@nrc.gov](mailto:ROPreports.Resource@nrc.gov)

DOCUMENT NAME: Monticello IR 2012 005

Publicly Available     Non-Publicly Available     Sensitive     Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII	RIII	RIII	RIII
NAME	MZiolkowski:rj	KRiemer		
DATE	2/06/13	2/06/13		

**OFFICIAL RECORD COPY**