UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
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February 1, 2012

Mr. Mark A. Schimmel
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 05000282/2011005; 05000306/2011005

Dear Mr. Schimmel:

On December 31, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an integrated inspection at your Prairie Island Nuclear Generating Plant, Units 1 and 2. The enclosed inspection report documents the results which were discussed on January 12, 2012, with Mr. K. Davison and other members of your staff.

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

One NRC-identified finding of very low safety significance was identified during this inspection. This finding was determined to involve a violation of NRC requirements. Further, licensee-identified violations which were determined to be of very low safety significance are listed in this report. The NRC is treating these violations as non-cited violations (NCVs) consistent with Section 2.3.2 of the Enforcement Policy.

If you contest these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with copies to the Regional Administrator, Region III; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at the Prairie Island Nuclear Generating Plant. If you disagree with the cross-cutting aspect assignment 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.

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

Sincerely,

/RA/

Kenneth Riemer, Branch Chief
Branch 2
Division of Reactor Projects

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

Enclosure: Inspection Report 05000282/2011005; 05000306/2011005
w/Attachment: Supplemental Information

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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:	05000282/2011005; 05000306/2011005
Licensee:	Northern States Power Company, Minnesota
Facility:	Prairie Island Nuclear Generating Plant, Units 1 and 2
Location:	Welch, MN
Dates:	October 1 through December 31, 2011
Inspectors:	K. Stoedter, Senior Resident Inspector P. Zurawski, Resident Inspector R. Baker, Operations Engineer S. Bell, Health Physicist D. McNeil, Senior Operations Engineer D. Oliver, Operations Engineer M. Phalen, Senior Health Physicist P. Voss, Resident Inspector – Monticello
Approved by:	Kenneth Riemer, Branch Chief Branch 2 Division of Reactor Projects

Enclosure

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SUMMARY OF FINDINGS

IR 05000282/2011005, 05000306/2011005; 10/01/2011 – 12/31/2011; 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 most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Mitigating Systems

- Green. A finding of very low safety significance and an associated NCV of 10 CFR Part 50, Appendix B, Criterion V, was identified by the inspectors due to the licensee's failure to complete an immediate operability determination as required by Procedure FP-OP-OL-01, "Operability/Functionality Determination." On October 27, 2011, the licensee identified that numerous molded case circuit breakers may not have received appropriate testing to demonstrate that the breakers would open to protect safety-related equipment. Although a corrective action document was written, an immediate operability determination was not performed because the information in the document was viewed as programmatic in nature. Corrective actions for this event included performing the immediate operability determination and ensuring that operations personnel understood that operability determinations were required for programmatic concerns which questioned equipment operability.

  The inspectors determined that this issue was more than minor because, if left uncorrected, the failure to complete operability determinations could result in leaving inoperable plant equipment in service (a more significant safety concern). The inspectors determined that this issue was of very low safety significance because it was not a design deficiency; it did not represent a loss of system safety function; it did not present a loss of safety function for one train for greater than the Technical Specification (TS) allowed outage time; and it did not screen as potentially risk significant due to a seismic, flooding or severe weather initiating event. This finding was determined to be cross-cutting in the Human Performance, Decision Making area because the licensee failed to use conservative assumptions when deciding whether an immediate operability determination was needed for the molded case circuit breakers (H.1(b)). (Section 1R15.1)

B. Licensee-Identified Violations

Violations of very low safety significance or severity level IV that were identified by the licensee have been reviewed by inspectors. Corrective actions planned or taken by the licensee have been entered into the licensee's corrective action program (CAP). These violations and corrective action tracking numbers are listed in Section 4OA7 of this report.

REPORT DETAILS

Summary of Plant Status

Unit 1 operated at or near full power levels for most of the inspection period. Small changes in reactor power were made during the inspection period to allow for routine testing of plant equipment. On December 2, 2011, operations personnel lowered Unit 1 reactor power to 45 percent to perform turbine stop valve testing. Operations personnel returned Unit 1 to full power on December 4, 2011.

Unit 2 began the inspection period operating at full power. On October 4, 2011, operations personnel shut down the Unit 2 reactor to allow the reactor coolant pump seals to be replaced. Operations personnel returned Unit 2 to power on October 19, 2011.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

.1 Winter Seasonal Readiness Preparations

a. Inspection Scope

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

- D5 and D6 Emergency Diesel Generator (EDG) Ventilation Systems.

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

b. Findings

Introduction: The inspectors identified an unresolved item (URI) due to the potential that Technical Specification (TS) Surveillance Requirement 3.8.1.1 was not performed within one hour of rendering the D5 EDG inoperable on November 10, 2011.

Description: On May 15, 2011, the licensee initiated CAP Document 1285989 due to Motor Damper (MD) 32421 (the 21 D5 Diesel Room Exhaust Air MD) failing to close as expected during testing. The licensee immediately evaluated this condition and determined that the failure of MD-32421 to operate as expected did not impact the operability of the diesel ventilation system or the D5 EDG since the outside air temperature was warm enough to keep the D5 EDG room within the required temperature limits.

Night shift operations personnel removed MD-32421 from service for repairs at 5:24 a.m. on November 10, 2011. In order to complete the repairs, MD-32420 and MD-32422 were also removed from service. After removing the MDs from service, operations personnel determined that the D5 EDG remained operable and available since the temperature in the D5 EDG room was greater than 50 degrees Fahrenheit (the minimum allowed room temperature). At 6:37 a.m., day shift operations personnel declared the D5 EDG inoperable because the method used to remove the MDs from service eliminated the ability of the dampers to modulate as specified in the USAR. Approximately 20 minutes later, operations personnel restored the ability of all three MDs to modulate and the D5 EDG was declared operable. The licensee initiated CAPs 1312509 and 1313190 to document this issue.

The inspectors reviewed TS 3.8.1, "AC Sources-Operating," to determine whether operations personnel had complied with TS requirements while removing the MDs from service. Technical Specification Limiting Condition for Operation (LCO) 3.8.1.B required that TS Surveillance Requirement 3.8.1.1 be performed within one hour of rendering an EDG inoperable. During a review of the November 10, 2011, Operations Station Log and the LCO Log the inspectors identified that the MDs discussed above were removed from service between 5:22 and 5:25 a.m. However, TS Surveillance Requirement 3.8.1.1 was not performed within one hour since the operations crew did not believe that removing the MDs from service rendered the D5 EDG inoperable.

The licensee was reviewing licensing and design basis documentation for the D5 EDG and the D5 EDG ventilation system at the conclusion of the inspection period. The licensee planned to use the review results to determine whether removing the MDs from service such that they were no longer able to modulate impacted the D5 EDG operability. As a result, this item was determined to be unresolved pending the inspectors review of the licensee's licensing and design basis information **(URI 05000306/2011005-01; Potential Technical Specification Non-Compliance While Completing Repairs on Motor Damper 32421)**.

1R04 Equipment Alignment (71111.04)

.1 Quarterly Partial System Walkdowns

a. Inspection Scope

The inspectors performed a partial system walkdown of the following risk-significant equipment:

- 121 Motor Driven Cooling Water Pump and 22 Diesel Driven Cooling Water Pump (DDCLP) while the 12 DDCLP was out-of-service.

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

These activities constituted one partial 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:

- 480 Volt (V) Safeguards Switchgear Bus 112 Room, (Fire Area 79);
- 4 Kilovolt (kV) Bus 26 Room (Fire Area 118);
- 480V Bus 211/212 Room (Fire Area 127); and
- 4kV Bus 27 Room (Fire Area 128).

The inspectors reviewed areas to assess if the licensee had implemented a fire protection program that adequately controlled combustibles and ignition sources within the plant, effectively maintained fire detection and suppression capability, maintained passive fire protection features in good material condition, and implemented adequate compensatory measures for out-of-service, degraded or inoperable fire protection equipment, systems, or features in accordance with the licensee's fire plan.
The inspectors selected fire areas based on their overall contribution to internal fire risk as documented in the plant's Individual Plant Examination of External Events with later additional insights, their potential to impact equipment which could initiate or mitigate a plant transient, or their impact on the licensee's ability to respond to a security event. Using the documents listed in the Attachment to this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for

immediate use; that fire detectors and sprinklers were unobstructed; that transient material loading was within the analyzed limits; and fire doors, dampers, and penetration seals appeared to be in satisfactory condition. The inspectors also verified that minor issues identified during the inspection were entered into the licensee's CAP.

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

b. Findings

Introduction: The inspectors identified a URI due the failure to have an adequate fire barrier between Fire Areas 118 and 128.

Description: During an inspection of Fire Areas 118 and 128 on November 8, 2011, the inspectors identified that the barrier between the two fire areas was degraded such that it failed to provide the required 3-hour fire rating. Fire Area 118 contained electrical bus 26 which was used to power Train B safeguards 4160 V equipment. Fire Zone 128 contained electrical bus 27 which was used to provide power to the 121 motor driven cooling water pump. Plant design allowed electrical bus 27 to be powered from either electrical bus 25 (Train A safeguards 4160 V equipment) or electrical bus 26.

The inspectors questioned licensee personnel regarding the adequacy of the fire barrier between Fire Areas 118 and 128. The licensee confirmed that the beam at the top of the wall between the two fire areas was not filled with a fire rated material and, therefore, could not be considered a 3-hour rated fire barrier. The licensee initiated CAP 1312153, documented the fire impairment, and established an hourly fire watch as a compensatory measure. The fire watch remained in place at the conclusion of the inspection period.

As discussed above, electrical bus 27 can be powered from electrical bus 25 or electrical bus 26. The electrical configuration of the bus used to supply power to electrical bus 27 was controlled through the use of a KIRK-KEY switch. The use of a KIRK-KEY switch also prevented electrical bus 27 from being powered by electrical bus 25 and electrical bus 26 at the same time. The licensee had previously assumed that a fire in Fire Area 118 or Fire Area 128 would result in the failure of Train B safeguards equipment. On December 9, 2011, the licensee identified the potential for a loss of direct current (DC) control power to electrical bus 25 (Train A) if a fire occurred in Fire Area 128 and electrical bus 27 was powered by electrical bus 25. Due to the degraded fire barrier between Fire Area 118 and Fire Area 128, the same fire could also result in a loss of electrical bus 26. This resulted in a condition the licensee had not analyzed. The licensee initiated CAP 1316877 to document this concern.

The licensee continued to evaluate this concern at the conclusion of the inspection. The inspectors planned to review the licensee's evaluation to determine whether the licensee was in compliance with 10 CFR Part 50 Appendix R. As a result, this issue was determined to be unresolved pending the inspectors review of the licensee's evaluation results **(URI 05000306/2011005-02: Appendix R Fire Barrier Degraded Between Fire Areas 118 and 128)**.

1R06 Flooding (71111.06)

.1 Internal Flooding

a. Inspection Scope

The inspectors reviewed selected risk important plant design features and licensee procedures intended to protect the plant and its safety-related equipment from internal flooding events. The inspectors reviewed flood analyses and design documents, engineering calculations, abnormal operating procedures and drawings to identify areas and equipment that may be affected by internal flooding caused by the failure or misalignment of nearby sources of water. The inspectors also reviewed the licensee's corrective action documents with respect to past flood-related items identified in the CAP to verify the adequacy of the corrective actions. The inspectors performed a review of the following plant equipment to assess the adequacy of flood detection and mitigation equipment and that the licensee complied with its commitments:

- Residual Heat Removal Area Sump Pumps and Level Switches.

Documents reviewed are listed in the Attachment to this report. This inspection constituted one internal flooding sample as defined in IP 71111.06-05.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program (71111.11)

.1 Resident Inspector Quarterly Review (71111.11Q)

a. Inspection Scope

On December 3, 2011, the inspectors observed a crew of licensed operators in the simulator during licensed operator requalification examinations 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 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 sample as defined in IP 71111.11.

b. Findings

No findings were identified.

.2 Biennial Written and Annual Operating Test Results (71111.11A)

a. Inspection Scope

The inspectors reviewed the overall pass/fail results of the Biennial Written Examination and the Annual Operating Test. This test was administered by the licensee from September 19 through November 4, 2011, as required by 10 CFR 55.59(a). The results were compared to the thresholds established in IMC 0609, Appendix I, "Licensed Operator Requalification Significance Determination Process (SDP)," to assess the overall adequacy of the licensee's Licensed Operator Requalification Training (LORT) program to meet the requirements of 10 CFR 55.59.

These inspection activities constituted one annual operating test results review inspection sample as defined in IP 71111.11A.

b. Findings

One licensee-identified violation was identified. This violation is discussed in Section 4OA7 of this report.

.3 Biennial Review (71111.11B)

a. Inspection Scope

The following inspection activities were conducted during the weeks of October 10 and 17, 2011, to assess: 1) the effectiveness and adequacy of the facility licensee's implementation and maintenance of its systems approach to training (SAT) based LORT program, put into effect to satisfy the requirements of 10 CFR 55.59; 2) conformance with the requirements of 10 CFR 55.46 for use of a plant referenced simulator to conduct operator licensing examinations and for satisfying experience requirements; and 3) conformance with the operator license conditions specified in 10 CFR 55.53. Documents reviewed are listed in the Attachment to this report.

Facility Operating History and Licensee Training Feedback System (10 CFR 55.59(c); SAT Element 5 as Defined in 10 CFR 55.4)

The inspectors evaluated the licensee's ability to assess the effectiveness of its LORT program and the ability to implement appropriate corrective actions to maintain the LORT Program up-to-date. The inspectors reviewed documents related to the plant's operating history and associated responses (e.g., plant issue matrix and performance review reports; recent examination and inspection reports; licensee event reports (LERs)). The inspectors reviewed the use of feedback from operators, instructors, and supervisors, as well as the use of feedback from plant events and industry experience information. The inspectors reviewed the licensee's quality

assurance oversight activities, including licensee training department self-assessment reports.

Licensee Requalification Examinations (10 CFR 55.59(c)); SAT Element 4 as Defined in 10 CFR 55.4)

The inspectors reviewed the licensee's program for development and administration of the LORT biennial written examination and annual operating tests to assess the licensee's ability to develop and administer examinations that are acceptable for meeting the requirements of 10 CFR 55.59(a).

- The inspectors reviewed the methodology used to construct the examination including content, level of difficulty, and general quality of the examination/test materials. The inspectors also assessed the level of examination material duplication from week-to-week for the operating tests conducted during the current year, as well as the written examinations administered in 2011. The inspectors reviewed a sample of the written examinations and associated answer keys to check for consistency and accuracy.

- The inspectors observed the administration of the annual operating test and biennial written examination to assess the licensee's effectiveness in conducting the examinations, including the conduct of pre-examination briefings, evaluations of individual operator and crew performance, and post-examination analysis. The inspectors evaluated the performance of one operating shift crew (two simulator crews) in parallel with the facility evaluators during two dynamic simulator scenarios, each administered twice, and evaluated various licensed crew members concurrently with facility evaluators during the administration of several job performance measures (JPMs).

- The inspectors assessed the adequacy and effectiveness of the remedial training conducted since the last requalification examinations and the training planned for the current examination cycle to ensure that they addressed weaknesses in licensed operator or crew performance identified during training and plant operations. The inspectors reviewed remedial training procedures and individual remedial training plans.

Conformance with Examination Security Requirements (10 CFR 55.49)

The inspectors conducted an assessment of the licensee's processes related to examination physical security and integrity (e.g., predictability and bias) to verify compliance with 10 CFR 55.49, "Integrity of Examinations and Tests." The inspectors reviewed the facility licensee's examination security procedure, and observed the implementation of physical security controls (e.g., access restrictions and simulator input/output controls) and integrity measures (e.g., security agreements, sampling criteria, bank use, and test item repetition) throughout the inspection period.

Conformance with Simulator Requirements Specified in 10 CFR 55.46

The inspectors assessed the adequacy of the licensee's simulation facility (simulator) for use in operator licensing examinations and for satisfying experience requirements. The inspectors reviewed a sample of simulator performance test records (e.g., transient tests, malfunction tests, scenario based tests, post-event tests, steady state tests, and

core performance tests), simulator discrepancies, and the process for ensuring continued assurance of simulator fidelity in accordance with 10 CFR 55.46. The inspectors reviewed and evaluated the discrepancy corrective action process to ensure that simulator fidelity was being maintained. Open simulator discrepancies were reviewed for importance relative to the impact on 10 CFR 55.45 and 55.59 operator actions as well as on nuclear and thermal hydraulic operating characteristics.

Conformance with Operator License Conditions (10 CFR 55.53)

The inspectors reviewed the facility licensee's program for maintaining active operator licenses and to assess compliance with 10 CFR 55.53(e) and (f). The inspectors reviewed the procedural guidance and the process for tracking on-shift hours for licensed operators, and which control room positions were granted watch-standing credit for maintaining active operator licenses. Additionally, medical records for 12 licensed operators were reviewed for compliance with 10 CFR 55.53(l).

These inspection activities constituted one biennial licensed operator requalification inspection sample as defined in IP 71111.11B.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12)

.1 Routine Quarterly Evaluations (71111.12Q)

a. Inspection Scope

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

- Spent Fuel Pool Cooling System;
- Waste Liquid System; and
- D5 and D6 EDG Ventilation.

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

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

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

This inspection constituted three quarterly maintenance effectiveness samples as defined in IP 71111.12-05.

b. Findings

Introduction: The inspectors identified a URI regarding the need to include the residual heat removal (RHR) pump pit sump pumps and level switches within the scope of the licensee's maintenance rule program.

Description: During a review of daily corrective action documents, the inspectors noted several documents which questioned the safety classification of the sump pumps and level switches located in the RHR pump pits. The sump pumps and level switches were used to remove water from the pits that may accumulate due to system leakage. Based upon the information in these corrective action documents, the inspectors selected the sump pumps and level switches (which were considered part of the waste liquid system) for additional review.

The inspectors reviewed information contained within the licensee's computer database and determined that the sump pumps and level switches were functionally checked every three years. The inspectors reviewed the maintenance history and determined that the functional checks were performed within the required periodicity.

The inspectors reviewed the licensee's Maintenance Rule Bases Document to determine whether the waste liquid system's risk-significant functions had been properly scoped into the maintenance rule. Title 10 CFR Part 50.65 required licensees to include equipment whose failure could prevent safety-related SSCs from fulfilling their safety function as part of their maintenance rule program. The inspectors noted that the RHR pump pit sump pumps and level switches were not included in the licensee's maintenance rule program even though the failure of this equipment during an RHR pump pit internal flood may prevent the RHR system (a safety-related system) from fulfilling its safety function. As a result, the inspectors were concerned that the licensee may not be monitoring the performance of the sump pumps and level switches as required by the NRC.

The inspectors discussed their concern with maintenance rule and system engineering personnel. At the conclusion of the inspection, the licensee was reviewing licensing and design basis information to determine whether the RHR pump pit sump pumps and level switches were credited as part of the internal flooding analysis. The inspectors planned to review the licensee's results when they were available to aid in determining whether the licensee was in compliance with 10 CFR Part 50.65. As a result, this issue was determined to be unresolved pending the inspectors' review of the licensee's licensing and design basis information **(URI 05000282/2011005-03; 05000306/2011005-03: Review of Information Regarding Need to Scope RHR Pump Pit Sump Pumps and Level Switches into the Maintenance Rule)**.

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 MD-32421;
- Increased risk associated with Unit 2 startup activities while a safeguards traveling screen was out-of-service; and
- Increased risk associated with the performance of Unit 1 reactor protection system logic testing while in an abnormal electrical configuration.

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

Documents reviewed during this inspection are listed in the Attachment to this report. These maintenance risk assessments and emergent work control activities constituted three 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:

- CAP 1310274 – Molded Case Circuit Breakers Not Tested Per Industry Standards;
- CAP 1290268 – Water Found between Sump B Valves; and
- CAP 1290269 – Potential for Pressure Locking of RHR to Safety Injection Motor Valves.

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 the 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 three samples as defined in IP 71111.15-05.

b. Findings

Introduction: The inspectors identified a finding of very low safety significance (Green) and a NCV of 10 CFR Part 50, Appendix B, Criterion V, due to the licensee's failure to complete an immediate operability determination for CAP 1310274 as required by Procedure FP-OP-OL-01, "Operability/Functionality Determination."

Description: On October 27, 2011, the licensee initiated CAP 1310274 to document a concern regarding the testing of numerous molded case circuit breakers (MCCBs). Specifically, the CAP stated that no records could be found to indicate that the MCCBs had ever been operationally tested, mechanically inspected or overcurrent trip tested per the requirements of Institute of Electrical and Electronic Engineers (IEEE) Standard 308-1971. The CAP also contained information that the lack of testing could result in a less than adequate assurance that the MCCBs would open when required to protect safety-related plant equipment from the effects of an electrical fault.

Step 3.2.2 of Procedure FP-OP-OL-01 required the shift manager to make operability determinations for all conditions that involve equipment or programmatic issues related to the ability of an SSC to perform its specified safety function. In addition, Step 5.1.7 stated that operability of an SSC shall be established by a documented examination of the deficiency whenever the ability of an SSC to perform its specified safety function is called into question.

On October 31, 2011, the inspectors reviewed CAP 1310274 as part of their daily review activities. The inspectors determined that since the CAP contained information which questioned the ability of the MCCBs to open when required to protect safety-related equipment from an electrical fault (a specified safety function), an operability determination was required. The inspectors reviewed the operations status notes included in the CAP and found that operations personnel had considered the CAP information to be programmatic in nature. The same operations personnel also concluded that no specific operability/functionality issues were raised within the CAP. As a result, an immediate operability determination was not completed.

The inspectors discussed their concern regarding the lack of an immediate operability determination with operations, engineering and plant management personnel.

Initially, the inspectors were told that testing did not need to be completed because Prairie Island was not committed to IEEE Standard 308-1971. While this may have been true, the inspectors remained concerned that the MCCBs may not have received any type of testing which showed that the breakers would open as required to isolate an electrical fault. After reviewing the information contained within CAP 1310274, licensee personnel agreed that an immediate operability determination was required to be completed. While completing the determination, the licensee found maintenance records which showed that approximately half of the MCCBs discussed in CAP 1310274 had been tested satisfactorily. The licensee used the historic test results to provide reasonable assurance that the untested MCCBs would continue to perform their safety functions until testing was completed.

Analysis: The inspectors determined that the failure to complete an immediate operability determination for CAP 1310274 as required by FP-OP-OL-01 was a performance deficiency that required an evaluation using the SDP. This finding impacted the Mitigating Systems Cornerstone. The inspectors determined that this issue was more than minor because, if left uncorrected, the failure to complete immediate operability determinations could result in leaving plant equipment in operation even though it was unable to perform its specified safety function (a more significant safety concern). The inspectors performed a Phase 1 SDP screening using IMC 0609, Attachment 4, Table 4a, "Characterization Worksheet for Mitigating Systems," and determined that this finding was of very low safety significance (Green) because it was not a design deficiency; it did not represent a loss of system safety function; it did not present a loss of safety function for one train for greater than the TS allowed outage time; and it did not screen as potentially risk significant due to a seismic, flooding or severe weather initiating event. This finding was determined to be cross-cutting in the Human Performance, Decision Making area because the licensee failed to use conservative assumptions when deciding whether an immediate operability determination was needed for the molded case circuit breakers (H.1(b)).

Enforcement: Criterion V of 10 CFR Part 50, Appendix B, requires, in part, that activities affecting quality be prescribed and accomplished by procedures appropriate to the circumstance. The licensee implemented the operability determination process (an activity affecting quality) using Procedure FP-OP-OL-01, "Operability/Functionality Determinations." Step 3.2.2 of Procedure FP-OP-OL-01, Revision 9, required the shift manager to make operability determinations for all conditions that involve equipment or programmatic issues related to the ability of a SSC to perform its specified safety function. In addition, Step 5.1.7 stated that operability of an SSC shall be established by a documented examination of the deficiency whenever the ability of an SSC to perform its specified safety function is called into question.

Contrary to the above, on October 27, 2011, the shift manager failed to make an operability determination for CAP 1310274 even though this CAP involved programmatic issues related to the ability of a SSC to perform its specified safety function. Because this violation was of very low safety significance and it was entered into the CAP as CAPs 1312505 and 1318853, this issue is being treated as an NCV, consistent with Section 2.3.2 of the NRC Enforcement Policy **(NCV 05000282/2011005-04; 05000306/2011005-04; Failure to Complete Operability Determination on Molded Case Circuit Breakers)**. Corrective actions for this issue included performing the operability determination, documenting the results of the determination, and developing a test schedule for the remaining MCCBs.

1R19 Post-Maintenance Testing (71111.19)

.1 Post-Maintenance Testing

a. Inspection Scope

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

- D1 Emergency Diesel Generator Fuse Replacement.

This activity was selected based upon the SSCs' ability to impact risk. The inspectors evaluated this activity 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 USAR, 10 CFR Part 50 requirements, licensee procedures, and various NRC generic communications to ensure that the test results adequately ensured that the equipment met the licensing basis and design requirements. In addition, the inspectors reviewed corrective action documents associated with PM tests to determine whether the licensee was identifying problems and entering them in the CAP and that the problems were being corrected commensurate with their importance to safety. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one PM testing sample as defined in IP 71111.19-05.

b. Findings

No findings were identified.

1R20 Outage Activities (71111.20)

.1 Other Outage Activities

a. Inspection Scope

The inspectors evaluated outage activities for an unscheduled Unit 2 outage to replace the reactor coolant pump seals. The outage began on October 4, 2011, and continued through October 19, 2011. The inspectors reviewed activities to ensure that the licensee considered risk in developing, planning, and implementing the outage schedule.

The inspectors observed or reviewed the reactor shutdown and cooldown, outage equipment configuration and risk management, electrical lineups, control and monitoring of decay heat removal, control of containment activities, startup and heatup activities, and identification and resolution of problems associated with the outage.

This inspection constituted one other outage 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 1035A, Reactor Protection Logic Test at Power Train A (Routine);
- SP 2102, 22 Auxiliary Feedwater Pump Monthly Test (Routine);
- SP 2214, Reactor Coolant System Pressure Isolation Check Valve Leakage Test (inservice test); and
- SP 2305, D6 Diesel Generator Monthly Slow Start (Routine).

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

- did preconditioning occur;
- were the effects of the testing adequately addressed by control room personnel or engineers prior to the commencement of the testing;
- were acceptance criteria clearly stated and consistent with the system design basis;
- plant equipment calibration was correct, accurate, and properly documented;
- as-left setpoints were within required ranges; and the calibration frequency was in accordance with TSs, the USAR, procedures, and applicable commitments;
- measuring and test equipment calibration was current;
- test equipment was used within the required range and accuracy; applicable prerequisites described in the test procedures were satisfied;
- test frequencies met TS requirements to demonstrate operability and reliability; tests were performed in accordance with the test procedures and other applicable procedures; jumpers and lifted leads were controlled and restored where used;
- test data and results were accurate, complete, within limits, and valid;
- test equipment was removed after testing;
- where applicable for 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 three 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 an emergency drill on November 15, 2011, to identify any weaknesses and deficiencies in classification, notification, and protective action recommendation development activities. The inspectors observed emergency response operations in the Technical Support Center 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 CAP. 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. RADIATION SAFETY

Cornerstones: Occupational and Public Radiation Safety

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

The inspection activities described below supplement those documented in Inspection Report (IR) 05000282/2011003, and constituted one complete sample as defined in IP 71124.01-05.

.1 Instructions to Workers (02.03)

a. Inspection Scope

The inspectors reviewed selected occurrences where a worker's electronic personal dosimeter noticeably malfunctioned or alarmed. The inspectors evaluated whether workers responded appropriately to the off-normal condition. The inspectors assessed whether the issue was included in the CAP and dose evaluations were conducted as appropriate.

For work activities that could suddenly and severely increase radiological conditions, the inspectors assessed the licensee's means to inform workers of changes that could significantly impact their occupational dose.

b. Findings

No findings were identified.

.2 Contamination and Radioactive Material Control (02.04)

a. Inspection Scope

The inspectors observed locations where the licensee monitored potentially contaminated material leaving the radiological control area and inspected the methods used for control, survey, and release from these areas. The inspectors observed the performance of personnel surveying and releasing material for unrestricted use and evaluated whether the work was performed in accordance with plant procedures and whether the procedures were sufficient to control the spread of contamination and prevent the unintended release of radioactive materials from the site. The inspectors assessed whether the radiation monitoring instrumentation had appropriate sensitivity for the type(s) of radiation present.

The inspectors reviewed the licensee's criteria for the survey and release of potentially contaminated material. The inspectors evaluated whether there was guidance on how to respond to an alarm that indicated the presence of licensed radioactive material.

The inspectors reviewed the licensee's procedures and records to verify that the radiation detection instrumentation was used at its typical sensitivity level based on appropriate counting parameters. The inspectors assessed whether or not the licensee has established a de facto "release limit" by altering the instrument's typical sensitivity through such methods as raising the energy discriminator level or locating the instrument in a high-radiation background area.

The inspectors selected several sealed sources from the licensee's inventory records and assessed whether the sources were properly accounted for and were intact.

The inspectors evaluated whether any transactions, since the last inspection, involving nationally tracked sources were reported in accordance with 10 CFR 20.2207.

b. Findings

No findings were identified.

.3 Radiological Hazards Control and Work Coverage (02.05)

a. Inspection Scope

The inspectors reviewed the application of dosimetry to effectively monitor exposure to personnel in high-radiation work areas with significant dose rate gradients.

The inspectors reviewed the following radiation work permit for work within airborne radioactivity areas with the potential for individual worker internal exposures:

- Reactor Cavity Decontamination.

For this radiation work permit, the inspectors evaluated airborne radioactive controls and monitoring, including potential for significant airborne levels (e.g., grinding, grit blasting, system breaches, entry into tanks, cubicles, and reactor cavities). The inspectors assessed airborne engineering control integrity and temporary high-efficiency particulate air ventilation system operation.

The inspectors examined the licensee's physical and programmatic controls for highly activated or contaminated materials (nonfuel) stored within spent fuel and other storage pools. The inspectors assessed whether appropriate controls (i.e., administrative and physical controls) were in place to preclude inadvertent removal of these materials from the pool.

The inspectors examined the posting and physical controls for selected high radiation areas and very high radiation areas to verify conformance with the occupational performance indicator.

b. Findings

No findings were identified.

.4 Risk-Significant High Radiation Area and Very High Radiation Area Controls (02.06)

a. Inspection Scope

The inspectors discussed the controls and procedures for high-risk high radiation areas and very high radiation areas with the radiation protection manager. The inspectors discussed methods employed by the licensee to provide stricter control of very high radiation area access as specified in 10 CFR 20.1602, "Control of Access to Very High Radiation Areas," and Regulatory Guide 8.38, "Control of Access to High and Very High Radiation Areas of Nuclear Plants." The inspectors assessed whether any changes to licensee procedures substantially reduced the effectiveness and level of worker protection.

The inspectors discussed the controls in place for special areas that have the potential to become very high radiation areas during certain plant operations with first-line health physics supervisors (or equivalent positions having backshift health physics oversight authority). The inspectors assessed whether these plant operations required prior communication with the health physics group, so as to allow corresponding timely actions to properly post, control, and monitor the radiation hazards including re-access authorization.

The inspectors evaluated licensee controls for very high radiation areas and areas with the potential to become a very high radiation area to ensure that an individual was not able to gain unauthorized access to the very high radiation area.

b. Findings

No findings were identified.

.5 Radiation Worker Performance (02.07)

a. Inspection Scope

The inspectors reviewed radiological problem reports since the last inspection which were determined to be caused by human performance errors. The inspectors evaluated whether there was an observable pattern traceable to a similar cause. The inspectors assessed whether this perspective matched the corrective action approach taken by the licensee to resolve the reported problems. The inspectors discussed any concerns with the corrective actions planned or taken with the radiation protection manager.

b. Findings

No findings were identified.

.6 Radiation Protection Technician Proficiency (02.08)

a. Inspection Scope

The inspectors reviewed radiological problem reports initiated since the last inspection where the cause was associated with radiation protection technician error. The inspectors evaluated whether there was an observable pattern traceable to a similar cause. The inspectors assessed whether this perspective matched the corrective action approach taken by the licensee to resolve the reported problems.

b. Findings

No findings were identified.

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

The inspection activities discussed below supplement those documented in IRs 05000282/2011003 and 05000282/2010004, and constituted one complete sample as defined in IP 71124.02-05.

.1 Source Term Reduction and Control (02.04)

a. Inspection Scope

The inspectors used licensee records to determine the historical trends and current status of significant tracked plant source terms known to contribute to elevated facility aggregate exposure. The inspectors assessed whether the licensee had made allowances or developed contingency plans for expected changes in the source term as

the result of changes in plant fuel performance issues or changes in plant primary chemistry.

b. Findings

No findings were identified.

.2 Problem Identification and Resolution (02.06)

a. Inspection Scope

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

b. Findings

No findings were identified.

2RS3 In-Plant Airborne Radioactivity Control and Mitigation (71124.03)

The inspection activities discussed below supplement those documented in IR 05000282/2011003 and constituted one complete sample as defined in IP 71124.03-05.

.1 Inspection Planning (02.01)

a. Inspection Scope

The inspectors reviewed the USAR to identify areas of the plant designed as potential airborne radiation areas and any associated ventilation systems or airborne monitoring instrumentation. Instrumentation review included continuous air monitors (continuous air monitors and particulate-iodine-noble-gas-type instruments) used to identify changing airborne radiological conditions such that actions to prevent an overexposure may be taken. The review included an overview of the respiratory protection program and a description of the types of devices used. The inspectors reviewed the USAR, TSs, and emergency planning documents to identify location and quantity of respiratory protection devices stored for emergency use.

The inspectors reviewed the licensee's procedures for maintenance, inspection, and use of respiratory protection equipment including self-contained breathing apparatuses (SCBAs), as well as procedures for air quality maintenance.

The inspectors reviewed reported performance indicators to identify any related to unintended dose resulting from intakes of radioactive material.

b. Findings

No findings were identified.

.2 Use of Respiratory Protection Devices (02.03)

a. Inspection Scope

For those situations where it is impractical to employ engineering controls to minimize airborne radioactivity, the inspectors assessed whether the licensee provided respiratory protective devices such that occupational doses were ALARA. The inspectors selected work activities where respiratory protection devices were used to limit the intake of radioactive materials, and assessed whether the licensee performed an evaluation concluding that further engineering controls were not practical and that the use of respirators was ALARA. The inspectors also evaluated whether the licensee had established means (such as routine bioassay) to determine if the level of protection (protection factor) provided by the respiratory protection devices during use was at least as good as that assumed in the licensee's work controls and dose assessment.

The inspectors assessed whether respiratory protection devices used to limit the intake of radioactive materials were certified by the National Institute for Occupational Safety and Health/Mine Safety and Health Administration or had been approved by the NRC per 10 CFR 20.1703(b). The inspectors selected work activities where respiratory protection devices were used. The inspectors evaluated whether the devices were used consistent with their National Institute for Occupational Safety and Health/Mine Safety and Health Administration certification or any conditions of their NRC approval.

The inspectors reviewed records of air testing for supplied-air devices and SCBA bottles to assess whether the air used in these devices met or exceeded Grade D quality. The inspectors reviewed plant breathing air supply systems to determine whether they met the minimum pressure and airflow requirements for the devices in use.

The inspectors selected several individuals qualified to use respiratory protection devices, and assessed whether they had been deemed fit to use the devices by a physician.

The inspectors selected several individuals assigned to wear a respiratory protection device and observed them donning, doffing, and functionally checking the device as appropriate. Through interviews with these individuals, the inspectors evaluated whether they knew how to safely use the device and how to properly respond to any device malfunction or unusual occurrence (loss of power, loss of air, etc.).

The inspectors chose multiple respiratory protection devices staged and ready for use in the plant or stocked for issuance for use. The inspectors assessed the physical condition of the device components (mask or hood, harnesses, air lines, regulators, air bottles, etc.) and reviewed records of routine inspection for each. The inspectors assessed whether onsite personnel assigned to repair vital components had received vendor-provided training.

b. Findings

No findings were identified.

.3 Self-Contained Breathing Apparatus for Emergency Use (02.04)

a. Inspection Scope

Based on the USAR, TSs, and emergency operating procedure requirements, the inspectors reviewed the status and surveillance records of SCBAs staged in the plant for use during emergencies. The inspectors reviewed the licensee's capability for refilling and transporting SCBA air bottles to and from the control room and operations support center during emergency conditions.

The inspectors selected several individuals on control room shift crews and from designated departments currently assigned emergency duties (e.g., onsite search and rescue duties) to assess whether control room operators and other emergency response and radiation protection personnel (assigned in-plant search and rescue duties or as required by emergency operating procedures or the emergency plan) were trained and qualified in the use of SCBAs (including personal bottle change out). The inspectors evaluated whether personnel assigned to refill bottles were trained and qualified for that task.

The inspectors determined whether appropriate mask sizes and types were available for use (i.e., in-field mask size and type match what was used in fit-testing). The inspectors determined whether on-shift operators had no facial hair that would interfere with the sealing of the mask to the face and whether vision correction (e.g., glasses inserts or corrected lenses) was available as appropriate.

The inspectors reviewed the past two years of maintenance records for select SCBA units used to support operator activities during accident conditions and designated as "ready for service" to assess whether any maintenance or repairs on any SCBA unit's vital components were performed by an individual, or individuals, certified by the manufacturer of the device to perform the work. The vital components typically were the pressure-demand air regulator and the low-pressure alarm. The inspectors reviewed the onsite maintenance procedures governing vital component work to determine any inconsistencies with the SCBA manufacturer's recommended practices. For those SCBAs designated as "ready for service," the inspectors determined whether the required, periodic air cylinder hydrostatic testing was documented and up to date, and the retest air cylinder markings required by the U.S. Department of Transportation were in place.

b. Findings

No findings were identified.

.4 Problem Identification and Resolution (02.05)

a. Inspection Scope

The inspectors evaluated whether problems associated with the control and mitigation of in-plant airborne radioactivity were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the CAP. The inspectors assessed whether the corrective actions were appropriate for a selected sample of problems involving airborne radioactivity and were appropriately documented by the licensee.

b. Findings

No findings were identified.

2RS6 Radioactive Gaseous and Liquid Effluent Treatment (71124.06)

This inspection constituted one complete sample as defined in IP 71124.06-05.

.1 Inspection Planning and Program Reviews (02.01)

Event Report and Effluent Report Reviews

a. Inspection Scope

The inspectors reviewed the radiological effluent release reports issued since the last inspection to determine if the reports were submitted as required by the Radiological Effluent Technical Specifications (RETS)/Offsite Dose Calculation Manual (ODCM). The inspectors reviewed anomalous results, unexpected trends, or abnormal releases identified by the licensee for further inspection to determine if they were evaluated, were entered in the CAP, and were adequately resolved.

The inspectors identified radioactive effluent monitor operability issues reported by the licensee as provided in effluent release reports, to review these issues during the onsite inspection, as warranted, given their relative significance and determine if the issues were entered into the CAP and adequately resolved.

b. Findings

No findings were identified.

Offsite Dose Calculation Manual and Updated Safety Analysis Report Review

a. Inspection Scope

The inspectors reviewed USAR descriptions of the radioactive effluent monitoring systems, treatment systems, and effluent flow paths so they could be evaluated during inspection walkdowns.

The inspectors reviewed changes to the ODCM made by the licensee since the last inspection against the guidance in NUREG-1301, 1302, and 0133, and Regulatory Guides 1.109, 1.21 and 4.1. When differences were identified, the inspectors reviewed the technical basis or evaluations of the change during the onsite inspection to determine whether they were technically justified and maintained effluent releases ALARA.

The inspectors reviewed documentation to determine if the licensee had identified any non-radioactive systems that have become contaminated as disclosed either through an event report or the ODCM since the last inspection. This review provided an intelligent sample list for the onsite inspection of any 10 CFR 50.59 evaluations allowed a determination if the newly contaminated systems have an unmonitored effluent discharge path to the environment, whether any required ODCM revisions were made to incorporate these new pathways into the manual and whether the associated effluents were reported in accordance with Regulatory Guide 1.21.

b. Findings

No findings were identified.

Groundwater Protection Initiative Program

a. Inspection Scope

The inspectors reviewed reported groundwater monitoring results and changes to the licensee's written program for identifying and controlling contaminated spills/leaks to groundwater.

b. Findings

No findings were identified.

Procedures, Special Reports, and Other Documents

a. Inspection Scope

The inspectors reviewed LERs, event reports and/or special reports related to the effluent program issued since the previous inspection to identify any additional focus areas for the inspection based on the scope/breadth of problems described in these reports.

The inspectors reviewed effluent program implementing procedures, particularly those associated with effluent sampling, effluent monitor set-point determinations, and dose calculations.

The inspectors reviewed copies of licensee and third party (independent) evaluation reports of the effluent monitoring program since the last inspection to gather insights into the licensee's program and aid in selecting areas for inspection review (smart sampling).

b. Findings

No findings were identified.

.2 Walkdowns and Observations (02.02)

a. Inspection Scope

The inspectors walked down selected components of the gaseous and liquid discharge systems to evaluate whether equipment configuration and flow paths aligned with the documents reviewed in Section 02.01 above and to assess equipment material condition. Special attention was made to identify potential unmonitored release points (such as open roof vents or temporary structures butted against the turbine, auxiliary or containment buildings), building alterations which could impact airborne or liquid effluent controls, and ventilation system leakage that communicated directly with the environment.

For equipment or areas associated with the systems selected for review that were not readily accessible due to radiological conditions, the inspectors reviewed the licensee's material condition surveillance records, as applicable.

The inspectors walked down filtered ventilation systems to assess for conditions such as degraded high-efficiency particulate air/charcoal banks, improper alignment or system installation issues that would impact the performance or the effluent monitoring capability of the effluent system.

As available, the inspectors observed selected portions of the routine processing and discharge of radioactive gaseous effluent (including sample collection and analysis) to evaluate whether appropriate treatment equipment was used and the processing activities aligned with discharge permits.

The inspectors determined if the licensee had made significant changes to their effluent release points, e.g., changes subject to a 10 CFR 50.59 review or require NRC approval of alternate discharge points.

As available, the inspectors observed selected portions of the routine processing and discharging of liquid waste (including sample collection and analysis) to determine if appropriate effluent treatment equipment was being used and that radioactive liquid waste was being processed and discharged in accordance with procedure requirements and discharge permits.

b. Findings

No findings were identified.

.3 Sampling and Analyses (02.03)

a. Inspection Scope

The inspectors selected effluent sampling activities, consistent with smart sampling, and assessed whether adequate controls had been implemented to ensure representative samples were obtained (e.g., provisions for sample line flushing, vessel recirculation, composite samplers, etc.).

The inspectors selected effluent discharges made with inoperable (declared out-of-service) effluent radiation monitors to assess whether controls were in place to ensure compensatory sampling was performed consistent with the RETS/ODCM and that those controls were adequate to prevent the release of unmonitored liquid and gaseous effluents.

The inspectors determined whether the facility was routinely relying on the use of compensatory sampling in lieu of adequate system maintenance, based on the frequency of compensatory sampling since the last inspection.

The inspectors reviewed the results of the inter-laboratory comparison program to evaluate the quality of the radioactive effluent sample analyses and assessed whether the inter-laboratory comparison program included hard-to-detect isotopes as appropriate.

b. Findings

No findings were identified.

.4 Instrumentation and Equipment (02.04)

Effluent Flow Measuring Instruments

a. Inspection Scope

The inspectors reviewed the methodology the licensee used to determine the effluent stack and vent flow rates. The results of this review were used to determine if the flow rates were consistent with RETS/ODCM or USAR values. Lastly, the inspectors reviewed differences between the assumed and actual stack and vent flow rates to ensure that these differences did not affect the results of the projected public doses.

b. Findings

No findings were identified.

Air Cleaning Systems

a. Inspection Scope

The inspectors reviewed the results of tests performed on the Containment/Auxiliary Building Ventilation System to ensure the results met TS requirements.

b. Findings

No findings were identified.

.5 Dose Calculations (02.05)

a. Inspection Scope

The inspectors reviewed all significant changes in reported dose values compared to the previous radiological effluent release report (e.g., a factor of five or increases that approach Appendix I Criteria) to evaluate the factors which may have resulted in the change.

The inspectors reviewed radioactive liquid and gaseous waste discharge permits to assess whether the projected doses to members of the public were accurate and based on representative samples of the discharge path.

The inspectors evaluated the methods used to determine the isotopes that were included in the source term to ensure all applicable radionuclides were included within detectability standards. The review included the current Part 61 analyses to ensure hard-to-detect radionuclides were included in the source term.

The inspectors reviewed changes in the licensee's offsite dose calculations since the last inspection to evaluate whether changes were consistent with the ODCM and Regulatory Guide 1.109. The inspectors reviewed meteorological dispersion and deposition factors used in the ODCM and effluent dose calculations to evaluate whether appropriate factors were being used for public dose calculations.

The inspectors reviewed the latest Land Use Census to assess whether changes (e.g., significant increases or decreases to population in the plant environs, changes in

critical exposure pathways, the location of nearest member of the public or critical receptor, etc.) had been factored into the dose calculations.

For the releases reviewed above, the inspectors evaluated whether the calculated doses (monthly, quarterly, and annual dose) were within the 10 CFR Part 50, Appendix I and TS dose criteria.

The inspectors reviewed, as available, records of any abnormal gaseous or liquid tank discharges (e.g., discharges resulting from misaligned valves, valve leak-by, etc.) to ensure the abnormal discharge was monitored by the discharge point effluent monitor. Discharges made with inoperable effluent radiation monitors, or unmonitored leakages were reviewed to ensure that the discharge was evaluated as required by 10 CFR Part 20.1501.

b. Findings

No findings were identified.

.6 Groundwater Protection Initiative Implementation (02.06)

a. Inspection Scope

The inspectors reviewed monitoring results of the Groundwater Protection Initiative to determine if the licensee had implemented its program as intended and to identify any anomalous results. For anomalous results or missed samples, the inspectors assessed whether the licensee had identified and addressed deficiencies through its CAP.

The inspectors reviewed identified leakage or spill events and entries made into 10 CFR 50.75 (g) records. The inspectors reviewed evaluations of leaks or spills and reviewed any remediation actions taken for effectiveness. The inspectors reviewed onsite contamination events involving contamination of ground water and assessed whether the source of the leak or spill was identified and mitigated.

For unmonitored spills, leaks, or unexpected liquid or gaseous discharges, the inspectors assessed whether an evaluation was performed to determine the type and amount of radioactive material that was discharged by:

Assessing whether sufficient radiological surveys were performed to evaluate the extent of the contamination and the radiological source term and assessing whether a survey/evaluation had been performed to include consideration of hard-to-detect radionuclides.

Determining whether the licensee completed offsite notifications, as provided in its Groundwater Protection Initiative implementing procedures.

The inspectors reviewed the evaluation of discharges from onsite surface water bodies that contain or potentially contain radioactivity, and the potential for ground water leakage from these onsite surface water bodies. The inspectors assessed whether the licensee was properly accounting for discharges from these surface water bodies as part of their effluent release reports.

The inspectors assessed whether onsite ground water sample results and a description of any significant onsite leaks/spills into ground water for each calendar year were documented in the Annual Radiological Environmental Operating Report for the Radiological Environmental Monitoring Program or the Annual Radiological Effluent Release Report for the RETS.

For significant new effluent discharge points (such as significant or continuing leakage to ground water that continues to impact the environment if not remediated), the inspectors evaluated whether the ODCM was updated to include the new release point.

b. Findings

No findings were identified.

.7 Problem Identification and Resolution (02.07)

a. Inspection Scope

Inspectors assessed whether problems associated with the effluent monitoring and control program were being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee CAP. In addition, they evaluated the appropriateness of the corrective actions for a selected sample of problems documented by the licensee involving radiation monitoring and exposure controls.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

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

4OA1 Performance Indicator Verification (71151)

.1 Mitigating Systems Performance Index - Cooling Water Systems

a. Inspection Scope

The inspectors sampled licensee submittals for the Mitigating Systems Performance Index (MSPI) - Cooling Water Systems performance indicator (PI) for Units 1 and 2 for the period from the fourth quarter of 2010 through the third quarter of 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, dated October 2009, was used. The inspectors reviewed the licensee's operator narrative logs, issue reports, MSPI derivation reports, event reports and NRC Integrated IRs for the period from the fourth quarter of 2010 through the third quarter of 2011 to validate the accuracy of the submittals. The inspectors reviewed the MSPI component risk coefficient to determine if it had changed by more than 25 percent in value since the previous inspection, and if so, that the change was in accordance with applicable NEI guidance. The inspectors also reviewed the licensee's 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 MSPI cooling water system samples as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Reactor Coolant Specific Activity

a. Inspection Scope

The inspectors sampled licensee submittals for the reactor coolant system specific activity PI for Prairie Island Nuclear Generating Plant, Units 1 and 2, for the period from the third quarter of 2010 through the second quarter of 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, dated October 2009, was used. The inspectors reviewed the licensee's reactor coolant system chemistry samples, TS requirements, issue reports, event reports, and NRC Integrated IRs for the period discussed above 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 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 reactor coolant system specific activity 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 that they were being entered into the licensee's CAP at an appropriate threshold, that adequate attention was being given to timely corrective actions, and that adverse trends were identified and addressed. Attributes reviewed included: identification of the problem was complete and accurate; timeliness was commensurate with the safety significance; evaluation and disposition of performance

issues, generic implications, common causes, contributing factors, root causes, extent-of-condition reviews, and previous occurrences reviews were proper and adequate; and that the classification, prioritization, focus, and timeliness of corrective actions were commensurate with safety and sufficient to prevent recurrence of the issue. Minor issues entered into the licensee's CAP as a result of the inspectors' observations are included in the Attachment to this report.

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

b. Findings

No findings were identified.

.2 Daily Corrective Action Program Reviews

a. Inspection Scope

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

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

b. Findings

No findings were identified.

.3 Semi-Annual Trend Review

a. Inspection Scope

The inspectors performed a review of the licensee's CAP and associated documents to identify trends that could indicate the existence of a more significant safety issue. The inspectors' review was focused on repetitive equipment issues, but also considered the results of daily inspector CAP item screening discussed in Section 4OA2.2 above, licensee trending efforts, and licensee human performance results. The inspectors' review nominally considered the six month period of July 1 through December 31, 2011, although some examples expanded beyond those dates where the scope of the trend warranted.

As part of this inspection, the inspectors also reviewed issues that could be documented outside the normal CAP such as in major equipment problem lists, repetitive and/or rework maintenance lists, departmental problem/challenges lists, system health reports, quality assurance audit/surveillance reports, self assessment reports, and Maintenance Rule assessments. The inspectors compared and contrasted their results with the results contained in the licensee's CAP trending reports. Corrective actions associated

with a sample of the issues identified in the licensee's trending reports were reviewed for adequacy.

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

b. Findings

No findings were identified.

.4 Annual Sample: Review of Operator Workarounds

a. Inspection Scope

The inspectors evaluated the licensee's implementation of their process used to identify, document, track, and resolve operational challenges. Inspection activities included, but were not limited to, a review of the cumulative effects of the operator workarounds (OWAs) on system availability and the potential for improper operation of the system, for potential impacts on multiple systems, and on the ability of operators to respond to plant transients or accidents.

The inspectors performed a review of the cumulative effects of OWAs. The documents listed in the Attachment to this report were reviewed to accomplish the objectives of the inspection procedure. The inspectors reviewed both current and historical operational challenge records to determine whether the licensee was identifying operator challenges at an appropriate threshold, had entered them into their CAP and proposed or implemented appropriate and timely corrective actions which addressed each issue. Reviews were conducted to determine if any operator challenge could increase the possibility of an Initiating Event, if the challenge was contrary to training, required a change from long-standing operational practices, or created the potential for inappropriate compensatory actions. Additionally, all temporary modifications were reviewed to identify any potential effect on the functionality of Mitigating Systems, impaired access to equipment, or required equipment uses for which the equipment was not designed. Daily plant and equipment status logs, degraded instrument logs, and operator aids or tools being used to compensate for material deficiencies were also assessed to identify any potential sources of unidentified OWAs.

This review constituted one OWA annual inspection sample as defined in IP 71152-05.

b. Findings

No findings were identified.

4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153)

.1 (Closed) LER 05000282/2011-003-00: Unit 1 Reactor Coolant System Leak Detection Was Inoperable

This LER describes an August 18, 2011, event where the licensee did not recognize the full consequences of isolating electrical bus 310 as part of maintenance planning. Prairie Island TS 3.4.16 required one containment sump A monitor and one containment radionuclide monitor to be operable in Modes 1 through 4 to fulfill the reactor coolant

system (RCS) leakage detection function. On August 13, 2011, the 1R-11 radionuclide monitor failed and was taken out-of-service. The licensee entered TS 3.4.16, Condition B which allowed 30 days for the monitor to be repaired. Five days later, electrical bus 310 was de-energized for maintenance. However, the licensee failed to recognize that this electrical configuration resulted in both containment sump A monitors being inoperable. Due to this knowledge error, the licensee failed to enter TS 3.4.16, Condition D, which directed an immediate entry into TS 3.0.3 and a plant shutdown. The licensee entered this issue into the CAP as CAP 1300034. The licensee performed a causal evaluation and determined that station processes lacked appropriate standards to ensure that complex electrical clearance orders were appropriately developed and approved. The lack of standards resulted in the development and approval of an inappropriate electrical isolation of bus 310. Corrective actions for this event included the development and implementation of procedure revisions to address electrical clearance order standards. The enforcement aspects of this issue are discussed in Section 4OA7 of this report. Documents reviewed are listed in the Attachment to this report. This LER is closed.

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

.2 Review of Licensee's Initial Response to CAP 1307751 – D1 and D2 Metering Fuses Not Coordinated

a. Inspection Scope

On October 11, 2011, the licensee's component design basis review team identified that the D1 and D2 EDG metering fuses may not be properly coordinated. Due to the improper coordination, a fault in the local metering could cause the EDG potential transformer primary fuses to fail. If the fuses failed, the EDG voltage regulator would degrade such that the EDG would be rendered inoperable.

The inspectors reviewed the licensee's initial operability determination and noted that continued operability of the D1 EDG was unable to be supported. The inspectors verified that the licensee appropriately entered TS action statements associated with one EDG being inoperable and that the required actions were completed in the allotted time. The inspectors observed maintenance personnel perform repairs on the D1 EDG to ensure that appropriate fuses were installed. Lastly, the inspectors monitored actions taken by the licensee to evaluate the continued operability of the D2 EDG. When the operability of the D2 EDG could no longer be assured, the inspectors verified that the licensee appropriately removed the EDG from service, completed repairs, and performed appropriate testing. Documents reviewed are listed in the Attachment to this report.

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

b. Findings

One licensee-identified NCV is discussed in Section 4OA7 of this report.

.3 Review of Steam Exclusion Damper Failures

a. Inspection Scope

The inspectors reviewed the circumstances surrounding the failure of three steam exclusion dampers which occurred between August 24 and September 22, 2011. Specifically, the inspectors observed damper repairs, discussed the damper failures and performance history with engineering personnel, and reviewed corrective action documents and causal evaluations to determine whether the licensee had taken appropriate actions to address the damper failures.

b. Findings

At the Prairie Island Nuclear Generating Plant, certain ventilation systems were designed with steam exclusion dampers. These dampers automatically closed during high energy line break (HELB) events to ensure that safety-related equipment remained protected from the impacts of high temperature steam. On August 24, 2011, steam exclusion control damper (CD) 34197 failed to fully close during surveillance testing. The licensee entered the appropriate Technical Requirements Manual (TRM) Action Statement, which directed that the redundant damper be closed within 24 hours. The inspectors verified that the redundant damper was closed within the required time. The inspectors observed the licensee's repair and PM testing of CD-34197 to ensure that the damper was properly returned to service.

On September 21, 2011, the licensee tested CD-34187 and CD-34188 which were used to protect equipment located on the 695 foot elevation of the auxiliary building from a HELB. During this testing CD-34187 closed, but gaps were identified between several damper blades. The licensee documented this condition in CAP 1304753. The inspectors verified that the licensee entered the appropriate TRM Action Statement and that the redundant damper (CD-34188) was closed within 24 hours.

While performing maintenance activities on CD-34187 on September 22, 2011, the licensee identified that the blades of damper CD-34188 also contained gaps. As a result, the licensee could not credit the closure of CD-34188 to meet the TRM Action Statement. The licensee immediately installed a blind flange to ensure that safety-related equipment remained protected from a HELB event. The licensee documented this condition in CAP 1305151. Since both dampers contained gaps, the inspectors were concerned that the condition of the dampers could have constituted a safety system functional failure or could have resulted in an unintended safety system functional failure of equipment located in the auxiliary building.

The licensee was continuing to review the inspectors concerns at the conclusion of the inspection period. As a result, this item will remain unresolved pending a review of documentation evaluating whether the safety-related equipment remained protected from HELBs even though both dampers contained gaps **(URI 05000282/2011005-05; 05000306/2011005-05: Review of Potential Safety System Functional Failure due to Steam Exclusion Damper Issues)**.

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

4OA5 Other Activities

.1 (Closed) URI 05000282/2011004-05; 05000306/2011004-05: Failure to Incorporate Revised Battery Room Temperature Information into Existing Operability Recommendation

a. Inspection Scope

As discussed in Section 4OA3.2 of NRC Inspection Report 05000282/2011004; 05000306/2011004, the inspectors were concerned that the licensee had not incorporated the results of Engineering Change (EC) 17949 into Operability Recommendation (OPR) 1265904. Operability Recommendation 1265904 evaluated the impact of a HELB on temperatures within the battery rooms and determined that the safety-related batteries would remain operable as long as the initial battery room temperatures were less than 89 degrees Fahrenheit. However, calculations performed as part of EC 17949 determined that the initial battery room temperature could be as high as 95 degrees Fahrenheit prior to the HELB event.

b. Findings

During the inspection period, engineering personnel identified that the calculation performed in support of EC 17949 was not conservative. When these non-conservatisms were fully evaluated, the battery room temperature limitation remained at 89 degrees Fahrenheit as documented in OPR 1265904. As a result, the decision to not revise the OPR was appropriate. No performance deficiency was identified. This URI is closed.

4OA6 Management Meetings

.1 Exit Meeting Summary

On January 12, 2012, the inspectors presented the inspection results to Mr. K. 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 licensed operator requalification training program inspection with the Site Vice President, Mr. M. Schimmel, on October 21, 2011;
- The licensed operator requalification training biennial written examination and annual operating test results with the General Supervisor Operations Training, Mr. T. Ouret, via telephone on November 7, 2011;
- The radiation protection and environmental monitoring inspection with Site Director, Mr. K. Davison on December 2, 2011; and
- The licensed operator examination security issue with Mr. T. Ouret, via telephone on December 15, 2011.

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

4OA7 Licensee-Identified Violations

The following violations of very low significance (Green) or of Severity Level IV were identified by the licensee and were violations of NRC requirements which met the criteria of the NRC Enforcement Policy for being dispositioned as NCVs.

- Technical Specification 3.4.16 required RCS leakage detection instrumentation (one containment sump A monitor and one containment radionuclide monitor) to be operable during Modes 1 through 4. Technical Specification 3.4.16, Condition D, required that Limiting Condition for Operation 3.0.3 be entered immediately when all required monitors were inoperable. As discussed in Section 4OA3.3 of this report and CAP 1300034, the containment radionuclide radiation monitor and both containment sump A monitors were inoperable on August 18 and 19, 2011.

  The failure to comply with TS 3.4.16 was determined to be a performance deficiency as defined in IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening." The inspectors determined this issue was more than minor because it was associated with the configuration control attribute of the Barrier Integrity Cornerstone and impacted the cornerstone objective of providing reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events. The inspectors determined this finding was of very low safety significance because other instrumentation was available to provide indications of RCS leakage. Corrective actions included revising procedures to ensure that complex electrical equipment isolations were appropriately developed and approved.

- Title 10 CFR 50.59 states that a licensee may make changes in the facility as described in the final safety analysis report (as updated), make changes in the procedures as described in the final safety analysis report (as updated), and conduct tests or experiments not described in the final safety analysis report (as updated) without obtaining a license amendment pursuant to Part 50.90 as long as a change to the TS is not required and the change, test or experiment does not meet any of the criteria in Paragraph 50.59(c)(2).

  Paragraph 50.59(d)(1) states that the licensee shall maintain records of changes in the facility, of changes in procedures, and of tests and experiments made pursuant to paragraph (c) of this section. These records must include a written evaluation which provides the bases for the determination that the change, test, or experiment does not require a license amendment.

  Contrary to the above, on October 11, 2011, licensee personnel made changes to procedures as described in the final safety analysis report (as updated) as part of implementing a compensatory measure and supporting continued operability of the D1 EDG without creating a written record which provided the bases for the determination that the change did not require a license amendment.

The NRC considered failures to comply with the requirements of 10 CFR 50.59 as violations that impacted the regulatory process. As a result, the NRC dispositioned these types of issues using the traditional enforcement process. However, the underlying technical issue was evaluated using the SDP. Based upon the information available during the inspection, the inspectors determined that the underlying technical issue was associated with a lack of configuration control which caused the installation of potentially improper fuses in the D1 EDG metering circuitry. The inspectors determined that the failure to properly control the configuration of the D1 EDG fuses was a performance deficiency which required evaluation using the SDP. The inspectors determined that this issue was more than minor because, if left uncorrected, the improper configuration control could result in safety-related equipment being improperly protected from electrical faults (a more significant safety issue). The inspectors determined that the underlying technical issue was of very low safety significance because it did not result in a loss of safety function for any mitigating system.

In accordance with the NRC Enforcement Policy, the licensee's failure to comply with 10 CFR 50.59 was classified as a Severity Level IV violation since the underlying technical issue was of very low safety significance (Green), was not willful or repetitive, and was entered into the licensee's CAP as CAP 1307933. Corrective actions for this issue included ensuring that personnel were aware of the requirement to perform a 10 CFR Part 50.59 evaluation for compensatory measures used to maintain operability.

- Technical Specification 5.4, "Procedures," requires compliance with all the programs specified in TS 5.5. Technical Specification 5.5.4 defines the requirements of the radioactive effluent controls program. Contrary to the above, on March 30, 2009, the licensee failed to perform compensatory radioactive effluent sampling that was required when the effluent radiation monitor for the condenser air ejector monitor (1R15) was out-of-service. The issue was documented in the licensee's CAP as CAP 1181462. Corrective actions included obtaining the required sample and planned improvements in effluent radiation monitor changes performance.

  The missed radioactive effluent sample was a performance deficiency as defined in IMC 0612, "Power Reactor Inspection Reports," Appendix B, "Issue Screening." The inspectors determined that the finding was more than minor because, if left uncorrected, the performance deficiency had the potential to lead to a more significant safety concern. The finding was reviewed for significance in accordance with IMC 0609, Appendix D, "Public Radiation Safety Significance Determination Process," and determined to be of very low safety significance because it did not involve radioactive material control, radioactive material transportation, or the Radioactive Environmental Monitoring Program. The finding did involve the Radioactive Effluent Release Program. However, there was not a failure to implement the Radioactive Effluent Program and public dose was less than 10 CFR Part 20, Appendix I Criterion and less than 10 CFR 20.1301(e) values.

- Title 10 CFR 55.49, "Integrity of Examinations and Tests," requires, in part, that the licensee shall not engage in activities that compromise the integrity of any application, test, or examination required by 10 CFR Part 55. Contrary to the

above, on December 5, 2011, the licensee determined that the control room simulator's plant process computer model was saving sequence of events files on a routine basis. The licensee determined that some of the files contained examination materials related to examinations required by 10 CFR Part 55. The integrity of a test or examination is considered compromised if any activity, regardless of intent, affected, or, but for detection, would have affected the equitable and consistent administration of the test or examination. Although the examination materials were compromised, the licensee was able to demonstrate that no unauthorized personnel gained access to the files containing examination material. Therefore, no individuals had an unfair advantage in taking any NRC-related examinations. This issue was documented in the facility's CAP as CAP 1316195. Corrective actions for this issue included revising the simulator's software to prevent unauthorized access to the sequence of events files being generated by the simulator.

The inspectors determined that the failure to control sequence of event files generated by the facility's simulator was a performance deficiency that required an SDP evaluation. The inspectors determined that this finding impacted the Mitigating Systems Cornerstone and consulted IMC 0609 Appendix I to assess the impact of this issue on examination security. The inspectors concluded that an examination compromise had occurred and the facility had taken immediate compensatory actions to prevent recurrence of this condition. Based on circumstances described above and the licensee's corrective actions, the inspectors concluded that this finding was of very low safety significance.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

M. Schimmel, Site Vice President
K. Davison, Director – Site Operations
P. Huffman, Site Engineering Director
S. Northard, Plant Manager
S. Sharp, Assistant Plant Manager
T. Allen, Senior Manager Site Engineering
J. Anderson, Regulatory Affairs Manager
C. Bough, Chemistry and Environmental Manager
B. Boyer, Radiation Protection Manager
K. DeFusco, Emergency Preparedness Manager
D. Goble, Safety and Human Performance Manager
J. Hamilton, Security Manager
J. Lash, Nuclear Oversight Manager
S. Lappegaard, Production Planning Manager
M. Milly, Maintenance Manager
K. Peterson, Business Support Manager
A. Pullam, Training Manager
J. Ruttar, Operations Manager

Nuclear Regulatory Commission

K. Riemer, Chief, Reactor Projects Branch 2
T. Wengert, Project Manager, Office of Nuclear Reactor Regulation

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened

05000306/2011005-01	URI	Potential Technical Specification Non-Compliance While Completing Repairs on Motor Damper 32421 (Section 1R01)
05000306/2011005-02	URI	Appendix R Fire Barrier Degraded Between Fire Areas 118 and 128 (Section 1R05)
05000282/2011005-03; 05000306/2011005-03	URI	Potential Maintenance Rule Scoping Issue for Residual Heat Removal Pump Pit Sump Pumps and Level Switches (Section 1R12)
05000282/2011005-04; 05000306/2011005-04	NCV	Failure to Complete Immediate Operability Determination on Molded Case Circuit Breakers (Section 1R15)
05000282/2011005-05; 05000306/2011005-05	URI	Potential Safety System Functional Failure due to Steam Exclusion Damper Issues (Section 4OA3.3)

Closed

05000282/2011005-04; 05000306/2011005-04	NCV	Failure to Complete Immediate Operability Determination on Molded Case Circuit Breakers (Section 1R15)
05000282/2011-003-00	LER	Unit 1 Reactor Coolant System Leak Detection Was Inoperable (Section 4OA3.1)
05000282/2011004-05; 05000306/2011004-05	URI	Failure to Incorporate Revised Battery Room Temperature Information into Existing Operability Recommendation (Section 4OA5.1)

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

- CAP 1262763; Low Temperature in D5 Diesel Room; December 13, 2010
- B37B; Emergency Diesel Generator Ventilation System; Revision 7
- Remote Alarm Response Procedure C50002-0506; Diesel Room Vent System Trouble; Revision 8
- M-870; D5/D6 Purchase Specification; March 10, 1988
- Procedure Change Request 20041032; May 4, 2004
- CAP 568592; Recirc Damper for D5 Engine Room Failed Closed During Post Maintenance Testing; January 22, 2004
- CAP 1253174; USAR and C18.1 Conflict for D5 and D6 Room Cooling Fans; October 7, 2010
- CAP 1312509; Unplanned Limiting Condition for Operation Entry due to D5 Damper Isolation; November 10, 2011
- CAP 1313190; Discrepancies between Maintenance Rule Bases Document, C Procedures and USAR Documents Regarding Diesel Ventilation System; November 15, 2011
- TP 1637; Winter Plant Operation; Revision 44

1R04 Equipment Alignment

- C1.1.35-1; Cooling Water System Unit One; Revision 11
- C1.1.35-3; Cooling Water System; Revision 31

1R05 Fire Protection

- Fire Hazards Analysis; Various Revisions
- Procedure F5, Appendix A; Fire Zone Plans and Maps; Various Revisions
- D52; Installation Guidelines For The Permanent & Temporary Sealing Of electrical/Mechanical Openings Between Established Fire Areas; Revision 13
- Engineering Manual 2.1.14; Fire Barriers and Penetration Seals; Revision 1

1R06 Flood Protection

- Waste Liquid System Health Report; no date provided
- NF-40751-10; Interlock Logic Diagram Waste Liquid Disposal System, Units 1 and 2; Revision S
- NE-40008, Sheet 42; Electrical Diagram for 11 Residual Heat Removal Pit Sump Pump; Revision BT
- Updated Safety Analysis Report, Section 6.5.3.2; Revision 32P
- EC 15902; Implement Waste Liquid Component's Classification Based on Q-List Project Documentation; Revision 0
- WO 424880, Task 1; 11 RHR Pit Sump Level Switches Calibration; October 27, 2011

- WO 323402, Task 1; 11 RHR Pit Sump Level Switches Calibration; May 1, 2008
- CAP 1308154; CDBR: RHR Pit Sump Pump Function for Mitigating Pit Flooding; October 13, 2011

1R12 Maintenance Effectiveness

- Maintenance Rule System Specific Bases Document; Revision 14
- Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 15
- Waste Liquid System Health Report; no date provided
- Fuel Pool Cooling System Health Report; no date provided
- Diesel Ventilation System Health Report; no date provided
- NF-40751-10; Interlock Logic Diagram Waste Liquid Disposal System, Units 1 and 2; Revision S
- NE-40008, Sheet 42; Electrical Diagram for 11 Residual Heat Removal Pit Sump Pump; Revision BT
- Updated Safety Analysis Report, Section 6.5.3.2; Revision 32P
- EC 15902; Implement Waste Liquid Component's Classification Based on Q-List Project Documentation; Revision 0
- WO 424880, Task 1; 11 RHR Pit Sump Level Switches Calibration; October 27, 2011
- WO 323402, Task 1; 11 RHR Pit Sump Level Switches Calibration; May 1, 2008
- CAP 1308154; CDBR: RHR Pit Sump Pump Function for Mitigating Pit Flooding; October 13, 2011

1R13 Maintenance Risk Assessment and Emergent Work

- V.SPA.11.032; Mode Change Risk Assessment – 122 Safeguards Traveling Screen (Mode 5 to 4); Addendum 1
- Shutdown Safety Assessment; October 16, 2011
- Forced Outage Restart Checklist; October 16, 2011

1R15 Operability Evaluations

- C1.1.20.10-2; Unit 2 Lighting and Miscellaneous Small Power System; Revision 27
- NH-40886; Front View & Wiring diagram 480-240V Ground Detection Cabinet; Revision F
- B20.10; 240 VAC Auxiliary System – Safeguard; Revision 3
- DBD-SYS-20.10; 240/120V AC Miscellaneous Auxiliaries System; Revision 4
- NF-40018-3; 230V AC Circuit Diagram Distribution Panels 134/135/119; Revision N
- CALC-EE-113; Aux Building 695' MCC Evaluation In Increased Ambient Temperature Environment; Revision 1
- CAP 1310274; CDBR: Molded Case Circuit Breakers Did Not Test In Accordance With Industry Standards; October 27, 2011
- NF-40013-1; 230V AC Auxiliaries Schematic Diagram; Revision 76
- NF-40208-1; Wiring diagram Bus 1 Motor Control Center !K; Revision 76
- SP1001B; Unit 1 Control Room Log – Modes 1 And 2; Revision 17
- NF-40283-2; Wiring Diagram 230VAC Distribution Panels – A Train; Revision R
- CAP 1307751; CDBR: D1 and D2 EDG Metering Fuses Not Coordinated; October 11, 2011
- EC 18878; D1 and D2 Fuses Replacements; October 12, 2011
- NF-40017-1; Emergency Generator D1 A.C. Schematic Diagram; Revision 76
- NF-40017-2; Emergency Generator D1 A.C. Schematic Diagram; Revision 76
- 5AWI 3.12.4; Post-Maintenance Testing; Revision 20

- FP-E-SPT-01; Setpoint Change Control; Revision 5
- H9; Fuse Control Program; Revision 10
- WO 443425; CDBR Identified Discrepancies Between PassPort and Prints October 12, 2011
- 1C20.7; D1/D2 Diesel Generators; Revision 29
- Safety Evaluation 478-AI-03; Pipe Stress and Pipe Whip; Revision 1
- Final Safety Analysis Report; Amendment 25; October 25, 1972
- Generic Letter 87-11; Relaxation in Arbitrary Intermediate Pipe Rupture Requirements; June 19, 1987

1R20 Outage Activities

- C1-B; Unit Startup Checklist; Revision 22
- C1.1-B1; Master System Checklist; Revision 3
- C1.2B; Chemistry Mode 3 ,Hot Standby; Revision 8
- C1.M3; Surveillance Requirements, Mode 3 Hot Standby; Revision 15
- C1.1.5-2; Rod Control & Position Indication Systems – Unit 2; Revision 10
- C1.1.7-2; Unit 2 Reactor Control, Revision 14
- C1.1.9-2A; Nuclear Instrumentation System; Revision 2
- C1.1.15-2; Unit 2 residual Heat Removal; Revision 31
- C1.1-B-2; Integrated Operations Master Systems Checklist; Revision 5
- C1.1.22-2; Turbine Generator Unit 2; Revision 4
- C1.1.23-2; Turbine Control System; Revision 5
- C23-2; Unit 2 Turbine Control System; Revision 13
- C1.1.27-2D; Part IV Main and Auxiliary Steam – Unit 2; Revision5
- 2C3 AOP3; Failure Of A Reactor Coolant Pump Seal; Revision 12A
- Emergency Response Computer System Plots (Reactor Coolant Pump Seal Leakoff); October 3-4, 2011
- CAP 1306901; Procedure/Equipment Issue Delaying Cooldown To Mode 5; October 4, 2011
- CAP 1257118; 50.59 Screening Not Sufficient – 122 SFP CC Heat Exchanger CC Loss; November 4, 2010
- CAP 1174370; No Tornado Protection of CC Piping For 122 SFP Heat Exchanger; March 23, 2009
- SP 2750; Post Outage Containment Close-Out Inspection; Revision 36
- 2C5 AOP3; Misalignment Of Groups Within A Bank; Revision 9
- Outage Scope Change #40; Deletion of SP 2137 Recirculation Mode Valve Functional Test; October 8, 2011
- 2C1.5; Operation Without Computer; Revision 32
- Fig C1A-3; Estimated Critical Boron Concentration Based On Simulate Code (Unit 1, Cycle 25, Startup #169); Revision 6
- Fig C1A-3; Estimated Critical Boron Concentration Based On Simulate Code (Unit 1, Cycle 27, Startup #172); Revision 9
- Fig C1A-3; Estimated Critical Boron Concentration (Unit 2, Cycle 26, Startup #145); Revision 16
- Fig C1A-3; Estimated Critical Boron Concentration Based On Simulate Code (Unit 2, Cycle 26, Startup #144); Revision 7
- Fig C1A-3; Estimated Critical Boron Concentration (Unit 2, Cycle 26, Startup #146); Revision 17
- Fig C1A-3; Estimated Critical Boron Concentration Based On Simulate Code (Unit 1, Cycle 25, Startup #168); Revision 6
- Forced Outage Restart Checklist; October 16, 2011

1R22 Surveillance Test

- SP 1032A; Safeguards Logic Test at Power – Train A; Revision 32
- SP 1035A; Reactor Protection Logic Test at Power – Train A; Revision 38
- SP 2214; Reactor Coolant System Pressure Isolation Check Valve Leakage Test; Revision 16
- SP 2305; D6 Diesel Generator Monthly Slow Start; Revision 34
- 5 AWI 1.11.6; Pre-job Brief; Revision 20
- FP-PA-HU-02; Human Performance Tools; Revision 6
- B8; Reactor Protection System; Revision 6
- WO 424656; SP2305 D6 Diesel Generator Monthly Slow Start; October 17, 2011

2RS1 Radiological Hazard Assessment and Exposure Controls

- CD 9.3; Radiological Posting; Revision 03
- Electronic Dosimetry Alarm Logs; January – December 2011
- PING 93; Radiation Occurrence Report; Selected Records; Various dates 2011
- RPIP 1118; Conducting Radiological Surveys; Revision 20
- RPIP 1120; Posting of Restricted Areas; Revision 35
- RPIP 1126; Contamination Monitor Alarm Response and Personnel Decontamination; Revision 24
- RPIP 1302; Unconditional Release of Materials; Revision 23
- RPIP 1304; Conditional Release of Equipment to Outside the Radiological Controlled Area; Revision 10
- RPIP 1518; Integral Tool Monitor Description, Operation and Calibration; Revision 10
- RPIP 1674; PM-7 Portal Monitor Description, Operation and Calibration; Revision 6
- RPIP 1677; SAM-11 Small Articles Monitor Operation and Calibration; Revision 4
- RWP 1273; Unit-1 Cavity Decontamination

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

- 1R27 Outage Work Orders Dose Estimates and Actual Dose Received; dated December 01, 2011
- Detail Dose by Work Order and Department; Selected Records; Various dates
- FP-RP-JPP-01; RP Job Planning; Revision 9
- FP-RP-RWP-01; Radiation Work Permit; Revision 9
- FP-RP-SAC-01; Station ALARA Committee; Revision 1
- FP-WM-IRM-01; Integrated Risk Management; Revision 5
- Prairie Island Nuclear Generating Plant Engineering Manual; Administrative Standards and Requirements for Design for ALARA; Sections 2.4.5 and 3.4.5; dated August 1992
- QF-1203; Radiological Work Assessment Form; Selected Records; Various dates 2011
- 2RS3 In-Plant Airborne Radioactivity Control and Mitigation (71124.03)
- CAP 1315641; 27 Scott Air Cylinders In-Service Past Their Hydro Due Date; dated December 2011
- Breathing Air System Air Quality Tests; Selected Records; Various dates 2011
- PSI Visual Cylinder Inspection Evaluations; Selected Records; Various dates 2011
- Respiratory Protection Equipment Maintenance Records; Selected Records; Various dates 2010 and 2011
- Respiratory Protection Equipment NIOSH Certifications; Selected Records; Various dates 2011
- Respiratory Protection Qualification Records; Selected Records; Various dates 2011
- Scott PosiChek3 Test Results; Selected Records; Various dates 2010 and 2011

2RS6 Radioactive Gaseous and Liquid Effluent Treatment

- 2009 Land Use Census
- 2009 Prairie Island Annual Radiological Effluent Report; dated May 12, 2010
- 2010 Land Use Census
- 2010 Prairie Island Annual Radiological Effluent Report; dated May 12, 2011
- 2011 10 CFR 61 Teledyne Brown Engineering Inc. Report L44739; dated February 1, 2011
- CAP 866805; Aging and Obsolete Radiation Monitors; dated July 14, 2005
- CAP 1171834; Potential Unmonitored Release; dated March 5, 2009
- CAP 1185228; U2 TBS Compositor Out-of-Service; dated June 11, 2009
- CAP 1206454; CVCS Waste Processing Issues; dated November 10, 2009
- CAP 1211880; Site's Failure to Implement Compensatory Action; dated March 20, 2010
- CAP 1228993; Unpermitted Release from the TBS; dated April, 23, 2010
- CAP 1241355; Unpermitted Release from 121 Cooling Tower; dated July 14, 2010
- CAP 1295889; Potentially Contaminated Water Dumped; dated July 23, 2011
- FP-WM-W01-01; Work Identification, Screening, Validation and Cancellation; Revision 12
- H4; Offsite Dose Calculation Manual (ODCM); Revision 26
- H4.2; Offsite Dose Calculation Manual (ODCM) Supporting Data; Revision 0
- NOS Observation Report, 2009-03-021 for period of September 9 through 30th; 2009
- Radioactive Release Permit GDT 129; dated May 26, 2010
- Radioactive Release Permit 121-ADT-MT; dated January 16, 2010
- Radioactive Release Permit GDT 128; dated September 26, 2011
- RPIP 1123; Alpha Characterization Smears; Revision 0
- RPIP 1124; Evaluation of Isotopic Mix; Revision 0
- RPIP 4505; Liquid Waste Tank Release Instructions; Revision 18
- RPIP 4508; Gas Decay Tank Release Instructions; Revision 14
- RPIP 4509; Containment Release Instructions; Revision 14
- RPIP 4528; Effluent Surveillance Sample Collection; Revision 18
- Title 10 CFR 50.75.g File Index and Selected Records; dated August 2011

4OA2 Identification and Resolution of Problems

- List of open operator workarounds

4OA3 Followup of Events and Notices of Enforcement Discretion

- CAP 1207751; CDBR: D1 and D2 EDG Metering Fuses are not Coordinated; October 11, 2011
- Apparent Cause Evaluation 1300773; Review Steam Exclusion Damper Failures; November 2, 2011
- CAP 1304753; Damper Gap Unsat During SP 1112; September 21, 2011
- CAP 1305151; Gaps Observed Between Seals on CD-34188; September 23, 2011

4OA5 Other

- Procedure 2C20.7; D5/6 Diesel Generators; Revision 36
- WO 388575; Replacement Of The DGIP-A/D5 Due To Potential Common Cause; Revision July 9, 2010
- WR 48308; Replacement Of The DGIP-A/D5 Due To Potential Common Cause; Revision; August 5, 2009
- CAP 1184883; D6 Would Not Control Load During SP 2305; June 8, 2009

- MRE 1184883-03; D6 Would Not Control Load During SP 2305; 12/28/2009
- ACE 1184883; D6 Would Not Control Load During SP 2305; July 9, 2009
- Work Plan 445421-03; D5 Diesel Generator In Parallel Auxiliary Relay A; Revision 00
- WO 445421; DGIP-A/D5 Inspect and Simulate Relay Action; November 7, 2011
- CAP 1173242; D5 Shutdown At End Of SP-2093 With High Output; March 17, 2000
- ACE 1173242; D5 Shutdown At End Of SP-2093 With High Output; April 17, 2000
- WO 400640; DGIP-A/D5 Replace The DGIP-A Relay For D5; February 18, 2010
- WO 445241; Troubleshooting Plan For DGIP-A/D5; November 7, 2011

4OA7 Licensee-Identified Violations

- LER 50-282/2011-00300, Unit 1 Reactor Coolant System Leak Detection Was Inoperable; October 15, 2011
- CAP 01300034; Isolated Sump A Discharge Caused Unplanned LCO 3.0.3 Entry
- CAP 1207751; CDBR: D1 and D2 EDG Metering Fuses are not Coordinated; October 11, 2011

LIST OF ACRONYMS USED

ADAMS	Agencywide Document Access Management System
ALARA	As-Low-As-Is-Reasonably-Achievable
CAP	Corrective Action Program
CD	Control Damper
CFR	Code of Federal Regulations
DC	Direct Current
DDCLP	Diesel Driven Cooling Water Pump
DRP	Division of Reactor Projects
EC	Engineering Change
EDG	Emergency Diesel Generator
HELB	High Energy Line Break
IEEE	Institute of Electrical & Electronic Engineers
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Inspection Report
JPM	Job Performance Measure
kV	Kilovolt
LCO	Limiting Condition for Operation
LER	Licensee Event Report
LORT	Licensed Operator Requalification Training
MCCB	Molded Case Circuit Breaker
MD	Motor Damper
MSPI	Mitigating Systems Performance Indicator
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OPR	Operability Recommendation
OWA	Operator Workaround
PARS	Publicly Available Records System
PI	Performance Indicator
PM	Post-Maintenance
RCS	Reactor Coolant System
RETS	Radiological Effluent Technical Specifications
RHR	Residual Heat Removal
SAT	Systems Approach to Training
SCBA	Self-Contained Breathing Apparatus
SDP	Significance Determination Process
SSC	Structure, System, and Component
TRM	Technical Requirements Manual
TS	Technical Specification
URI	Unresolved Item
USAR	Updated Safety Analysis Report
V	Volts
WO	Work Order

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Sincerely,

/RA/

Kenneth Riemer, Branch Chief
Branch 2
Division of Reactor Projects

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

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Letter to M. Schimmel from K. Riemer dated February 1, 2012

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2 - NRC INTEGRATED INSPECTION REPORT 05000282/2011005; 05000306/2011005

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