



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE RD. SUITE 210
LISLE, IL 60532-4352

May 5, 2014

Mr. Kevin Davison
Site Vice President
Prairie Island Nuclear Generating Plant
Northern States Power Company, Minnesota
1717 Wakonade Drive East
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2
NRC INTEGRATED INSPECTION REPORT 05000282/2014002;
05000306/2014002

Dear Mr. Davison:

On March 31, 2014, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your Prairie Island Nuclear Generating Plant, Units 1 and 2. The enclosed report documents the results of this inspection, which were discussed on April 3, 2014, with you and other members of your staff.

One NRC-identified 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) in accordance with Section 2.3.2.a of the NRC Enforcement Policy.

If you contest the subject or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Prairie Island Nuclear Generating Plant.

If you disagree with the cross-cutting aspect assignment to the 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 Prairie Island Nuclear Generating Plant.

K. Davison

-2-

Additionally, as we informed you in the most recent NRC integrated inspection report, cross-cutting aspects identified in the last six months of 2013 using the previous terminology were being converted in accordance with the cross-reference in Inspection Manual Chapter (IMC) 0310. Section 4OA5 of the enclosed report documents the conversion of these cross-cutting aspects which will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review. If you disagree with the cross-cutting aspect assigned, 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 Prairie Island Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and 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 Documents Access and Management System (ADAMS), 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 2
Division of Reactor Projects

Docket Nos. 50-282; 50-306; 72-010
License Nos. DPR-42; DPR-60; SNM-2506

Enclosure:
IR 05000282/2014002; 05000306/2014002
w/Attachment: Supplemental Information

cc w/encl: Distribution via LISTSERV®

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos: 50-282; 50-306; 72-010
License Nos: DPR-42; DPR-60; SNM-2506

Report No: 05000282/2014002; 05000306/2014002

Licensee: Northern States Power Company, Minnesota

Facility: Prairie Island Nuclear Generating Plant, Units 1 and 2

Location: Welch, MN

Dates: January 1 through March 31, 2014

Inspectors: K. Stoedter, Senior Resident Inspector
P. LaFlamme, Resident Inspector
E. Sanchez-Santiago, Acting Resident Inspector
S. Bell, Health Physics Inspector
J. Bozga, Engineering Inspector
L. Haeg, Senior Resident Inspector – Duane Arnold
M. Phalen, Health Physics Inspector

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

Enclosure

TABLE OF CONTENTS

SUMMARY OF FINDINGS	2
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).....	7
1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13)	8
1R15 Operability Determinations and Functional Assessments (71111.15)	9
1R19 Post-Maintenance Testing (71111.19).....	11
1R20 Outage Activities (71111.20).....	12
1R22 Surveillance Testing (71111.22)	13
1EP6 Drill Evaluation (71114.06).....	14
2. RADIATION SAFETY	15
2RS2 Occupational As-Low-As-Reasonably-Achievable Planning and Controls (71124.02).....	15
2RS5 Radiation Monitoring Instrumentation (71124.05).....	16
2RS8 Occupational Dose Assessment (71124.08).....	20
4. OTHER ACTIVITIES.....	24
4OA1 Performance Indicator Verification (71151)	24
4OA2 Identification and Resolution of Problems (71152)	26
4OA5 Other Activities	28
4OA6 Management Meetings	29
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	11

SUMMARY OF FINDINGS

Inspection Report (IR) 05000282/2014002; 05000306/2014002; 01/01/2014 - 03/31/2014; Prairie Island Nuclear Generating Plant, Units 1 and 2; Operability Evaluations.

This report covers a 3-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 inspection findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, or Red) and determined using IMC 0609, "Significance Determination Process" (SDP) dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310; "Components Within the Cross-Cutting Areas" dated January 1, 2014. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy dated January 28, 2013. 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.

Cornerstone: Mitigating Systems

- Green. The inspectors identified a finding of very low safety significance and a non-cited violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," on February 13, 2014, due to the failure to construct scaffolds as required by Procedure D80, "Scaffolding, Ladders and Cable Trays Platforms." During routine plant walk downs, the inspectors identified multiple examples where scaffolds were erected within the two inch minimum clearance requirement without proper justification. Corrective actions for this issue included walking down all scaffolds erected onsite and removing those that failed to comply with Procedure D80, briefing maintenance, operations and engineering staff on scaffolding clearance requirements, and a future revision to Procedure D80 to better clarify the minimum clearance requirements.

The inspectors determined that this issue was more than minor because it impacted the protection against external factors attribute of the Mitigating Systems cornerstone. In addition, the finding impacted the cornerstone objective of ensuring the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, multiple scaffolds were erected in contact with safety-related equipment, or within the minimum clearance distance which could have challenged the availability, reliability or capability of safety-related systems during a seismic event. This issue was of very low safety significance because each question provided in IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," was answered "No." The inspectors concluded that this finding was cross-cutting in the Human Performance, Conservative Bias area because workers did not utilize prudent decision making practices while erecting scaffolding near safety-related equipment (H.14). (Section 1R15)

REPORT DETAILS

Summary of Plant Status

Unit 1 began the inspection period at full power. On March 31, 2014, operations personnel lowered reactor power to 98 percent to perform maintenance on the 11B and 13B feedwater heater control systems. Reactor power remained at 98 percent at the conclusion of the inspection period. Other small power reductions were required during the inspection period to allow for routine testing of plant equipment.

Unit 2 began the inspection period in Mode 3 as part of Refueling Outage 2R28. At 1538 on January 1, 2014, Unit 2 entered Mode 2 and began reactor startup activities. Mode 1 was entered at 1118 on January 2, 2014; full power was achieved on January 13, 2014. Unit 2 operated at full power until March 14, 2014, when power was reduced to 30 percent to allow the repair of a component cooling water leak inside of containment. Following the repairs, Unit 2 returned to full power and remained there through the duration of the inspection period.

1. REACTOR SAFETY

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

1R01 Adverse Weather Protection (71111.01)

.1 Readiness for Impending Adverse Weather Condition – Extreme Cold Conditions

a. Inspection Scope

Since extreme cold conditions were forecast in the vicinity of the facility for January 23 through January 28, 2014, the inspectors reviewed the licensee's overall preparations/protection for the expected weather conditions. On the dates listed above, the inspectors walked down heating and ventilation systems in the plant screen house, the turbine building, the auxiliary building and the D5/D6 building to ensure the buildings were sufficiently warm to support the continued operability of safety-related equipment. The inspectors observed insulation, heat trace circuits, heater operation, and weatherized enclosures to ensure operability of affected systems. During this time, the licensee also operated under a "grid condition yellow" condition. Under this condition, the licensee suspended testing and maintenance activities that could potentially impact continued plant operation and the electrical grid. The inspectors reviewed licensee procedures and discussed potential compensatory measures with control room personnel. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one readiness for impending adverse weather condition sample as defined in Inspection Procedure (IP) 71111.01-05.

b. Findings

No findings were identified.

1R04 Equipment Alignment (71111.04)

.1 Quarterly Partial System Walkdowns

a. Inspection Scope

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

- 12 Diesel Driven Cooling Water Pump and associated piping;
- 22 Residual Heat Removal Pump and associated piping;
- 22 Shield Building Ventilation System; and
- 121 Control Room Chilled Water Pump and associated piping.

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, Updated Safety Analysis Report (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 corrective action program (CAP) with the appropriate significance characterization. Documents reviewed are listed in the Attachment to this report.

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

b. Findings

No findings were identified.

.2 Semi-Annual Complete System Walkdown

a. Inspection Scope

On February 26, 2014, the inspectors performed a complete system alignment inspection of the safeguards chilled water 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 Areas 4 and 85 - Unit 1 and Unit 2 auxiliary building and fuel handling areas;
- Fire Area 58 - Unit 1 auxiliary building (695' elevation);
- Fire Zone 19 - Spent Fuel Pool Cooling Heat Exchanger and Pump Area; and
- Fire Areas 25 and 26 – D1 and D2 Emergency Diesel Generator Rooms.

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 licensee'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 licensee's ability to respond to a security event. 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. Documents reviewed are listed in the Attachment to this report.

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

b. Findings

No findings were identified.

1R06 Flooding (71111.06)

.1 Underground Vaults

a. Inspection Scope

The inspectors selected underground bunkers/manholes subject to flooding that contained cables whose failure could disable risk-significant equipment. The inspectors determined that the cables were not submerged, that splices were intact, and that appropriate cable support structures were in place. In those areas where dewatering devices were used, such as a sump pump, the device was operable and level alarm circuits were set appropriately to ensure that the cables would not be submerged. In those areas without dewatering devices, the inspectors verified that drainage of the area was available, or that the cables were qualified for submergence conditions. The inspectors also reviewed the licensee's corrective action documents with respect to past submerged cable issues identified in the corrective action program to verify the adequacy of the corrective actions. The inspectors performed a walkdown of the following underground bunkers/manholes subject to flooding:

- 13.8KV Cable Vault between Switch Yard and Substation.

Documents reviewed are listed in the Attachment to this report. This inspection constituted one underground vaults 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 February 4, 2014, the inspectors observed a crew of licensed operators in the 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

In early January, the inspectors observed Unit 2 power ascension activities following the completion of Refueling Outage (RFO) 2R28. This was a multi-day activity that required heightened awareness in the control room 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 and Emergency Plan actions and notifications.

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.

1R12 Maintenance Effectiveness (71111.12)

.1 Routine Quarterly Evaluations

a. Inspection Scope

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

- Containment Ventilation and
- Radiation Monitoring.

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/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 two quarterly maintenance effectiveness samples 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:

- Planned maintenance on one of two Unit 1 offsite electrical sources, fire protection valves, the D6 emergency diesel generator (EDG) high temperature coolant pump, the 21 residual heat removal (RHR) system and the 121 and 122 recycle gates;
- Emergent maintenance on the 12 shield building ventilation system (SBSVS) and planned maintenance on the 12 cooling water strainer, the "A" cooling water header, the D1 EDG and the 11 RHR pump;
- Emergent maintenance on the 21 SBSVS and planned maintenance on the 12 electrohydraulic control (EHC) system unloader valve, the D2 EDG and fire protection piping;
- Planned maintenance on the 12 EHC pump and the 121 control room chiller; and

- Planned maintenance on the 22 diesel driven cooling water pump and the 122 control room chiller.

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 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 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.

Documents reviewed are listed in the Attachment to this report. These maintenance risk assessments and emergent work control activities constituted five samples as defined in IP 71111.13-05.

b. Findings

No findings were identified.

1R15 Operability Determinations and Functional Assessments (71111.15)

.1 Operability Evaluations

a. Inspection Scope

The inspectors reviewed the following issues:

- 22 Control Rod Drive Mechanism Cooling Water Isolation Valve (CV-39417) failure to stroke closed;
- CAP 1419465 - Scaffolding in Contact with 121 Control Room Chiller;
- CAP 1422033 - Small Flame Detected on D1 EDG during Surveillance Testing;
- CAP 1422058 - Discovered Unit 1 and Unit 2 Component Cooling Water Surge Tank Levels Decreasing; and
- Operability Recommendation 1404840-01 – Extension in Time Required to Replace Electrical Cables 16408-1 and 16408-2 from Transformer CT-11 to Bus 16.

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 five samples as defined in IP 71111.15-05.

b. Findings

Introduction: The inspectors identified a finding of very low safety significance (Green) and an NCV of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures and Drawings," on February 13, 2014, due to the licensee's failure to install scaffolds as required by Procedure D80, "Scaffolding, Ladders and Cable Trays Platforms." Specifically, the inspectors identified multiple instances where erected scaffolds were installed within the two inch minimum clearance without appropriate justification.

Description: While performing a routine tour of the screen house on February 13, 2014, the inspectors identified a scaffold in direct contact with an electrical power conduit associated with the 22 cooling water system strainer. The inspectors noted that Procedure D80, "Scaffold, Ladders and Cable Tray Platforms," Step 3.1.3 stated, in part, that a minimum of 2 inches of clearance must be maintained between the scaffold and safety-related equipment. The minimum clearance could be reduced to 1 inch as long as engineering evaluated the condition and approved the configuration. No contact was allowed between scaffolding and safety-related equipment.

The inspectors communicated their observation to the licensee. The licensee entered the issue into the corrective action program as CAP 1418846. In response to the inspectors' observation, the licensee performed a site wide walk down and identified three additional scaffolds that exceeded the minimum clearance requirement. These scaffolds were subsequently removed. On February 18, 2014, the inspectors performed another plant walk down and identified an additional scaffold in contact with the 121 control room chilled water system. The inspectors communicated this additional observation to the licensee. The licensee initiated CAP 1419465 and performed an additional walk down of all erected scaffolds which identified no concerns. The inspectors performed a third walk down and concurred with the licensee's results.

While reviewing this issue further, the inspectors interviewed maintenance, operations and engineering staff. Through the interview process, the inspectors determined that several plant staff lacked a thorough understanding of the D80 procedure. The inspectors were concerned that some maintenance and operations staff had the mindset that engineering had justified and authorized scaffold builds erected within 2 inches of plant equipment and that it was acceptable to exceed the 1 inch minimum requirement if necessary.

Analysis: The inspectors determined that the failure to erect scaffolds in accordance with the requirements provided in Procedure D80 was a performance deficiency that was required to be evaluated using the Significance Determination Process. The inspectors determined that this issue was more than minor because it adversely impacted the protection against external factors attribute of the Mitigating Systems cornerstone and its objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, multiple scaffolds were erected in contact with safety-related equipment or within the minimum clearance

proximity without adequate engineering justification. These configurations could have challenged the availability, reliability or capability of safety-related systems during a seismic event.

The inspectors utilized IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," and determined that this issue was of very low safety significance (Green) because each question provided in IMC 0609, Appendix A, Exhibit 2, "Mitigating Systems Screening Questions," was answered "No." The inspectors concluded that this finding was associated with a conservative bias cross-cutting aspect in the human performance cross-cutting area. Specifically, workers did not utilize prudent decision making practices while erecting scaffolding near safety-related equipment to ensure the clearance requirements were satisfied in accordance with Procedure D80 (H.14).

Enforcement: Title 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," requires, in part, that activities affecting quality be prescribed by documented procedures of a type appropriate to the circumstances and be accomplished in accordance with these procedures. The licensee established Procedure D80, "Scaffolding, Ladders and Cable Trays Platforms," Revision 27, as the implementing procedure for erecting scaffolds, an activity affecting quality. Procedure D80, Step 3.1.3 stated, "The minimum clearance requirement for scaffold to operating equipment is 2 inches including range of operation of equipment. The minimum clearance can be reduced to 1 inch if approval is obtained from Engineering."

Contrary to the above, prior to February 13, 2014, the licensee failed to accomplish scaffold erection in accordance with Procedure D80. Specifically, licensee personnel failed to ensure scaffolding erected adjacent to safety-related equipment met the clearance requirements. In addition, scaffolds erected within one inch of safety-related equipment did not have an adequate engineering justification to verify the configuration would be acceptable during a seismic event. Because this violation was of very low safety significance and was entered into the licensee's CAP as CAPs 1418846 and 1419465, this violation is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy (**NCV 05000282/2014002-01, Failure to Implement the Scaffolding, Ladders and Cable Trays Platforms Procedure**). Corrective actions for this issue included walking down all scaffolds erected onsite and removing those that failed to comply with procedural requirements, briefing maintenance, operations and engineering staff on scaffolding clearance requirements, and a future revision to Procedure D80 to better clarify the minimum clearance requirements.

1R19 Post-Maintenance Testing (71111.19)

.1 Post-Maintenance Testing

a. Inspection Scope

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

- 12 EHC pump testing following planned maintenance;
- 12 EHC unloader valve testing following planned maintenance;

- 21 SBSVS testing following differential pressure switch replacement;
- 4KV safeguards breaker maintenance and relay trip testing on breaker CT11-6;
- D1 EDG testing following preventative maintenance and starting air relief valve replacement; and
- Train "A" RHR system testing following preventative maintenance.

These activities were selected based upon the SSC's 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 TSs, the UFSAR, 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 post-maintenance 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.

This inspection constituted six post-maintenance testing samples as defined in IP 71111.19-05.

b. Findings

No findings were identified.

1R20 Outage Activities (71111.20)

.1 Refueling Outage Activities

a. Inspection Scope

Refueling Outage 2R28 began on September 20, 2013. The inspectors observed multiple outage activities which were documented in NRC Inspection Reports 05000282/2013004; 05000306/2013004 and 05000282/2013005; 05000306/2013005. During this inspection period, the inspectors continued to review the licensee's controls over the 2R28 activities listed below:

- monitoring of decay heat removal processes, systems, and components;
- licensee fatigue management, as required by 10 CFR 26, Subpart I;
- startup and ascension to full power operation; and
- licensee identification and resolution of problems related to RFO activities.

Documents reviewed are listed in the Attachment to this report.

When combined with the inspection activities completed previously, this inspection constituted one RFO sample as defined in IP 71111.20-05.

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:

- SP 1101 – 22 Motor-Driven Auxiliary Feedwater Pump Quarterly Flow and Valve Test (routine);
- SP 1106B – 22 Diesel Driven Cooling Water Monthly Test (IST);
- SP 1112 – Steam Exclusion Monthly Damper Test (routine);
- SP 2032B – Unit 2 Train B Safeguards Logic Testing Train (routine);
- SP 2035B – Unit 2 Train B Reactor Protection Logic Test at Power (routine); and
- SP 2093 – Unit 2 D5 Emergency Diesel Generator Slow Speed Monthly Test (routine).

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

- did preconditioning occur;
- the effects of the testing were adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- acceptance criteria were clearly stated, demonstrated operational readiness, and were 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 inservice testing 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 five routine surveillance testing samples and one inservice testing sample as defined in IP 71111.22, Sections -02 and -05.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06)

.1 Emergency Preparedness Drill Observation

a. Inspection Scope

The inspectors evaluated the conduct of a routine licensee emergency drill on March 25, 2014, to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the simulator to determine whether the event classification, notifications, and protective action recommendations were performed in accordance with procedures. The inspectors also attended the licensee drill critique to compare any inspector-observed weakness with those identified by the licensee staff in order to evaluate the critique and to verify whether the licensee staff was properly identifying weaknesses and entering them into the corrective action program. As part of the inspection, the inspectors reviewed the drill package and other documents listed in the Attachment to this report.

This emergency preparedness drill inspection constituted one sample as defined in IP 71114.06-05.

b. Findings

No findings were identified.

.2 Training Observation

a. Inspection Scope

The inspector observed a simulator training evolution for licensed operators on January 25, 2014, which required emergency plan implementation by a licensee operations crew. This evolution was planned to be evaluated and included in performance indicator data regarding drill and exercise performance. The inspectors observed event classification and notification activities performed by the crew. The inspectors also attended the post-evolution critique for the scenario. The focus of the inspectors' activities was to note any weaknesses and deficiencies in the crew's performance and ensure that the licensee evaluators noted the same issues and entered them into the corrective action program. As part of the inspection, the inspectors reviewed the scenario package and other documents listed in the Attachment to this report.

This inspection of the licensee's training evolution with emergency preparedness drill aspects constituted one sample as defined in IP 71114.06-06.

b. Findings

No findings were identified.

2. RADIATION SAFETY

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

This inspection constituted a partial sample as defined in IP 71124.02-05.

.1 Inspection Planning (02.01)

a. Inspection Scope

The inspectors reviewed pertinent information regarding plant collective exposure history, current exposure trends, and ongoing or planned activities in order to assess current performance and exposure challenges. The inspectors reviewed the plant's 3-year rolling average (TYRA) collective exposure.

The inspectors reviewed the site-specific trends in collective exposures and source term measurements.

The inspectors reviewed site-specific procedures associated with maintaining occupational exposures as-low-as-reasonably-achievable (ALARA), which included a review of processes used to estimate and track exposures from specific work activities.

b. Findings

No findings were identified.

.2 Verification of Dose Estimates and Exposure Tracking Systems (02.03)

a. Inspection Scope

The inspectors evaluated whether the licensee established measures to track, trend, and, if necessary, to reduce occupational doses for ongoing work activities. The inspectors assessed whether trigger points or criteria were established to prompt additional reviews and/or additional ALARA planning and controls.

The inspectors evaluated the licensee's method of adjusting exposure estimates, or re-planning work, when unexpected changes in scope or emergent work were encountered. The inspectors assessed whether adjustments to exposure estimates (intended dose) were based on sound radiation protection and ALARA principles, or if they were just adjusted to account for failures to control the work. The inspectors evaluated whether the frequency of these adjustments called into question the adequacy of the original ALARA planning process.

b. Findings

No findings were identified.

.3 Problem Identification and Resolution (02.06)

a. Inspection Scope

The inspectors evaluated whether problems associated with ALARA planning and controls are being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the CAP.

b. Findings

No findings were identified.

2RS5 Radiation Monitoring Instrumentation (71124.05)

This inspection constituted a partial sample as defined in IP 71124.05-05.

.1 Inspection Planning and Identification of Instrumentation (02.01)

a. Inspection Scope

The inspectors reviewed the USAR to identify radiation instruments associated with monitoring area radiological conditions including airborne radioactivity, process streams, effluents, materials/articles, and workers. Additionally, the inspectors reviewed the instrumentation and the associated TS requirements for post-accident monitoring instrumentation including instruments used for remote emergency assessment.

The inspectors reviewed a listing of in-service survey instrumentation including air samplers and small article monitors, along with instruments used to detect and analyze workers' external contamination. Additionally, the inspectors reviewed personnel contamination monitors and portal monitors, including whole-body counters (WBCs), to detect workers' internal contamination. The inspectors reviewed this list to assess

whether an adequate number and type of instruments were available to support operations.

The inspectors reviewed licensee and third-party evaluation reports of the Radiation Monitoring Program since the last inspection. These reports were reviewed for insights into the licensee's program and to aid in selecting areas for review ("smart sampling").

The inspectors reviewed procedures that govern instrument source checks and calibrations, focusing on instruments used for monitoring transient high radiological conditions, including instruments used for underwater surveys. The inspectors reviewed the calibration and source check procedures for adequacy and as an aid to smart sampling.

The inspectors reviewed the area radiation monitor alarm set-point values and set-point bases as provided in the TSs and the USAR.

The inspectors reviewed effluent monitor alarm set-point bases and the calculational methods provided in the Offsite Dose Calculation Manual (ODCM).

b. Findings

No findings were identified.

.2 Walkdowns and Observations (02.02)

a. Inspection Scope

The inspectors walked down effluent radiation monitoring systems, including at least one liquid and one airborne system. Focus was placed on flow measurement devices and all accessible point-of-discharge liquid and gaseous effluent monitors of the selected systems. The inspectors assessed whether the effluent/process monitor configurations aligned with ODCM descriptions and observed monitors for degradation and out-of-service tags.

The inspectors selected portable survey instruments that were in use or available for issuance and assessed calibration and source check stickers for currency as well as instrument material condition and operability.

The inspectors observed licensee staff performance as the staff demonstrated source checks for various types of portable survey instruments. The inspectors assessed whether high-range instruments were source checked on all appropriate scales.

The inspectors walked down area radiation monitors and continuous air monitors to determine whether they were appropriately positioned relative to the radiation sources or areas they were intended to monitor. Selectively, the inspectors compared monitor response (via local or remote control room indications) with actual area conditions for consistency.

The inspectors selected personnel contamination monitors, portal monitors, and small article monitors and evaluated whether the periodic source checks were performed in accordance with the manufacturer's recommendations and licensee procedures.

b. Findings

No findings were identified.

.3 Laboratory Instrumentation (02.04)

a. Inspection Scope

The inspectors assessed laboratory analytical instruments used for radiological analyses to determine whether daily performance checks and calibration data indicated that the frequency of the calibrations was adequate and there were no indications of degraded instrument performance.

The inspectors assessed whether appropriate corrective actions were implemented in response to indications of degraded instrument performance.

b. Findings

No findings were identified.

.4 Whole Body Counter (02.05)

a. Inspection Scope

The inspectors reviewed the methods and sources used to perform WBC functional checks before daily use of the instrument and assessed whether check sources were appropriate and aligned with the plant's isotopic mix.

The inspectors reviewed WBC calibration records since the last inspection and evaluated whether calibration sources were representative of the plant source term and that appropriate calibration phantoms were used. The inspectors looked for anomalous results or other indications of instrument performance problems.

b. Findings

No findings were identified.

.5 Post-Accident Monitoring Instrumentation (02.06)

a. Inspection Scope

The inspectors selected containment high-range monitors and reviewed the calibration documentation since the last inspection and assessed whether an electronic calibration was completed for all range decades above 10 rem/hour and whether at least one decade at or below 10 rem/hour was calibrated using an appropriate radiation source. The calibration acceptance criteria were found to be reasonable, accounting for the large measuring range and the intended purpose of the instruments.

The inspectors selected effluent/process monitors that were relied on by the licensee in its emergency operating procedures as a basis for triggering emergency action levels and subsequent emergency classifications, or to make protective action recommendations during an accident. The inspectors evaluated the calibration and

availability of these instruments. In addition the inspectors reviewed the licensee's capability to collect high-range, post-accident iodine effluent samples.

As available, the inspectors observed electronic and radiation calibration of these instruments to assess conformity with the licensee's calibration and test protocols.

b. Findings

No findings were identified.

.6 Portal Monitors, Personnel Contamination Monitors, and Small Article Monitors (02.07)

a. Inspection Scope

For each type of these instruments used on site, the inspectors assessed whether the alarm set-point values were reasonable under the circumstances to ensure that licensed material is not released from the site. The inspectors reviewed the calibration documentation for each instrument selected and discussed the calibration methods with the licensee to determine consistency with the manufacturer's recommendations.

b. Findings

No findings were identified.

.7 Portable Survey Instruments, Area Radiation Monitors, Electronic Dosimetry, and Air Samplers/Continuous Air Monitors (02.08)

a. Inspection Scope

The inspectors reviewed calibration documentation for at least one of each type of instrument. For portable survey instruments and area radiation monitors, the inspectors reviewed detector measurement geometry and calibration methods and had the licensee demonstrate use of its instrument calibrator as applicable. The inspectors conducted comparison of instrument readings versus an NRC survey instrument if problems were suspected.

As available, the inspectors selected portable survey instruments that did not meet acceptance criteria during calibration or source checks to assess whether the licensee had taken appropriate corrective action for instruments found significantly out of calibration (e.g., greater than 50 percent). The inspectors evaluated whether the licensee evaluated the possible consequences of instrument use since the last successful calibration or source check.

b. Findings

No findings were identified.

.8 Instrument Calibrator

a. Inspection Scope

As applicable, the inspectors reviewed the current output values for the licensee's portable survey and area radiation monitor instrument calibrator unit(s). The inspectors

assessed whether the licensee periodically measures calibrator output over the range of the instruments used through measurements by ion chamber/electrometer.

The inspectors assessed whether the measuring devices had been calibrated by a facility using National Institute of Standards and Technology traceable sources and whether corrective factors for these measuring devices were properly applied by the licensee in its output verification.

b. Findings

No findings were identified.

.9 Calibration and Check Sources (02.09)

a. Inspection Scope

The inspectors reviewed the licensee's 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste," source term to assess whether calibration sources used were representative of the types and energies of radiation encountered in the plant.

b. Findings

No findings were identified.

.10 Problem Identification and Resolution (02.10)

a. Inspection Scope

The inspectors evaluated whether problems associated with radiation monitoring instrumentation were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee's CAP. The inspectors assessed the appropriateness of the corrective actions for a selected sample of problems documented by the licensee that involve radiation monitoring instrumentation.

b. Findings

No findings were identified.

2RS8 Occupational Dose Assessment (71124.08)

This inspection constituted one radioactive solid waste processing and radioactive material handling, storage, and transportation sample as defined in IP 71124.08-05.

.1 Inspection Planning (02.01)

a. Inspection Scope

The inspectors reviewed the solid radioactive waste system description in the USAR, the Process Control Program (PCP), and the recent radiological effluent release report for information on the types, amounts, and processing of radioactive waste disposed.

The inspectors reviewed the scope of any quality assurance audits in this area since the last inspection to gain insights into the licensee's performance and inform the "smart sampling" inspection planning.

b. Findings

No findings were identified.

.2 Radioactive Material Storage (02.02)

a. Inspection Scope

The inspectors selected areas where containers of radioactive waste were stored and evaluated whether the containers were labeled in accordance with 10 CFR 20.1904, "Labeling Containers," or controlled in accordance with 10 CFR 20.1905, "Exemptions to Labeling Requirements," as appropriate.

The inspectors assessed whether the radioactive material storage areas were controlled and posted in accordance with the requirements of 10 CFR Part 20, "Standards for Protection against Radiation." For materials stored or used in the controlled or unrestricted areas, the inspectors evaluated whether they were secured against unauthorized removal and controlled in accordance with 10 CFR 20.1801, "Security of Stored Material," and 10 CFR 20.1802, "Control of Material Not in Storage," as appropriate.

The inspectors evaluated whether the licensee established a process for monitoring the impact of long term storage (e.g., buildup of any gases produced by waste decomposition, chemical reactions, container deformation, loss of container integrity, or re-release of free-flowing water) that was sufficient to identify potential unmonitored, unplanned releases or nonconformance with waste disposal requirements.

The inspectors selected containers of stored radioactive material and assessed for signs of swelling, leakage and deformation.

b. Findings

No findings were identified.

.3 Radioactive Waste System Walkdown (02.03)

a. Inspection Scope

The inspectors walked down accessible portions of select radioactive waste processing systems to assess whether the current system configuration and operation agreed with the descriptions in the USAR, ODCM, and PCP.

The inspectors reviewed administrative and/or physical controls (i.e., drainage and isolation of the system from other systems) to assess whether the equipment which is not in service or abandoned in place, would not contribute to an unmonitored release path and/or affect operating systems or be a source of unnecessary personnel exposure. The inspectors assessed whether the licensee reviewed the safety significance of

systems and equipment abandoned in place in accordance with 10 CFR 50.59, "Changes, Tests, and Experiments."

The inspectors reviewed the adequacy of changes made to the radioactive waste processing systems since the last inspection. The inspectors evaluated whether changes from what is described in the USAR were reviewed and documented in accordance with 10 CFR 50.59, as appropriate and to assess the impact on radiation doses to members of the public.

The inspectors selected processes for transferring radioactive waste resin and/or sludge discharges into shipping/disposal containers and assessed whether the waste stream mixing, sampling procedures, and methodology for waste concentration averaging were consistent with the PCP, and provided representative samples of the waste product for the purposes of waste classification as described in 10 CFR 61.55, "Waste Classification."

For those systems that provide tank recirculation, the inspectors evaluated whether the tank recirculation procedures provided sufficient mixing.

The inspectors assessed whether the licensee's PCP correctly described the current methods and procedures for dewatering and waste stabilization (e.g., removal of freestanding liquid).

b. Findings

No findings were identified.

.4 Waste Characterization and Classification (02.04)

a. Inspection Scope

The inspectors selected the following radioactive waste streams for review:

- Bead Resin;
- Dry Active Waste;
- High Level Filters;
- Low Level Filters; and
- Steam Generator Blow Down Resin.

For the waste streams listed above, the inspectors assessed whether the licensee's radiochemical sample analysis results (i.e., "10 CFR Part 61" analysis) were sufficient to support radioactive waste characterization as required by 10 CFR Part 61, "Licensing Requirements for Land Disposal of Radioactive Waste." The inspectors evaluated whether the licensee's use of scaling factors and calculations to account for difficult-to-measure radionuclides was technically sound and based on current 10 CFR Part 61 analysis for the selected radioactive waste streams.

The inspectors evaluated whether changes to plant operational parameters were taken into account to: (1) maintain the validity of the waste stream composition data between the annual or biennial sample analysis update; and (2) assure that waste shipments continued to meet the requirements of 10 CFR Part 61 for the waste streams selected above.

The inspectors evaluated whether the licensee established and maintained an adequate Quality Assurance Program to ensure compliance with the waste classification and characterization requirements of 10 CFR 61.55 and 10 CFR 61.56, "Waste Characteristics."

b. Findings

No findings were identified.

.5 Shipment Preparation (02.05)

a. Inspection Scope

The inspectors observed shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness. The inspectors assessed whether the requirements of applicable transport cask certificate of compliance had been met. The inspectors evaluated whether the receiving licensee was authorized to receive the shipment packages. The inspectors evaluated whether the licensee's procedures for cask loading and closure procedures were consistent with the vendor's current approved procedures.

The inspectors observed radiation workers during the conduct of radioactive waste processing and radioactive material shipment preparation and receipt activities. The inspectors assessed whether the shippers were knowledgeable of the shipping regulations and whether shipping personnel demonstrated adequate skills to accomplish the package preparation requirements for public transport with respect to:

- As appropriate, the licensee's response to NRC Bulletin 79-19, "Packaging of Low-Level Radioactive Waste for Transport and Burial," dated August 10, 1979;
- Title 49 CFR Part 172, "Hazardous Materials Table, Special Provisions, Hazardous Materials Communication, Emergency Response Information, Training Requirement, and Security Plans," Subpart H, "Training."

b. Findings

No findings were identified.

.6 Shipping Records (02.06)

a. Inspection Scope

The inspectors evaluated whether the shipping documents indicated the proper shipper name; emergency response information and a 24-hour contact telephone number; accurate curie content and volume of material; and appropriate waste classification, transport index, and UN number for the following radioactive shipments:

- Shipping Record 13-047; Radioactive Waste Shipment Old Steam Generators Upper Section;
- Shipping Record 13-048; Radioactive Waste Shipment Old Steam Generators Upper Section;

- Shipping Record 13-052; Radioactive Waste Shipment Old Steam Generators Lower Section; and
- Shipping Record 13-053; Radioactive Waste Shipment Old Steam Generators Lower Section.

Additionally, the inspectors assessed whether the shipment placarding was consistent with the information in the shipping documentation.

b. Findings

No findings were identified.

.7 Identification and Resolution of Problems (02.07)

a. Inspection Scope

The inspectors assessed whether problems associated with radioactive waste processing, handling, storage, and transportation, were being identified by the licensee at an appropriate threshold, were properly characterized, and were properly addressed for resolution in the licensee's CAP. Additionally, the inspectors evaluated whether the corrective actions were appropriate for a selected sample of problems documented by the licensee that involve radioactive waste processing, handling, storage, and transportation.

The inspectors reviewed results of selected audits performed since the last inspection of this program and evaluated the adequacy of the licensee's corrective actions for issues identified during those audits.

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 Unplanned Scrams per 7000 Critical Hours

a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Scrams per 7000 Critical Hours performance indicator (PI) for Units 1 and 2 for the period from the first quarter of 2013 through the fourth quarter of 2013. 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 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, CAPs, event reports and NRC Integrated Inspection Reports for the period of the first quarter through the fourth quarter of 2013 to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP

database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two unplanned scrams per 7000 critical hours samples as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Unplanned Scrams with Complications

a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Scrams with Complications performance indicator Units 1 and 2 for the period from the first quarter of 2013 through the fourth quarter of 2013. 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 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, CAP's, event reports and NRC Integrated Inspection Reports for the period of the first quarter through the fourth quarter of 2013 to validate the accuracy of the submittals. The inspectors also reviewed the licensee's CAP database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two unplanned scrams with complications samples as defined in IP 71151-05.

b. Findings

No findings were identified.

.3 Unplanned Transients per 7000 Critical Hours

a. Inspection Scope

The inspectors sampled licensee submittals for the Unplanned Transients per 7000 Critical Hours performance indicator Units 1 and 2 for the period from the first quarter of 2013 through the fourth quarter of 2013. 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 7, dated August 31, 2013, were used. The inspectors reviewed the licensee's operator narrative logs, CAPs, maintenance rule records, event reports and NRC Integrated Inspection Reports for the period of first quarter of 2013 through the fourth quarter of 2013 to validate the accuracy of the submittals. The inspectors also reviewed the licensee's corrective action database to determine if any problems had been identified with the PI data collected or transmitted for this indicator and none were identified. Documents reviewed are listed in the Attachment to this report.

This inspection constituted two unplanned transients per 7000 critical hours samples as defined in IP 71151-05.

b. Findings

No findings were identified.

4OA2 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 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 Selected Issue Follow-Up Inspection: Review of Corrective Actions Taken in Response to CAP 1403558, "Main Steam Piping Re-analysis Inappropriately Conservative"

a. Inspection Scope

During a review of items entered in the licensee's CAP, the inspectors discovered a corrective action document regarding a re-analysis of the Unit 2 main steam lines for torsional acceleration. The inspectors were initially concerned that information in the CAP failed to address whether torsional acceleration issues existed on the Unit 1 main steam lines. The inspectors reviewed the Unit 1 main steam piping analysis to determine whether torsional accelerations were considered in the analysis of record. The inspectors determined that the Unit 1 main steam line analysis of record was acceptable because it demonstrated compliance with the current licensing basis requirements.

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

b. Findings

No findings were identified.

.4 Selected Issue Follow-up Inspection: Use of Designated Operator to Eliminate Need to Accrue System Unavailability During Surveillance Testing

a. Inspection Scope

Nuclear Energy Institute Document 99-02, "Regulatory Assessment Performance Indicator Guidelines," provides NRC licensee's with guidelines that must be met as part of the PI reporting process. Appendix F of NEI 99-02 allowed licensees to exclude system unavailability hours accrued during surveillance testing from their PI reports if a designated operator could take action to restore the system during an emergency. However, NEI 99-02 stated that the designated operator must be stationed locally for the sole purpose of performing the restoration actions, the actions must be proceduralized, and the actions needed to consist of only one action or a few simple actions.

While observing cooling water pump surveillance testing in 2012, the inspectors identified that the licensee was not properly adhering to industry guidelines regarding the use of designated operators. Specifically, the inspectors observed the designated operator performing other activities during the testing rather than being dedicated to performance of the system restoration actions. As a result, the inspectors questioned the accuracy of the licensee's cooling water system PIs. The inspectors reviewed the licensee's PI bases document and system unavailability data for each of the safety-related systems monitored by the NRC's PI program. The inspectors identified similar concerns with the auxiliary feedwater and RHR systems. The licensee reviewed the inspectors' concerns and provided updated PI data to the NRC. While the failure to report accurate PI data to the NRC was a violation of 10 CFR 50.9, this violation was considered minor as none of the PIs changed color.

During the first quarter of 2014, the inspectors observed surveillance testing on multiple systems to ensure that the licensee was complying with the guidance provided in NEI 99-02 regarding the use of designated operators. The inspectors also reviewed a sampling of PI system unavailability information to assess whether the licensee was properly reporting this data to the NRC.

b. Findings

No findings were identified.

4OA5 Other Activities

.1 Institute of Nuclear Power Operations (INPO) Plant Assessment Report Review

a. Inspection Scope

The inspectors reviewed the final report for the INPO plant assessment conducted in August 2013. The inspectors reviewed the report to ensure that issues identified were consistent with the NRC perspectives of licensee performance and to verify if any significant safety issues were identified that required further NRC follow-up.

b. Findings

No findings were identified.

.2 Summary of Revised Cross-Cutting Aspects for 3rd and 4th Quarter 2013 Inspection Findings

The table below provides a cross-reference from the third and fourth quarter 2013 findings and associated cross-cutting aspects to the new cross-cutting aspects resulting from the common language initiative. These aspects and any others identified since January 2014 will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review.

Finding	Old Cross-Cutting Aspect	New Cross-Cutting Aspect
05000282/2013004-01; 05000306/2013004-01	H.3(a)	H.5
05000282/2013004-02; 05000306/2013004-02	H.3(a)	H.5
05000282/2013004-03; 05000306/2013004-03	H.1(b)	H.14
05000282/2013004-04	H.4(c)	H.2
05000252/2013405; 05000306/2013405	H.4(c)	H.2
05000306/2013005-01	H.1(b)	H.14
05000282/2013005-02; 05000306/2013005-02	H.2(c)	H.7
05000282/2013005-03	P.1(c)	P.2

4OA6 Management Meetings

.1 Exit Meeting Summary

On April 3, 2014, the inspectors presented the inspection results to Mr. Kevin Davison, 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 areas of occupational ALARA planning and controls; radiation monitoring instrumentation; and radioactive solid waste processing and radioactive material handling, storage, and transportation with Mr. Kevin Davison, Site Vice President, on February 14, 2014.

The inspectors confirmed that none of the potential report input discussed was considered proprietary.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

K. Davison, Site Vice President
S. Sharp, Director – Site Operations
J. Hallenbeck, Site Engineering Director
T. Allen, Assistant Plant Manager
J. Anderson, Regulatory Affairs Manager
J. Boesch, Maintenance Manager
T. Borgen, Training Manager
B. Boyer, Radiation Protection Manager
H. Butterworth, Nuclear Oversight Manager
F. Calia, Business Support Manager
J. Corwin, Security Manager
K. DeFusco, Emergency Preparedness Manager
D. Gauger, Chemistry/Environmental Manager
G. Johnson, Senior Manager Site Engineering
S. Lappegaard, Production Planning Manager
B. Meek, Safety and Human Performance Manager
J. Ruttar, Operations Manager

Nuclear Regulatory Commission

K. Riemer, Chief, Reactor Projects Branch 2
S. Wall, Project Manager, Office of Nuclear Reactor Regulation

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

05000282/2014002-01	NCV	Failure to Implement the Scaffolding, Ladders and Cable Trays Platforms Procedure (1R15)
---------------------	-----	--

Closed

05000282/2014002-01	NCV	Failure to Implement the Scaffolding, Ladders and Cable Trays Platforms Procedure (1R15)
---------------------	-----	--

Discussed

None

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.

1R01 Adverse Weather Protection

- CAP 1416034; Incorrect Quality Classification, D5/D6 HT Preheater Circulation Motor; January 26, 2014
- CAP 1416232; Nuisance Alarms in ISFSI Due to Snow Accumulation; January 26, 2014
- CAP 1416272; Did Not Perform TP2296A 7 TP2296B D5 & D6 Fan Runs; January 26, 2014

1R04 Equipment Alignment

- C1.1.15-2; Unit 2 Residual Heat Removal; Revision 33; October 23, 2013
- C1.1.35-2; Cooling Water System Integrated Checklist; Revision 32
- C19.2-6; Shield Building Ventilation System Unit 2; Revision 9
- C37.11; Chilled Water Safeguard System Operation; Revision 25
- C37.11-1; Chilled Water Safeguards System; Revision 21
- CAP 1332269; 122 CR Chiller Oil Sump Temperature Observed At 126F; April 4, 2012
- CAP 1332665; 122 CR Chiller Oil Sump Temperature Observed From 125-143F; April 8, 2012
- CAP 1333849; Alert Vibes On 121 CR Chiller; April 14, 2012
- CAP 1344880; 121 Control Room Chiller Purge Compressor Unit Electrical Box Disconnected; July 14, 2012
- CAP 1356401; 121 CR Chiller Did Not Start; October 25, 2012
- CAP 1356614; 121 CR Chiller Control Panel Fuses Opened; October 26, 2012
- CAP 1356614; 121 CR Chiller Control Power Fuses Opened; November 19, 2013
- CAP 1356787; Potentially Defective Fuses Installed In 122 CR Chiller; October 27, 2012
- CAP 1379250; Perform a(1) Determination MRFF 1356614; April 17, 2013
- CAP 1386289; 122 CR Chiller Has Suspected Leak Into Compressor; June 12, 2013
- CAP 1396029; SF-27-2, 122 SFP PMP DISCH CHECK Inspection Plug Leak Worse; October 10, 2013
- CAP 1413710; I-beam is Not Attached to Wall Properly; January 8, 2014
- CAP 1421678; 121 CR Chiller Pressure Switch Found Out Of Tolerance; March 6, 2014
- Figure B35-1; Cooling Water System Flow Diagram; Revision 15
- NF-39216-1; Flow Diagram Cooling Water – Screenhouse Unit 1 & 2; Revision 86
- WO 467078-01; Replace Control Power Fuses For 121 CR Chiller; November 30, 2012
- WOP 00466934-06; Replace 121 CR Chiller Refrg. Gas Inlet Vane Load Limit Relay; October 27, 2012
- X-HIAW-106-102; Piping ISO Cooling Water Turbine Room; Revision C

1R05 Fire Protection

- 5AWI 3.13.2; Fire Prevention; Revision 22
- 5AWI 8.5.0; Housekeeping and Material Condition; Revision 11
- F5, Appendix A; Fire Protection Zones; Revision 29
- F5, Appendix F; Fire Hazard Analysis; Revision 28

1R06 Flood Protection (Internal)

- H65.2.21; Inaccessible Medium and Low Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Aging Management Program; Revision 0
- WO-480951-01; Structural Inspection of Manhole 13.8KV; January 10, 2014
- NF-45431; Underground Cable Layout Substation to Cooling Tower Area; Revision 84

1R12 Maintenance Effectiveness

- CAP 1319887; 1RE12 Communications Link Failed; January 2012
- CAP 1324077; R-18 Failed during Performance of SP 1027.11B; February 7, 2012
- CAP 1327291; 2RM-54 Spurious High Warning Alarms; March 1, 2012
- CAP 1329594; 1R49 Containment High Range Area Radiation Detector A Dropped Approximately 0.6R; March 16, 2012
- CAP 1336535; 1R11 has a Local Link Failure Alarm; May 5, 2012
- CAP 1350121; 2R48 Failed Source Check High; August 30, 2012
- CAP 1354242; 2R51 Steam Generator Main Steam Loop Radiation Monitor Needle not Deflecting; October 7, 2012
- CAP 1357794; R-25 did not Actuate 121 Spent Fuel Pool Special Ventilation System; November 4, 2012
- CAP 1358243; 1R50 Shield Building High Range Radiation Monitor Pump Sheared Shaft; November 7, 2012
- CAP 1361354; 2R51 Main Steam Line Radiation Monitor is Failing; November 30, 2012
- CAP 1370577; 1RE-11 Failed; February 16, 2013
- CAP 1375936; 1R11 Failure; March 23, 2013
- CAP 1381363; Unplanned Limiting Condition for Operation Entry due to 2R-11 Failure; May 2, 2013
- CAP 1381633; RE-27 12/22 Residual Heat Removal Cubical Air Radiation Detector Pump Failed; May 4, 2013
- CAP 1387415; 2R-54 Indicated Higher Than Expected At Lowest Bug Point; No MRE; June 21, 2013
- CAP 1387456; 2R-30 Auxiliary Building Vent Radiation Monitor Power Supply Has High Ripple; No Date
- CAP 1388700; Unplanned LCO Entry and Trip of Unit 2 SGB; July 2, 2013
- CAP 1388849; R-38 Spiking Causing Alarms; No Date
- CAP 1389002; R-38 With Hi Alarm On Detector and No Control Board Alarm; No Date
- CAP 1389082; 1R-11 Indicated Count Rate Increases Every 65 Hours; No Date
- CAP 1390410; Increasing Downward Trend 2R0049A U2 Containment High RNG Area Monitor A; July 8, 2013
- CAP 1390727; 1R-07 High Radiation Alarm, 47022-0108; No Date
- CAP 1390746; 2R-11 Containment/Shield Building Vent Part Rad Pump Failed; July 19, 2013
- CAP 1391772; 2R-37 Vacuum Gauge Reading 0"; July 29, 2013
- CAP 1391796; 2R-48 Fails To Reach Minimum Acceptable Value; No Date
- CAP 1392415; 1R52 Found In Alarm; No Date
- CAP 1392427; 2R-50 High Flow Indicator; No Date
- CAP 1392657; R 38 Failed Bug Test During SP 1027.2A; August 6, 2013
- CAP 1392694; 1R-52 Has Been Trending Up Over The Last 21 Days; No Date
- CAP 1393001; R-21 Failed Bug Point Test Three Times During SP 1027.2A; Invalid MRE; August 9, 2013

- CAP 1393460; 1R-07 Incore Seal Table Area Rad Det Failed High; No MRE; No Date
- CAP 1393674; 1R-52 Is Alarming Multiple Times Per Shift; No Date
- CAP 1393978; IR-50 Shield Building Hi Range Vent Gas Rad Det Flow Indicator; No Date
- CAP 1394475; MREP Approved RD Maintenance Rule Basis Document Revision; August 23, 2013
- CAP 1395369; IR-54 CS Pump Area Rad Meter Failed TP-1740; No Date
- CAP 1396733; IR-02 Containment Vessel Area Rad Det In Alarm; September 13, 2013
- CAP 1397202; 2R12 Fails Source Check; September 18, 2013
- CAP 1398343; 2R-2 Multiple Downscale Failure Alarms; No Date
- CAP 1399098; 2R-2 Downscale Failure Input To U1 BOP Annunciator Disabled; No Date
- CAP 1401561; 1RE-52 Found In Alarm; No Date
- CAP 1402023; R-38 Used As A Workbench; No Date
- CAP 1403215; Faulty Control Switch On 2RM-02; No Date
- CAP 1403532; R-24 Did Not Actuate Downscale Alarm Per SP 1229B; No Date
- CAP 1403538; 2R-11 Pump Tripped; October 25, 2013
- CAP 1405235; 2R-11 Pump Tripped; November 6, 2013
- CAP 1405259; 1R-11 Filter Not In Motion Alarm; No Date
- CAP 1405634; Found 2RM-02 High Alarm Out Of Tol Low During WO 489636; No Date
- CAP 1406852; 1R-11 Skid RAM 606 Module Failed During SP-1229B; November 17, 2013
- CAP 1407504; 2RE-19 Failed To Respond Properly To Bug Point #3 During SP; No Date
- CAP 1410220; 2R-22 Hi Rad Alarm Tripped In-Service Purge; No Date
- CAP 1410641; 2RE-7 Multiple Rad Monitor Downscale Failure Alarms; No Date
- CAP 1411006; 1RE-11 Torn Paper Alarm, Unplanned LCO; No Date
- CAP 1412272; 1R-70 Removed From Service Due To Frequent Spiking; No Date
- CAP 1413795; 1RM-02 Containment Vessel Area Rad Monitor; No Date
- CAP 1415271; 2R-37 Pump Failure; No Date
- CAP 1415330; Broken Belt On MTR-222G-1 Shield Building Vent Monitor 2R; No Date
- CAP 1416062; 2R-37 Sample Pump Will Not Start; No Date
- CAP 1417909; 1R-22 Indicates High Counts; No Date
- CAP 1418563; R-21 Failed Low; No Date
- FP-E-MR-02- Maintenance Rule Scoping; RD – Radiation Monitoring; September 10, 2013
- FP-E-MR-02, Maintenance Rule Scoping, RD – Radiation Monitoring; September 2013
- Maintenance Rule Scope Evaluation; System ZH, Safeguards Chilled Water; February 13, 2014
- PINGP Maintenance Rule (a)(1) SSCs; March 3, 2014
- Xcel Energy (a)(1) Action Plan Development and Action Plan (Monitoring) Goal Setting Template; CAP 01394475 – Determined At MREP Meeting; August 23, 2013
- Xcel Energy (a)(1) Action Plan Development and Action Plan (Monitoring) Goal Setting Template; CAP 01394475-01; January 10, 2014

1R13 Maintenance Risk Assessment and Emergent Work

- CAP 01417161; Unplanned LCO Entry Due To Failure Of 22 DD Cooling Water Pump; February 1, 2014
- CAP 1417079; Question About Possible Pre-Conditioning During SP 1106B; January 31, 2014
- CAP 1417083; Question About Possible Pre-Conditioning During SP 1106B; January 31, 2014
- CAP 1417111; During SP 1106B A Question On Dedicated Operator Occurred; January 31, 2014
- CAP 1417625; Fire Protection Equipment OOS > 72 Hours For FP PRA; February 5, 2014
- CAP 1420107; Trend Increase In Gen End Turn Vibration On Sensor #8; February 24, 2014
- FP-E-MR-09; Maintenance Rule (a)(4) Fire Risk Assessment Mitigation Actions; Revision 0

- FP-WM-IRM-01; Integrated Risk Management; Revision 10
- FP-WM-IRM-02; Station Integrated Risk Management/Defense in Depth; Revision 0
- H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 19
- NRC Form 361 (12-2000); Event Notification Worksheet; False Activation Of Emergency Siren (G-14); January 30, 2014
- Risk Assessment For Proposed Work For Week Of 1405; U1 Configuration Risk Assessment; February 4, 2014
- Risk Assessment For Proposed Work For Week Of 1406; U1 Configuration Risk Assessment; February 11, 2014
- SP 1106B; 22 Diesel Cooling Water Pump Monthly Test, Revision 81; May 23, 2013

1R15 Operability Evaluations

- C37.11-1; Chilled Water Safeguards System; Revision 21
- CAP 1404075; Power Supply Voltage for XMTRs Not Identified Properly in EC; October 29, 2013
- CAP 1412465; CV-39417 22 CRDM SHRD CLG Coil SPLY CV Stopped Mid-travel; December 26, 2013
- CAP 1418846; Scaffolding In Contact With Plant Equipment; February 13, 2014
- CAP 1418855; Scaffolding in Contact with Plant Equipment; February 13, 2014
- CAP 1419392; Extent Of Condition Walk Down On CAP 1418846; February 17, 2014
- CAP 1419465; Scaffold Near Plant Equipment Less Than 1 inch Clearance; February 18, 2014
- CAP 1419466; 121 Control Room Chiller; February 18, 2014
- CAP 1419664; Unplanned LCO for 2R-11; February 19, 2014
- CAP 1421650; D80, Rev 27 Requires Revision Due To Inconsistencies; March 6, 2014
- CAP 1422875; 121 CR Chiller Leaked Upon Restoration; March 17, 2014
- D80; Scaffolding, Ladders And Cable Trays Platforms; Revision 27
- DBD SYS-35; Design Bases Document for the Cooling Water System; Revision 9
- NF-86172-4; Flow Diagram CHLD WTR SYS ZE Loads and CNTMT Units 1 & 2; Revision 78
- SP 2297B; Train B Quarterly Cycling of CRDM Cooling Valve; Revision 8
- WO 482544-02; Clean 2CL-95-1 Valve & Sensing Lines; February 13, 2014

1R19 Post Maintenance Testing

- 1C23 AOP2; Malfunction Of Turbine EH Control System; Revision 16
- 1C23; Unit 1 Turbine Control System; Revision 17
- C20.11-1; Cooling Tower 4.16KV Breaker Rack Out/Rack In; Revision 15
- CAP 1414344; Minor Leakage on D1 Lube Oil HX Floating End Flange; January 13, 2014
- CAP 1414360; D1 DSL Gen Start-up Air Compressor Gasket Leak; January 13, 2014
- CAP 1417614; BKR CT11-6, Breaker Found Out of Adjustment; February 5, 2014
- CAP 1417868; Damage Caused By Moisture Found in 4160v Breaker Cubicle; February 6, 2014
- CAP 1418333; Unplanned LCO 3.6.9 for Train A Shield Bldg Vent System; February 11, 2014
- PE CT11-06T; CT11-6 Breaker Relay Test Trip; Revision 1
- SP 1073A; Monthly Train A Shield Building Ventilation System Test; Revision 9
- SP 1093; D1 Diesel Generator Monthly Slow Start Test; January 13, 2014
- SP 2089B; Train A RHR Pump and Suction Valve From the RWST Quarterly Test; February 6, 2014

- WO 1417493; Bus CT11 Feed to Bus 15&16, Closing Springs Failed to Charge; February 5, 2014
- WO 450877-01; D1 DSL GEN Air Compressor Relief PM; January 13, 2014
- WO 450878-01; SA-54-3 Change-out Relief Valve; January 13, 2014
- WO 479095; Six Month D1 DSL Generator Inspection; January 13, 2014
- WO 497153-01; 21 Shield Building Ventilation System D/P Switch Calibration; February 14, 2014
- WO 497481-03; Mech: Replace 12 E-H Oil Pump Rework; March 11, 2014

1R20 Refueling and Outage

- 2C1.2-M1; Unit 2 Startup To Mode 1; Revision 0; November 9, 2013

1R22 Surveillance Test

- C18.1; Engineering Safeguards Equipment Support Systems; Revision 36
- CAP 1408830; D5 E1 Lube Oil Press Switch Inlet Fitting Leak; December 7, 2013
- CAP 1417057; Requirement of C18.1 Not Met During D5 Run 1/* and D6 Run 1/19/2014; January 31, 2014
- CAP 1417308; Added Oil to D5 2B Air Dist Air Oiler; February 3, 2014
- CAP 1417838; Minor Leakage Noted on 21 RHR Pump Seal During SP 2089A; February 6, 2014
- SP 2032B; Safeguards Logic Test at Power – Train B; Revision 22
- SP 2035B; Reactor Protection Logic Test at Power – Train B; January 30, 2014
- SP 2093; D5 Diesel Generator Monthly Slow Start Test; February 4, 2014
- WR 101156; Minor Packing on 12 MDAFW Pump Discharge Root Isolation Valve; February 27, 2014

2RS2 Occupational As-Low-As-Reasonably-Achievable Planning and Controls

- 2013 Contaminated Workers Report; date printed February 11, 2014
- 2014 Prairie Island ALARA Program Status Report; dated January 15, 2014
- Prairie Island Nuclear Generating Plant; 2R28 Radiation Protection Outage Report; Steam Generator Replacement Project; dated February 3, 2014

2RS5 Radiation Monitoring Instrumentation

- CAP 1368170; WBC Calibration Did Not Occur at Normal Frequency; dated February 28, 2013
- CAP 1371265; Incorrect WBC Factory Settings; dated September 16, 2013
- FP-RP-EDC-01; DMC-2000 S/SOR Electronic Dosimeter and IRD-2000 Calibration; Revision 02
- FP-RP-ICC-01; Instrument Control and Calibration/Functional Check Frequencies of RP Instruments; Revision 06
- FP-RP-WBC-01; Whole Body Counter Use and Functional Check; Revision 01
- H4; Prairie Island Nuclear Generating Plant; Offsite Dose Calculation Manual (ODCM); Revisions 27 and 28
- NOS Observation Report 1401046; Radiological Monitoring Instrumentation; dated December 19, 2013
- PINGP 1008; ASP-1 Neutron Meter Calibration Data Sheet; various dates 2013
- PINGP 1025; Yearly Source Calibration; dated August 14, 2013
- PINGP 1149; RO2A Calibration Data Sheet; various dates 2013

- PINGP 1449; AMS-4 CAM Calibration Data Sheet; various dates 2013
- PINGP 1569; Eberline PCM-1B Calibration Data Sheet; various dates 2013
- PINGP 1572; SAM-11 Small Article Monitor Calibration Data Sheet; various dates 2013
- PINGP 1635; Model 177 Frisker Calibration Data Sheet, various dates 2013
- PINGP 1642; MG Telepole Calibration Data Sheet; various dates 2013
- PINGP 1656; AMP-100 Calibration Data Sheet; various dates 2013
- PINGP 716; Portal Monitor Calibration Data Sheet; various dates, 2013
- PINGP 718; Radeco AVS-28A Air Sampler Calibration Data Sheet; various dates, 2013
- PINGP 722; AM-2 Area Monitor Calibration Data Sheet; various dates 2013
- RPIP 1501; Radiation Protection Instrument Control; Revision 15
- RPIP 1558; Protean Operation, Daily Checks and Plateaus; Revision 13
- RPIP 1608; RO-2, RO-2A, and RO-20 Operation and Calibration; Revision 10
- RPIP 1613; Model 177 Frisker Operation and Calibration; Revision 02
- RPIP 1614; RM-14 Operation and Calibration; Revision 14
- RPIP 1615; Eberline E-120 with Frisker Probe Operation and Calibration; Revision 11
- RPIP 1621; AM-2 Area Monitor Operation and Calibration; Revision 16
- RPIP 1632; RADECO AVS-28A Air Sampler Calibration; Revision 10
- RPIP 1658; ASP-1 Neutron Meter Operation and Calibration; Revision 14
- RPIP 1660; Yearly Source Calibration; Revision 9
- RPIP 1673; AMS-4 CAM Operation and Calibration; Revision 09
- RPIP 1674; PM-7 Portal Monitor Description, Operation, and Calibration; Revision 07
- RPIP 1675; Eberline PCM-1B Operation and Calibration; Revision 04
- RPIP 1677; SAM-11 Small Articles Monitor Operation and Calibration; Revision 06
- RPIP 1680; MG Telepole Operation and Calibration; Revision 02
- RPIP 1682; RADOS TSE Operation and Calibration; Revision 03
- RPIP 1684; AMP-100 Operation and Calibration; Revision 01
- RPIP 4651; Gas Calibration of R25 and R31; Revision 04
- SP 1027.1B; Westinghouse Radiation Monitor Train "B" Calibration; dated August 2013
- SP 1027.2A; NMC Radiation Monitor Train "A" Calibration; dated July 2013
- SP 1027.2B; NMC Radiation Monitor Train "B" Calibration; dated January 2012
- SP 1243B; Radiation Monitoring Quarterly Source Test Train "B"; dated September 2013
- SP 1783.4A; High Range Radiation Monitor Electronic Calibration Train "A"; dated January 2013
- SP 1783.4B; High Range Radiation Monitor Electronic Calibration Train "B"; dated January 2013
- SP 1783.5A; Apentec Radiation Monitor Channel Cal Train A; dated September 30, 2013

2RS8 Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

- C49.10; Clamshell Operations; Revision 16
- D11.7; Radioactive Material Shipment LSA/SCO/LDT Quantity to a Licensed Facility; Revision 21
- D11.11; Radioactive Material Shipment LSA/SCO/LDT Quantity to a Licensed Processing Facility; Revision 17
- D11.12; Radioactive Materials Shipment – Old Steam Generator, Upper and Lower Parts; Revision 3
- D20.13; Sluicing Resin from 12 Mixed Bed IX to 121 Spent Resin Tank; Revision 19
- D20.16; Sluicing Resin from 11 Evap Condensate IX to a Resin Shipping Liner; Revision 16
- D59; Process Control Program for Solidification/Dewatering of Radioactive Waste from Liquid Systems; Revision 10

- Department of Transportation Special Permit 14455; June 3, 2013
- FP-RP-RW-02; Radioactive Shipping Procedure; Revisions 8 and 9
- FP-WM-IRM-01; Integrated Risk-Management; Revision 10
- H31 Radioactive Fluid Leakage Outside of Containment Reduction Program; Revision 2
- NOS Observation Report 2013-02-026; Radiation Protection/Rad Waste; dated July 18, 2013
- PM 4629; WL and WG Concealed Tank Inspections; Revision 1
- RPIP 1303; Packaging of Radioactive Material for Shipment; Revision 9
- RPIP 1309; Tracking Radwaste Shipments; Revision 6
- RPIP 1310; Rad Waste Streams Scaling Factors; Revision 11
- RPIP 1319; Loading LSA Boxes/Sealand Containers; Revision 20
- RPIP 1721; Resin Sluice; Revision 22
- QF-2007; (FP-WM-IRM-01); Planning and Approval of High Risk or Scheduled Risk Work; Revision 3
- QF-2010; (FP-WM-IRM-01); Work Order Risk Screening Worksheet; Revision 16
- Shipping Record 13-047; Radioactive Waste Shipment Old Steam Generators Upper Section; November 16, 2013
- Shipping Record 13-048; Radioactive Waste Shipment Old Steam Generators Upper Section; November 16, 2013
- Shipping Record 13-052; Radioactive Waste Shipment Old Steam Generators Lower Section; December 26, 2013
- Shipping Record 13-053; Radioactive Waste Shipment Old Steam Generators Lower Section; December 26, 2013
- SP 1201C; CVCS Holdup Tank and Associated Leakage Test; Revision 8
- Title 10 CFR Part 61 Waste Characterization Analysis; Bead Resin; dated August 2012
- Title 10 CFR Part 61 Waste Characterization Analysis; Dry Active Waste; dated August 2012
- Title 10 CFR Part 61 Waste Characterization Analysis; High Level Filters; dated August 2012
- Title 10 CFR Part 61 Waste Characterization Analysis; Low Level Filters; dated August 2012
- Title 10 CFR Part 61 Waste Characterization Analysis; SGBD Resin; dated February 2013

40A1 Performance Indicator Verification

- CAP 1416664; RCS Special Activity – Misreporting Of Performance Indicator For 2013; January 29, 2014

40A2 Identification and Resolution of Problems

- Calculation Book No. 132; "Reactor Building Framing for Pipe Break"; Revision 0
- Calculation Book No. 138; "Prairie Island-Unit #1 Reactor Building Main Steam Line Steam Generator #1B Pipe Rupture Restraints"; Revision 0
- Calculation No. 259.10; "MS SYST-CALCS FOR RIGID RESTRAINT AT PT#81"; Revision 0
- Calculation No. 321.4200-AD; "Design of Pipe Hangers at Fuel Handling Floor and Operating Floor;" Revision 0
- Calculation No. 321.4200-C; "Design of Main Steam Steel Force Restraint #1;" Revision 0
- CAP 1412091; "NRC Question 71152-01"; dated December 20, 2013
- CAP 1412093; "NRC Question 71152-02"; dated December 20, 2013
- CAP 1412095; "NRC Question 71152-03"; dated December 20, 2013
- CAP 1412096; "NRC Question 71152-04A"; dated December 20, 2013
- CAP 1412097; "NRC Question 71152-05"; dated December 20, 2013
- CAP 1412098; "NRC Question 71152-06"; dated December 20, 2013
- CAP 1412099; "NRC Question 71152-07A"; dated December 20, 2013
- CAP 1412100; "NRC Question 71152-07B"; dated December 20, 2013

- CAP 1412101; "NRC Question 71152-08"; dated December 20, 2013
- CAP 1412104; "NRC Question 71152-04B"; dated December 20, 2013
- CAP 1417079; Question About Possible Pre-Conditioning During SP 1106B; January 31, 2014
- CAP 1417083; Question About Possible Pre-Conditioning During SP 1106B; January 31, 2014
- CAP 1417111; During SP 1106B A Question On Dedicated Operator Occurred;
January 31, 2014
- CAP 1417161; Unplanned LCO Entry Due To Failure Of 22 DD Cooling Water Pump;
February 1, 2014
- Drawing No. ND-92411-19; "Pipe Support 1-MSH-109"; Revision B
- Drawing No. XH-106-7157; "Main Steam Pipe Support 1-MSH-4"; Revision 075
- SP 1106B; 22 Diesel Cooling Water Pump Monthly Test; Revision 81; May 23, 2013

LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access Management System
ALARA	As-Low-As-Is-Reasonably-Achievable
CAP	Corrective Action Program
CFR	Code of Federal Regulations
DRP	Division of Reactor Projects
ED	Electronic Dosimeter
EDG	Emergency Diesel Generator
EHC	Electrohydraulic Control
IMC	Inspection Manual Chapter
INPO	Institute of Nuclear Power Operations
IP	Inspection Procedure
IR	Inspection Report
kV	Kilovolt
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OPR	Operability Recommendation
PARS	Publicly Available Records System
PCP	Process Control Program
PI	Performance Indicator
RFO	Refueling Outage
RHR	Residual Heat Removal
SBSVS	Shield Building Special Ventilation System
SDP	Significance Determination Process
TS	Technical Specification
TYRA	Three Year Rolling Average
USAR	Updated Safety Analysis Report
WBC	Whole Body Counter
WO	Work Order

K. Davison

-2-

Additionally, as we informed you in the most recent NRC integrated inspection report, cross-cutting aspects identified in the last six months of 2013 using the previous terminology were being converted in accordance with the cross-reference in Inspection Manual Chapter (IMC) 0310. Section 4OA5 of the enclosed report documents the conversion of these cross-cutting aspects which will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review. If you disagree with the cross-cutting aspect assigned, 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 Prairie Island Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and 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 Documents Access and Management System (ADAMS), 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 2
Division of Reactor Projects

Docket Nos. 50-282; 50-306; 72-010
License Nos. DPR-42; DPR-60; SNM-2506

Enclosure:
IR 05000282/2014002; 05000306/2014002
w/Attachment: Supplemental Information

cc w/encl: Distribution via LISTSERV®

DISTRIBUTION:
See next page

DOCUMENT NAME: Prairie Island IR 2014002
 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	
NAME	NShah:mt		KRiemer					
DATE	04/24/14		05/05/14					

OFFICIAL RECORD COPY

Letter to Kevin Davison from Kenneth Riemer dated May 5, 2014

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2
NRC INTEGRATED INSPECTION REPORT 05000282/2014002;
05000306/2014002

DISTRIBUTION:

Joseph Nick
RidsNrrPMPrairieIsland Resource
RidsNrrDorLpl3-1 Resource
RidsNrrDirslrib Resource
Cynthia Pederson
Darrell Roberts
Steven Orth
Allan Barker
Carole Ariano
Linda Linn
DRPIII
DRSIII
Patricia Buckley
Carmen Olteanu
ROPreports.Resource@nrc.gov