July 11, 2003

Mr. Joseph Solymossy
Site Vice-President
Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC
1717 Wakonade Drive East
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2
NRC INTEGRATED INSPECTION REPORT 50-282/03-04; 50-306/03-04

Dear Mr. Solymossy:

On June 30, 2003, the U. S. Nuclear Regulatory Commission (NRC) completed a baseline inspection at your Prairie Island Nuclear Generating Plant, Units 1 and 2. The enclosed report documents the inspection findings which were discussed on June 30, 2003, with you and other members of your staff.

This inspection examined activities conducted under your license as they relate to safety and to 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.

Based on the results of this inspection, no findings of significance were identified.

Since the terrorist attacks on September 11, 2001, NRC has issued five Orders and several threat advisories to licensees of commercial power reactors to strengthen licensee capabilities, improve security force readiness, and enhance controls over access authorization. In addition to applicable baseline inspections, the NRC issued Temporary Instruction 2515/148, "Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures," and its subsequent revision, to audit and inspect licensee implementation of the interim compensatory measures required by order. Phase 1 of TI 2515/148 was completed at all commercial power nuclear power plants during calender year 2002 and the remaining inspection activities for Prairie Island are scheduled for completion in June 2003. The NRC will continue to monitor overall safeguards and security controls at Prairie Island.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document 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/

Patrick Louden, Chief
Branch 5
Division of Reactor Projects

Docket Nos. 50-282; 50-306
License Nos. DPR-42; DPR-60

Enclosure: Inspection Report 50-282/03-04; 50-306/03-04

cc w/encl: Plant Manager, Prairie Island
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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-282; 50-306
License Nos:	DPR-42; DPR-60
Report No:	50-282/03-04; 50-306/03-04
Licensee:	Nuclear Management Company, LLC
Facility:	Prairie Island Nuclear Generating Plant, Units 1 and 2
Location:	1717 Wakonade Drive East Welch, MN 55089
Dates:	April 1 through June 30, 2003
Inspectors:	J. Adams, Senior Resident Inspector D. Karjala, Resident Inspector M. Mitchell, Radiation Specialist, DRS J. Creed, Lead Physical Security Inspector G. Pirtle, Physical Security Inspector R. Jickling, Emergency Preparedness Inspector T. Ploski, Emergency Preparedness Inspector
Approved by:	Patrick Louden, Chief Branch 5 Division of Reactor Projects

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SUMMARY OF FINDINGS

IR 05000282/2003-004, 05000306/2003-004; Nuclear Management Company, LLC; 04/01/03 - 06/30/03; Prairie Island Nuclear Generating Plant, Units 1 & 2; Routine Baseline Inspection Report.

This report covers a 3-month period of baseline resident inspection and announced baseline inspection on radiation protection, security, and emergency preparedness. The inspection was conducted by the resident inspectors and inspectors from the Region III office. No findings of significance were identified. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector-Identified and Self-Revealed Findings

No findings of significance were identified.

B. Licensee-Identified Violations

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

REPORT DETAILS

Summary of Plant Status

Unit 1 was operated at or near full power until April 14, 2003, when reactor power was reduced to Mode 2 and the generator was taken off-line to repair an oil leak on the main transformer 1GT. Unit 1 was returned to full power on April 20, 2003, and was operated at that power level until June 16, 2003, when it was discovered that at 100 percent reactor power the steam flow in 11 Steam Generator exceeds 104 percent of design. Reactor power was reduced to approximately 99.5 percent and operated at that power level for the remainder of the inspection period.

Unit 2 was operated at or near full power until April 5, 2003, when power was reduced to 40 percent to conduct quarterly turbine valve testing and to clean condenser water boxes. Unit 2 was returned to full power on April 6, 2003, and was operated at that power level for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstone: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01)

Hot Weather, Tornado, and High Winds

a. Inspection Scope

On April 25, 2003, the inspectors performed a detailed review of the summer plant operation, high wind, and tornado hazard procedures; Updated Safety Analysis Report (USAR); design basis documents for the alternating current transformers, the switchyard, and engineering safeguards equipment ventilation systems; applicable Technical Specifications (TSs); and the Prairie Island Individual Plant Examination of External Events (IPEEE). During this review, the inspectors verified that the as-found conditions were consistent with the description provided in the above documents.

The inspectors conducted tornado, high winds, and hot weather inspections of the following risk significant mitigating systems:

Tornado and High Winds

- Unit 1 and 2 alternating current power transformers;
- Unit 1 and 2 switchyard; and
- Unit 1 emergency diesel generators.

Hot Weather

- Guardhouse diesel generator
- Unit 1 4160 volt essential switchgear room ventilation for electrical bus 15 and 16; and
- Unit 1 and 2 residual heat removal pump ventilation systems.

The inspectors reviewed the selected systems to verify that the material conditions and system configuration supported the system's availability and operability under adverse weather conditions, and to verify that additional cooling equipment specified in the summer plant operation procedure was available and operating as specified in the procedure. The inspectors conducted walkdowns of the areas specified in the tornado hazards surveillance procedure (SP) to verify that potential missile hazards to transformers and the switchyard had been removed or properly secured.

The inspectors reviewed a number of weather-related corrective action program (CAP) action requests (ARs) that entered problems that, if left uncorrected, could affect the performance of mitigating systems or result in an initiating event. The review was conducted to verify that the licensee entered problems into the corrective action program, identified appropriate corrective actions, and implemented those corrective actions. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed a partial equipment alignment walkdown of the following risk significant mitigating systems:

- On April 21, 2003, the inspectors conducted an in-plant equipment alignment verification of the D2 emergency diesel generator (EDG) while the D1 EDG was unavailable due to preventative maintenance and testing.

- On May 23, 2003, the inspectors conducted an in-plant equipment alignment verification of the 12 motor-driven auxiliary feedwater (AFW) pump while the 11 turbine-driven AFW pump was unavailable during surveillance testing.

- On May 27, 2003, the inspectors conducted an in-plant equipment alignment verification of the D5 EDG while the D6 EDG was unavailable during surveillance testing.

- On May 28, 2003, the inspectors conducted an in-plant equipment alignment verification of the 21 safety injection pump while the 22 safety injection pump was unavailable for the installation of a plant modification and surveillance testing.

The inspectors utilized the valve and electrical breaker status checklists to verify that system components and support systems were properly configured to support the operability of the available train. The inspectors performed a physical inspection of the available train and reviewed existing outstanding work orders (WOs) and AR CAPs to verify that the available train would be capable to perform its design function as described in the system's design basis. The inspectors also reviewed housekeeping in the proximity of the before mentioned equipment trains to verify that there were no housekeeping issues that could affect the available train's function.

The inspectors reviewed AR CAPs to verify that minor deficiencies identified during these inspections were entered into the licensee's corrective action system. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

1R05 Fire Protection Area Walkdowns (71111.05)

.1 Fire Protection Zone Walkdowns

a. Inspection Scope

The inspectors conducted in-office and in-plant reviews of portions of the licensee's Fire Hazards Analysis and Fire Strategies to verify consistency in the documented installed fire protection equipment in the fire protection areas listed below. The inspectors selected fire areas for inspection based on their overall contribution to internal fire risk, as documented in the IPEEE; their potential to impact equipment which could initiate a plant transient; or their impact on the plant's ability to respond to a security event. The inspectors assessed the control of transient combustibles and ignition sources, the material and operational condition of fire protection systems and equipment, and the status of fire barriers. The inspectors performed an in-plant walkdown of the following risk significant fire areas:

- Fire Area 20, Unit 1 4160 volt safeguards switchgear room (bus 16), on April 4, 2003;
- Fire Area 41A, screenhouse (diesel-driven cooling water pump area), on April 4, 2003;
- Fire Area 58, Unit 1 auxiliary building ground floor, on April 4, 2003;
- Fire Area 73, Unit 2 auxiliary building ground floor, on April 4, 2003;
- Fire Area 59, Unit 1 auxiliary building mezzanine level, on April 7, 2003;
- Fire Area 74, Unit 2 auxiliary building mezzanine level, on April 7, 2003;
- Fire Area 114, Unit 2 D6 emergency diesel generator fuel oil day tank room, on April 7, 2003; and
- Fire Area 116, Unit 2 D6 emergency diesel generator lubricating oil make-up tank room, on April 27, 2003.

The inspectors also reviewed the AR CAPs listed at the end of this report to verify that the licensee was identifying fire protection issues at an appropriate threshold and

entering them into their corrective action program in accordance with station corrective action procedures. The inspectors discussed fire protection issues with the fire protection engineer, operations personnel, and plant management.

b. Findings

No findings of significance were identified.

.2 Annual Fire Drill Observation

a. Inspection Scope

On April 30, 2003, inspectors observed an unannounced fire brigade drill. A large transformer fire was simulated at the Unit 1, 1R transformer. The inspectors observed the fire brigade's response at the scene of the simulated fire, at the fire brigade dress out area, and in the control room.

The inspectors verified that the fire brigade donned the appropriate turnout gear and self-contained breathing apparatus; that plant personnel adequately controlled personnel access to the affected area; that the fire brigade made a controlled approach to the simulated fire; that the fire brigade responded with sufficient equipment of the appropriate type to extinguish the fire; that communications between the fire brigade, fire brigade leader, and control room were clear and concise; that fire brigade members checked for victims and for fire propagation into other plant areas; and that the fire brigade correctly used fire fighting pre-plans. Additionally, the inspectors verified that the drill scenario was followed and that drill objectives and acceptance criteria were met. The inspectors attended the post drill critique and verified that minor weaknesses noted during the drill were discussed with the drill participants.

b. Findings

No findings of significance were identified.

1R06 Flood Protection Measures (71111.06)

.1 External Flood Protection Inspection

a. Inspection Scope

The inspectors performed an in-office review of the most recently completed SP for the inspection of plant flooding barriers and the abnormal procedure for flooding and compared the procedural requirements to the plant flood protection design sections in the USAR and assumption contained in the IPEEE associated with external flooding.

The inspectors performed a physical inspection of all flood protection barriers in the Auxiliary Building, Turbine Building, D5/D6 Building, and the Old Screenhouse during the period of April 2 - 11, 2003, against the acceptance criteria in the SP for the inspection of plant flood barriers. The inspectors also verified that the actions specified in the abnormal procedure for flooding could be performed in a timely manner if

required, and the necessary hardware and consumable materials were available and still within their shelf life.

The inspectors reviewed several AR CAPs to verify that minor deficiencies identified during this inspection were entered into the licensee's corrective action program, that problems associated with plant equipment relied upon to prevent or minimize flooding were identified at an appropriate threshold, and that corrective actions commensurate with the significance of the issue were identified and implemented. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

.2 Internal Flood Protection Inspection

a. Inspection Scope

The inspectors reviewed the applicable sections of the USAR and Individual Plant Examination associated with internal flooding in the area of the Unit 1 and Unit 2 Auxiliary Building, elevations 695 feet and 715 feet. The inspectors conducted a physical walkdown of the Unit 1 and Unit 2 Auxiliary Building on April 23, 2003. The inspectors verified that piping systems in these areas were being maintained. The inspectors verified that drain paths from these areas had been maintained and there were no accumulations of loose materials that could plug drain paths. The inspectors reviewed the operator response times assumed in the flood analysis for operator actions and verified that operators could reasonably be expected to complete the required actions in the assumed time.

The inspectors reviewed several AR CAPs to verify that problems associated with plant equipment relied upon to prevent or minimize flooding were identified at an appropriate threshold, and that corrective actions commensurate with the significance of the issue were identified and implemented. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

1R07 Heat Sink Performance

a. Inspection Scope

On April 21, 2003, the inspectors conducted an as-found inspection of the D1 EDG lubricating oil and jacket water heat exchangers. The inspectors compared the as-found condition of the heat exchangers to the assumed conditions contained in applicable engineering design and performance analyses listed at the end of this report. The inspectors observed conditions as-found heat exchanger for deficiencies such as mussels, clams, tubercles, mud, silt, scale, foreign materials, corrosion, and erosion.

The inspectors also reviewed the licensee's performance with respect to the identification and resolution of problems associated with heat sink performance problems. The inspectors focused their evaluation on problems that could result in an initiating event or affect multiple heat exchangers in mitigating systems, thereby increasing risk. A list of corrective action documents reviewed by the inspectors has been included at the end of this report.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification (71111.11)

a. Inspection Scope

The inspectors observed an operating crew at the simulator during an as-found requalification examination on May 5, 2003. The inspectors evaluated crew performance in the areas of:

- clarity and formality of communications;
- ability to take timely actions in the safe direction;
- prioritization, interpretation, and verification of alarms;
- procedure use;
- control board manipulations;
- oversight and direction from supervisors; and
- group dynamics.

Crew performance in these areas was compared to licensee management expectations identified in the Administrative Work Instruction (AWI) listed at the end of this report. The inspectors also compared simulator configurations with actual control room board configurations. For any weaknesses identified, the inspectors observed the licensee evaluators to verify that they also noted the issues and discussed them in the critique at the end of the session.

b. Findings

No findings of significance were identified.

1R12 Maintenance Effectiveness (71111.12)

a. Inspection Scope

The inspectors reviewed systems to verify that the licensee properly implemented the maintenance rule for structures, systems, or components (SSCs) with performance problems. This evaluation included the following aspects:

- whether the SSC was scoped in accordance with 10 CFR 50.65;
- whether the performance problems constituted maintenance rule functional failures;

- the proper safety significance classification;
- the proper 10 CFR 50.65(a)(1) or (a)(2) classification for the SSC; and
- the appropriateness of the performance criteria for SSCs classified as (a)(2) or the appropriateness of goals and corrective actions for SSCs classified as (a)(1).

The above aspects were evaluated by using the maintenance rule scoping and report documents listed at the end of this report. For each SSC reviewed, the inspectors also reviewed significant WOs and condition reports listed at the end of this report to verify that failures were properly identified, classified, and corrected and that unavailable time had been properly calculated. The inspectors reviewed documents to verify that minor discrepancies in the licensee's maintenance rule reports were corrected.

The inspectors reviewed the licensee's implementation of the maintenance rule requirements for the following SSCs:

- Unit 1 and 2 Instrument and Station Air Systems; and
- Cooling Water Pump packing and shaft bearing lubrication.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed the licensee's management of plant risk during emergent maintenance activities and during activities where more than one significant system or train was unavailable. During this review the inspectors compared the licensee's risk management actions to those actions specified in the licensee's procedures for the assessment and management of risk associated with maintenance activities. The activities were chosen based on their potential impact on increasing the probability of an initiating event or impacting the operation of safety significant equipment. The inspectors verified that evaluation, planning, control, and performance of the work were done in a manner to reduce the risk and minimize the duration where practical, and that contingency plans were in place where appropriate. The licensee's daily configuration risk assessment records, observations of shift turnover meetings, observations of daily plant status meetings, observations of shiftly outage meetings, and the documents listed at the end of this report were used by the inspectors to verify that the equipment configurations had been properly listed, that protected equipment had been identified and was being controlled where appropriate, and that significant aspects of plant risk were being communicated to the necessary personnel.

The inspectors reviewed the following planned and emergent maintenance activities:

- planned maintenance on bus ties 1RYBT, 2RYBT, and 4160 volt breakers 14-4, 13-1, 24-9, and 23-9 on April 15, 2003;

- planned maintenance on the 12 diesel-driven cooling water pump, the 11 turbine-driven auxiliary feedwater pump, and the 11 component cooling water pump on April 22, 2003;
- planned maintenance on the D1 EDG and 12 diesel-driven cooling water pump on April 23, 2003;
- emergent failure of the 21 cooling water pump out of service due to excessive heating of the outboard packing gland on May 6, 2003;
- planned maintenance on the 22 safety injection pump, 22 residual heat removal pump, and the unavailability of the residual heat removal pump discharge to safety injection pump suction motor-operated valve MV-32209 on May 28, 2003;
- planned maintenance on the 122 instrument air dryer and the 22 turbine-driven auxiliary feedwater pump on May 30, 2003;
- planned maintenance on the 12 safety injection pump, 12 residual heat removal pump, 122 instrument air compressor, and the unavailability of the residual heat removal pump discharge to safety injection pump suction motor-operated valve MV-32207 on June 5, 2003; and
- emergent failure of the 21 residual heat removal pump due to degraded auxiliary contacts on June 10, 2003.

b. Findings

No findings of significance were identified.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors reviewed six operability determinations the licensee generated that warranted selection on the basis of risk. The inspectors reviewed the following operability determinations:

- prompt operability determination for AR CAP 028899, “Inadequate Thread/Bolt Engagement on 12 Safety Injection Pump Seal Water Supply/Return Flanges,” March 12, 2003;
- prompt operability determination for AR CAP 029638, “Degraded Screen Condition Noted On Safeguards Traveling Screens,” April 10, 2003;
- prompt operability determination for AR CAP 029823, “Significant Perturbation in 21 RCP [Reactor Coolant Pump] Seal Leakoff,” April 19, 2003;
- Operability Recommendation (OPR) 000408, “Existence of Three Unsealed Holes in Flood Door 73,” May 9, 2003;
- prompt operability determination for AR CAP 030359, “14 Containment Fan Cooling Unit Has High Vibrations in the Danger Range,” May 17, 2003; and
- OPR 000415, “Breaker 26-10 (22 Safety Injection Pump) Found Puddle of Oil on Cubical Floor Under Charging Motor,” May 28, 2003.

The inspectors assessed the accuracy of the evaluations, the use and control of compensatory measures as needed, and compliance with the TSs. The inspectors’ review included a verification that the operability determinations were made as specified by 5AWI 3.15.5, “Operability Determinations.” The technical adequacy of the

determinations was reviewed and compared to the TSs, Technical Requirements Manual, USAR, and associated design basis documents. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (OWAs) (71111.16)

.1 Review of Selected Workarounds

a. Inspection Scope

On May 7, 2003, inspectors conducted an in-office review of an OWA associated with Unit 2, 21 RCP seal leak-off. The RCP seal leak-off started to decrease in January and February 2003, indicating probable seal degradation, which increases the potential for seal failure; an unisolable loss of coolant event. The reduced seal leak-off requires operators to take precautions to prevent further seal degradation. Precautions include smaller and more frequent dilutions, and close monitoring of seal conditions and cooling water temperatures.

The inspectors reviewed the Operating Information for monitoring 21 RCP seal conditions and instructions for responding to normal and transient conditions to determine whether instructions and contingency actions were adequately communicated to and reviewed by on-shift licensed operators. The inspectors reviewed the root cause investigation report and proposed corrective actions to correct and prevent recurrence of the condition. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

.2 Cumulative Effects of OWAs

a. Inspection Scope

On May 8 - 9, 2003 the inspectors reviewed the cumulative effect of all identified OWAs to determine if there was a significant impact on plant risk or on the operators' ability to respond to a transient or an accident. The inspectors reviewed operator logs, AR CAPs, and Operating Information documents to determine if there were OWAs that had not been evaluated. The inspectors used the documents listed at the end of this report to evaluate the list of OWAs.

b. Findings

No findings of significance were identified.

1R17 Permanent Plant Modifications (71111.17)

.1 Permanent Plant Modification Installed On-Line

a. Inspection Scope

The inspectors reviewed design change 01RH01 which removed an interlock from the circuit for motor-operated valve MV-32207 on Unit 1. Motor Operated Valve 32207 is used during the recirculation phase of a small break loss of coolant accident to provide residual heat removal pump discharge to safety injection pump suction. The interlock prevents opening MV-32207 above 210 pounds per square inch gauge to protect from over-pressurization of the safety injection pump suction piping. However, the pressure instrument loops are quality level QIII, while the remainder of the valve circuits are QI. Administrative and procedural controls were implemented to provide protection against inadvertent over-pressurization of safety injection piping. The inspectors also observed the installation of the modification and the post-modification testing. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors conducted in-plant observation and in-office review of post-maintenance testing activities associated with maintenance on important mitigating, barrier integrity, and support systems to ensure that the testing was performed adequately, demonstrated that the maintenance was successful, and that operability was restored. The inspectors reviewed the appropriate sections of the TSs, USAR, and maintenance documents to determine the systems' safety functions and the scope of the maintenance. In addition, the inspectors reviewed ARs to verify that minor deficiencies identified during these inspections were entered into the licensee's corrective action system in accordance with station corrective action procedures. A detailed list of the documents reviewed during this inspection is included at the end of this report.

The inspectors observed and evaluated the post-maintenance activities for the following maintenance activities:

- 21 cooling water strainer following annual inspection on April 1, 2003;
- 22 diesel-driven cooling water (DDCL) pump following relay replacement on April 9, 2003;
- D1 EDG 18-month preventive maintenance inspection on April 24, 2003;
- 12 DDCL pump following relay replacement on April 25, 2003;
- 22 containment spray pump following repair of test line drain valve 2CS-25-2 on May 2, 2003;

- 21 pressurizer heaters electrolytic capacitors replacement on May 13, 2003; and
- 11 steam generator power-operated relief valve following replacement of a cable splice on May 15, 2003.

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope

On April 15, 2003, Unit 1 reactor power was reduced to one percent (Mode 2) and the turbine/generator was removed from service because of an unisolable oil leak on main power transformer 1GT. Inspectors observed the unit shutdown and activities related to outage planning, control of risk during plant configuration changes and planned maintenance activities, and return to power operation.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors conducted in-plant observation and/or in-office review of selected surveillance tests and test data to verify that the equipment performance met SP acceptance criteria. The inspectors verified that the tested equipment was capable of performing its intended safety functions as described in TSs and the USAR. The inspectors verified that the testing met the required TS frequency; that the tests were conducted in accordance with the applicable procedures; that operators met prerequisites and established the proper plant conditions; and that the results of the tests were properly recorded and reviewed . A detailed list of the documents reviewed during this inspection is included at the end of this report. The following tests were observed or reviewed and evaluated:

- SP 2102, “22 Turbine-Driven AFW Pump Monthly Test” on April 4, 2003;
- SP 2093, “D5 Diesel Generator Monthly Slow Start” on April 14, 2003;
- SP 1198, “NIS [Nuclear Instrumentation System] Power Range Startup Test” on April 15, 2003;
- SP 1295, “D1 Diesel Generator 6 Month Fast Start Test” on April 24, 2003; and
- SP 1032A, “Safeguards Logic Test at Power - Train A, and SP 1035A, Reactor Protection Logic Test at Power - Train A” on June 12, 2003.

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors conducted an in-office review of associated documentation and in-plant walkdowns of the following temporary modifications:

- configuration changes to the 23 charging pump speed control feedback loop; and
- addition of door alarms to the hot chemistry lab doors.

The inspectors reviewed the system design basis requirements in applicable sections of the USAR comparing the as-found configuration to that documented in the USAR. The inspectors reviewed the applicable procedure requirements for control of plant configuration and 50.59 screenings comparing the actions taken by the licensee to the requirements contained in the applicable procedural guidance. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings

No findings of significance were identified.

Cornerstone: Emergency Preparedness

1EP2 Alert and Notification System (ANS) Testing (71114.02)

a. Inspection Scope

The inspectors discussed with Emergency Preparedness (EP) staff the design, equipment, and periodic testing of the public ANS for the Prairie Island Nuclear Generating Plant (PINGP) reactor facility emergency planning zone to verify that the system was properly tested and maintained. The inspectors also reviewed procedures and records for an 18-month period ending March 2003 related to ANS testing, annual preventive maintenance, and non-scheduled maintenance. The inspectors reviewed the licensee's documentation for determining whether each model of siren installed in the emergency planning zone would perform as expected if fully activated. Records used to document and trend component failures for each model of installed siren were also reviewed to ensure that corrective actions were taken for test failures or system anomalies.

b. Findings

No findings of significance were identified.

1EP3 Emergency Response Organization (ERO) Augmentation Testing (71114.03)

a. Inspection Scope

The inspectors reviewed the licensees ERO augmentation testing to verify that the licensee maintained and tested its ability to staff the ERO during an emergency in a timely manner. Specifically, the inspectors reviewed quarterly, off-hours staff augmentation test procedures, related November 6, 2001; January 22, 2002; May 2, 2002; September 18, 2002; November 11, 2002; and February 10, 2003 drill records, primary and backup provisions for off-hours notification of the Prairie Island reactor facility emergency responders, and the current ERO rosters for Prairie Island. The inspectors reviewed and discussed the facility EP staff's provisions for maintaining ERO call out lists.

b. Findings

No findings of significance were identified.

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

a. Inspection Scope

The inspectors reviewed Revisions 25, 26, and 27 of the Prairie Island Nuclear Generating Plant Emergency Plan to determine whether changes identified reduced the effectiveness of the licensee's emergency planning, pending onsite inspection of the implementation of these changes.

b. Findings

No findings of significance were identified.

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies (71114.05)

a. Inspection Scope

The inspectors reviewed the Nuclear Oversight staff's 2002 and 2003 audits to ensure that these audits complied with the requirements of 10 CFR 50.54(t) and that the licensee adequately identified and corrected deficiencies. The inspectors also reviewed the EP staff's 2002 and 2003 self assessments, and critiques to evaluate the EP staff's efforts to identify and correct weaknesses and deficiencies. Additionally, the inspectors reviewed a sample of EP items, condition reports, and action requests related to the facility's EP program to determine whether corrective actions were acceptably completed.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

2OS1 Access Control to Radiologically Significant Areas (71121.01)

.1 Plant Walkdowns and Radiological Boundary Verification

a. Inspection Scope

The inspectors conducted walkdowns of selected radiologically controlled areas within the plant to verify the adequacy of radiological boundaries and postings. Specifically, the inspectors walked down areas that were controlled for a resin sluicing to High Integrity Container (HIC) operation. The inspectors observed personnel performing confirmatory radiation measurements to verify that these areas and selected radiation areas were properly posted and controlled in accordance with 10 CFR Part 20, licensee procedures, and the Technical Specifications.

b. Findings

No findings of significance were identified.

.2 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed licensee AR CAPs written since the last inspection (February 2003) to the date of the current inspection, which focused on access control to radiologically significant areas (i.e., problems concerning activities in High Radiation Areas, radiation protection technicians performance, and radiation worker practices). The inspectors reviewed these documents to assess the licensee's ability to identify repetitive problems, contributing causes, and the extent of conditions; and then implement corrective actions in order to achieve lasting results.

2OS3 Radiation Monitoring Instrumentation and Protective Equipment (71121.03)

.1 Walkdowns of Radiation Monitoring Instrumentation

a. Inspection Scope

The inspectors reviewed the USAR and performed walkdowns of selected area radiation monitors, small article monitors, and continuous air monitors, in the auxiliary and radwaste buildings. Additionally, the inspectors examined a representative number of portable radiation survey instruments staged throughout the licensee's facility to verify that those instruments had current calibrations, were operable, and in good physical condition. The inspectors also reviewed the status of repair or troubleshooting activities associated with selected radiation monitoring instruments to verify that instrumentation problems were being addressed in an appropriate and timely manner. The inspectors performed these walkdowns to verify the instrumentation was: (1) optimally positioned (i.e., relative to the potential source(s) of radiation they were intended to monitor), (2) in a good material condition, and (3) properly indicating area radiation levels.

b. Findings

No findings of significance were identified.

.2 Calibration, Operability, and Alarm Set Points of Radiation Monitoring Instrumentation

a Inspection Scope

The inspectors examined calibration and surveillance records for radiological instrumentation associated with monitoring transient high and/or very high radiation areas and instruments used for remote emergency assessment to verify that the calibrations were conducted consistent with industry standards and in accordance with station procedures.

- Unit 1 High Range RCS [Reactor Coolant System] Hot Leg Radiation Monitor Train A (1R-49)
- Unit 1 High Range RCS Hot Leg Radiation Monitor Train B (1R-48)
- Spent Fuel Pool Air Radiation Monitor B (R-31)
- Control Room Air Supply Radiation Monitor A and B (R23 and R24)
- New Fuel Pit Criticality Area Radiation Monitor (R-28)

Additionally, the inspectors observed gas calibration and reviewed the licensee's alarm set points for the 2R37 Auxiliary Building ventilation monitor to verify that the set points were established consistent with the Technical Specifications. The inspectors also observed calibration of handheld radiation monitors to assure proper calibration using station procedure

The inspectors discussed surveillance practices with licensee personnel and reviewed calender year (CY) 2002 calibration records and procedures for the Canberra Fastscan Whole Body Counter used for assessment of internal exposure. The inspectors also reviewed calibration records and procedures associated with the electronic dosimeters utilized for real-time dose tracking of personnel during work in the radiologically controlled area.

The inspectors evaluated the calibration procedures and CY 2001 - 2003 calibration records for selected installed radiation monitoring and portable radiation survey instruments to verify that they had been properly calibrated consistent with the licensee's procedures. Specifically, the inspectors observed the calibrations of the MiniRad Monitor Model 3500 and Rados Electronic Dosimeter.

The inspectors also observed Radiation Protection Technicians performing daily functional checks of selected radiation detection instruments to verify that they had been tested consistent with the licensee's procedures. Specifically, the inspectors observed the functional testing of the MiniRad Monitor Model 3500.

b. Findings

No findings of significance were identified.

.3 Problem Identification and Resolution

a. Inspection Scope

The inspectors reviewed CY 2002-2003 AR CAPs that addressed radiation monitoring instrument deficiencies to determine if any significant radiological incidents involving instrument deficiencies had occurred. The inspectors examined the results of a self-assessment that focused on the licensee's radiation protection instrumentation controls. Additionally, the inspectors reviewed a Nuclear Oversight Observation Report related to radiation monitoring instrumentation accuracy and operability generated during the current assessment period. The inspectors also interviewed plant staff and examined closed AR CAPs to verify that radiological instrumentation and protective equipment related issues were adequately addressed by the licensee. The inspectors evaluated these documents to verify the licensee's ability to identify repetitive problems, contributing causes, extent of conditions, and the implementation of corrective actions to achieve lasting results.

b. Findings

No findings of significance were identified.

.4 Self-Contained Breathing Apparatus (SCBA) Program

a. Inspection Scope

The inspectors reviewed the licensee's respiratory protection program for compliance with the requirements of Subpart H of 10 CFR Part 20. The inspectors performed walkdowns of the SCBA storage locations and inspected a sampling of the units to verify the material condition of the protective equipment, to ensure that they were properly maintained and stored, and to ensure that SCBAs were properly staged and ready for use. The inspectors evaluated the licensee's capability to refill and transport SCBA air bottles throughout the plant in the event of an emergency response. The inspectors examined the licensee's shiftly crew staffing (i.e., control room as well as other key emergency response personnel) of SCBA qualified personnel to verify an adequate number of plant personnel could respond in the event of an emergency. The inspectors reviewed the manufacturer-certified training/qualification of personnel allowed to perform maintenance and repairs on SCBA components vital to the unit's function. The inspectors assessed maintenance procedures governing vital component work and periodic air cylinder hydrostatic testing documentation to verify consistency between licensee procedures and SCBA manufacturer's recommended practices. The inspectors reviewed a selection of the CY 2002-2003 monthly testing records for SCBAs located in various areas within the site. Specifically, the inspectors reviewed the licensee's current SCBA training and qualification records to verify that control room personnel, fire brigade staff, and other key emergency response organization personnel were properly equipped with necessary protective equipment, currently trained, and qualified for SCBA use (including personal bottle change-out), as required by the Code of Federal Regulations, the licensee's Emergency Plan, USAR, and plant procedures.

b. Findings

No findings of significance were identified.

Cornerstone: Public Radiation Safety

2PS3 Radiological Environmental Monitoring and Radioactive Material Control Programs (71122.03)

.1 Review of Environmental Monitoring Reports and Data

a. Inspection Scope

The inspectors reviewed the 2001 Annual Environmental Monitoring Report. Sampling location commitments, monitoring and measurement frequencies, land use census, the vendor laboratory's Interlaboratory Comparison Program, and data analysis were assessed. Anomalous results including data, missed samples, and inoperable or lost equipment were evaluated. The review of the Radiological Environmental Monitoring Program (REMP) was conducted to verify that the REMP was implemented as required by the Radiological Environmental Technical Specifications/Offsite Dose Calculation Manual (RETS/ODCM), and associated Technical Specifications, and that changes, if any, did not affect the licensee's ability to monitor the impacts of radioactive effluent releases on the environment. The most recent quality assessment of the licensee's REMP vendor was reviewed to verify that the vendor laboratory performance was consistent with licensee and NRC requirements.

b. Findings

No findings of significance were identified.

.2 Walkdowns of Radiological Environmental Monitoring Stations and Meteorological Tower

a. Inspection Scope

The inspectors conducted a walkdown of selected environmental air, water, and milk sampling stations, and thermoluminescent dosimeters locations to verify that the locations were consistent with their descriptions in the RETS/ODCM and to evaluate the equipment material condition and operability. The inspectors also conducted a walkdown of the primary meteorological monitoring site to validate that sensors were adequately positioned and operable. The inspectors reviewed the 2001 Annual Environmental Monitoring Report to evaluate the onsite meteorological monitoring program's data recovery rates, routine calibration and maintenance activities, and non-scheduled maintenance activities. The review was conducted to verify that the meteorological instrumentation was operable and was calibrated and maintained in accordance with licensee procedures. The inspectors also reviewed indications of wind speed, wind direction, and atmospheric stability measurements to verify that the indications were available in the Control Room and that the instrument indications were operable.

b. Findings

No findings of significance were identified.

.3 Review of REMP Sample Collection and Analysis

a. Inspection Scope

The inspectors accompanied the licensee REMP technician to observe the collection and preparation of air filters, surface and drinking water samples, and milk samples to verify that representative samples were being collected in accordance with procedures and the RETS/ODCM. The inspectors observed the technician perform air sampler field check maintenance to verify that the air samplers were functioning in accordance with procedures. Selected air sampler calibration and maintenance records for 2001 and 2002 were reviewed to verify that the equipment was being maintained as required. The environmental sample collection program was compared with the RETS/ODCM to verify that samples were representative of the licensee's release pathways. Additionally, the inspectors reviewed results of the vendor laboratory's Interlaboratory Comparison Program to verify that the vendor was capable of making adequate radio-chemical measurements.

b. Findings

No findings of significance were identified.

.4 Unrestricted Release of Material from the Radiologically Controlled Area

a. Inspection Scope

The inspectors evaluated the licensee's controls, procedures, and practices for the unrestricted release of material from radiologically controlled areas and conducted reviews to verify that: (1) radiation monitoring instrumentation used to perform surveys for unrestricted release of materials was appropriate; (2) instrument sensitivities were consistent with NRC guidance contained in Inspection and Enforcement Circular 81-07 and Health Physics Positions in NUREG/CR-5569 for both surface contaminated and volumetrically contaminated materials; (3) criteria for survey and release conformed to NRC requirements; (4) licensee procedures were technically sound and provided clear guidance for survey methodologies; and (5) radiation protection staff adequately implemented station procedures.

b. Findings

No findings of significance were identified.

.5 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed corrective action process documents addressing issues involving the REMP as well as a Generation Quality Services (GQS) audit of the environmental monitoring program and observation reports addressing the REMP to determine if problems were being identified and entered into the corrective action program for timely resolution.

b. Findings

No findings of significance were identified.

3. SAFEGUARDS

Cornerstone: Physical Protection

3PP2 Access Control (Identification, Authorization and Search of Personnel and Packages (IP 71130.02)

a. Inspection Scope

The inspectors reviewed the licensee's protected area access control equipment testing and maintenance procedures to determine if testing was performance-based, challenged the detection capabilities of the equipment, and was in accordance with security plan requirements. The inspector observed licensee testing of access control equipment to determine if testing and maintenance practices were performance based. On two occasions, during peak ingress periods, the inspector observed in-processing search of personnel and packages to determine if search practices were conducted in accordance with regulatory requirements, and that sufficient security force staffing was available for the search functions.

The inspectors reviewed a sample of licensee security logged events and other security documents for identification and resolution of problems. In addition, the inspector interviewed security managers to evaluate their knowledge and use of the licensee's corrective action system.

b. Findings

No findings of significance were identified.

3PP3 Response to Contingency Events (71130.03)

a. Inspection Scope

The inspectors reviewed the current Plant Protective Strategy. The inspector also conducted a walk down of the protected area boundary and alarm system and observed testing of selected protected area alarm zones. The closed circuit television day light assessment capability was also evaluated. The inspector reviewed licensee drill and exercise critiques pertaining to response to security contingency events.

The inspectors reviewed a sample of licensee security logged events for identification and resolution of problems. In addition, the inspector interviewed security managers to evaluate their knowledge and use of the licensee's corrective action system.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification (71151)

Cornerstones: Initiating Events, Mitigating Systems, Emergency Preparedness, and Occupational Radiation Safety

.1 Safety System Unavailability-Residual Heat Removal System Units 1 and 2

a. Inspection Scope

The inspectors conducted an in-office review of the performance indicator data submitted by the licensee for completeness and accuracy, and to verify that the licensee had reported data in accordance with the guidance provided by the Nuclear Energy Institute. The inspectors reviewed documents listed at the end of this report for performance indicator data for the mitigating systems cornerstone. The inspectors reviewed safety system unavailability performance indicator for the residual heat removal system for both Unit 1 and Unit 2 from the 2nd quarter 2002 through the 1st quarter 2003.

b. Findings

No findings of significance were identified.

.2 Reactor Scrams and Reactor Scrams with Loss of Normal Heat Removal

a. Inspection Scope

The inspectors conducted an in-office review of the performance indicator data submitted by the licensee for completeness and accuracy, and to verify that the licensee had reported data in accordance with the guidance provided by the Nuclear Energy Institute. The inspectors reviewed documents listed at the end of this report for performance indicator data for the initiating events cornerstone. The inspectors

reviewed the following performance indicators from the 2nd quarter 2002 through the 1st quarter 2003:

- Reactor Scrams; and
- Reactor Scrams with Loss of Normal Heat Removal.

b. Findings

No findings of significance were identified.

.3 ANS, ERO Drill Participation, and Drill and Exercise Performance

a. Inspection Scope

The inspectors verified that the licensee had accurately reported these indicators: ANS, ERO Drill Participation, and Drill and Exercise Performance, for the EP cornerstone. Specifically, the inspectors reviewed the licensee's performance indicator records, data reported to the NRC, and condition reports for the period April 2002 through December 2002 to identify any occurrences that were not identified by the licensee. Records of relevant Control Room Simulator training sessions, periodic ANS tests, and excerpts of drill and exercise scenario and evaluations were also reviewed.

b. Findings

No findings of significance were identified.

.4 Occupational Exposure Control Effectiveness

a. Inspection Scope

The inspectors reviewed the licensee's determination of performance indicator (PI) for the occupational radiation safety cornerstone (Occupational Exposure Control Effectiveness) to verify that the licensee accurately determined these performance indicators and had identified all occurrences required by these indicators. Specifically, the inspectors reviewed the licensee's AR CAPs for CY 2002-2003 Occupational Exposure performance indicator data to ensure that there were no PI occurrences that were not identified by the licensee. Additionally, as part of plant walkdowns (Section 2OS1.1), the inspectors selectively examined the adequacy of posting and controls for locked High Radiation Areas, to verify the current Occupational Exposure Control Effectiveness performance indicator. The inspectors interviewed members of the licensee's staff who were responsible for performance indicator data acquisition, verification and reporting, to verify that their review and assessment of the data was adequate.

b. Findings

No findings of significance were identified.

.5 Protected Area Equipment, Personnel Screening Program, FFD/Personnel Reliability Program

a. Inspection Scope

The inspectors verified that the licensee had accurately reported these indicators: Protected Area Equipment, Personnel Screening Program, FFD/Personnel Reliability Program, for the Physical Protection cornerstone. Specifically, a sample of plant reports related to security events and other applicable security records were reviewed for the 4th Quarter 2002 and 1st Quarter of 2003.

c. Findings

No findings of significance were identified.

4OA2 Identification and Resolution of Problems (71152)

.1 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

Inspectors conducted an in-office review and in-plant walkdown of the corrective actions for previously identified deficiencies in external flood protection barriers and procedures to verify implementation. A detailed list of the documents reviewed during this inspection is included at the end of this report.

b. Findings and Observations

There were no findings identified associated with the sample reviewed. However, the inspectors identified that the implementation of some corrective actions was either incomplete or not thorough. Licensee Event Report (LER) 50-282, 306/01-003-00, "Plant in Unanalyzed Condition Due to Flood Panel Deficiencies," was submitted in 2001 as a result of deficiencies in external flood barriers. The LER stated that flood panel inspection/installation procedures would be improved. However the following deficiencies were noted during this inspection period:

- Inspectors identified that Procedure AB-4, "Flood," does not include guidance for removing tack welds to open a trap door for egress following installation of a flood seal on door 164 to the Waste Compactor Room;
- An AR CAP documents that flood barrier sealant had exceeded its shelf life; and
- An AR CAP documents that Procedure AB-4 instructions regarding use of primer and removal of paint are different than manufacturer's instructions.

.2 Routine Review of Identification and Resolution of Problems

a. Inspection Scope

The inspectors selected AR Other (OTH) 023756 for review during the Emergency Preparedness program inspection. The OTH was initiated to evaluate the November 3, 2002, seismic event. The AR OTH was reviewed to ensure the full extent of the issue was identified, appropriate evaluations were performed, and appropriate corrective actions were specified and prioritized. The inspectors evaluated the AR OTH against the requirements of the licensee's corrective action program as delineated in 5AWI 16.0.0, "Action Request Process."

b. Findings and Observations

There were no findings identified associated with the samples reviewed. However, the inspectors identified one corrective action to revise the emergency plan implementing procedure (EPIP) F3-2, "Classification of Emergencies," which could result in a decrease in effectiveness. Revision 32 to EPIP F3-2 was intended to provide operators with better guidance for determining when a seismic event met the emergency classification criteria. The change added a requirement for "shift supervisor (SS) or shift manager (SM) or emergency director (ED) opinion," to the Unusual Event classification for the "Natural Events" condition under the "Any Confirmed Earthquake" initiating condition. Adding the subjective requirement for the SM to make a judgement call conflicts with Appendix E. IV. B, which states that emergency action levels shall be based on in-plant conditions and instrumentation in addition to onsite and offsite monitoring.

Additionally, guidance in NUREG 0654, Appendix 1-3 states, in part, the rationale for the unusual event and alert classes is to provide early and prompt notification of minor events which could lead to more serious consequences given operator error or equipment failure. The conflicting condition created in this initiating condition could challenge operator consistency in determining emergency classifications as well as providing early and prompt notifications of minor events. The NRC expects the SM or ED to use judgement on all emergency classifications. However, in changing this emergency action level, if the SS or SM or ED declared an emergency using opinion incorrectly, then the change would be a decrease in effectiveness and the licensee's PINGP 1239, "Emergency Plan 50.54(q) Review Screening," process would be incorrect.

4OA3 Event Followup (71153)

.1 Closure of Unresolved Item (URI) 50-306/01-13-02: Potential Failure to Provide Complete and Accurate Information.

a. Inspection Scope

The inspectors reviewed the circumstances associated with URI 50-306/01-13-02. The inspectors also reviewed Enforcement Action (EA)-01-248 dated December 11, 2001 and EA-02-068 dated December 13, 2002.

b. Findings

URI 50-306/01-13-02 documented an apparent failure of the licensee to provide complete and accurate information to the NRC. After further review, the NRC

determined that a violation of NRC requirements occurred. The resolution of this issue is documented in EA-02-068 dated December 13, 2002. URI 50-306/01-13-02 is closed.

.2 (Closed) LER 50-282/03-001-00: Residual Heat Removal Valve CV-31236 Positioner Linkage Found Broken.

On or about December 4, 2002, a wrench was inappropriately left resting on the positioner for the Unit 1, B train residual heat removal heat exchanger outlet valve CV-31236 by licensee personnel. Subsequently, the wrench fell off the positioner becoming entangled with the positioner feedback linkage causing the linkage to bind and fail. The licensee identified this condition on March 3, 2003, and entered the condition into their corrective action program with AR CAP 028703. The valve was found in its safeguards position and could be opened and closed from the control room allowing the system to perform its safety functions. Upon discovery, the licensee declared the B train of the residual heat removal system inoperable, repaired the valve positioner linkage, and successfully tested the valve.

The inspectors reviewed the licensee's root cause investigation, immediate corrective actions, and corrective actions to prevent recurrence to verify that the proposed corrective actions addressed the causes of the event and fully restored the function of CV-31236. The inspectors also assessed the significance of the finding using significance determination process. Because the resulting linkage failure did not cause a loss of safety function of the affected train and the redundant train remained operable, the finding screened out of the phase one worksheets was not more than of very low safety significance (Green). The licensee's inappropriate control of tools is being treated as a Non-Cited Violation (see report section 4OA7).

.3 (Closed) LER 50-282, 306/03-002-00: Appendix R Safe Shutdown Analysis Issues.

On March 26, 2003, an evaluation of potential flow diversions was in progress resulting from LER 50-282, 306/98-015-00, "Containment to RHR [Residual Heat Removal] MOVs [Motor-Operated Valve] Appendix R Safe Shutdown Analysis Issues." The evaluation determined that, absent compensatory measures, the ability to safely shut down could have been adversely affected in two cases. In the first case, a postulated fire in certain areas could result in a spurious start of a containment spray pump and spurious opening of its associated discharge motor-operated valve, which would divert the sole credited source of reactor coolant system makeup, the refueling water storage tank, into containment. In the second case, the scavenging and combustion air dampers for the diesel-driven emergency cooling water pumps were found to be vulnerable to postulated fires in certain areas. The licensee entered the condition into their corrective action program with AR CAPs 024537 and 028574. Compensatory measures were added to the plant procedures for control room evacuation fire and fire outside the control room.

The inspectors reviewed the licensee's immediate corrective actions, and planned corrective actions to verify implementation. The LER was reviewed by the inspectors and no findings of significance were identified. This LER is closed.

4OA5 Other Activities

.1 (Closed) URI 50-282, 306/00-10-02: Calculation Method of IDS Unavailability Index.

The unresolved item pertains to the Security Equipment performance indicator (PI). The Security Equipment PI consists of counting compensatory hours for the perimeter intrusion detection system (IDS) and the closed circuit television (CCTV) system. The PI value is determined by adding the IDS Unavailability Index plus the CCTV Unavailability Index and dividing by 2. At Prairie Island, compensatory measures for the CCTV system are not required except for catastrophic equipment failures that exceed the ability of the on-duty security force to compensate for. Therefore, the current PI value for the Protected Area Security Equipment shows only half the out-of-service time requiring compensatory man-hours for the perimeter detection system. The URI is if Prairie Island should use the part of the PI formula pertaining to CCTV compensatory hours since the security force is not required to routinely compensate for CCTV degradations. This issue is being evaluated by NRC Headquarters and resolution of the issue will be addressed by separate correspondence.

4OA6 Meeting(s)

.1 Interim Exit Meetings

- Emergency Preparedness inspection with Mr. R. Lingle on April 4, 2003;
- Radiation Protection inspection with Mr. Joe Solymossy, Site Vice President on April 11, 2003;
- Access Control to Radiologically Significant Areas, Radiation Monitoring Instrumentation and Protective Equipment, and Performance Indicator Verification for Occupational Exposure Control Effectiveness with Mr. J. Solymossy on June 6, 2003; and
- Temporary Instruction 2515/148, Inspection of Nuclear Reactor Safeguards Interim Compensatory Measures with Mr. J. Solymossy on June 27, 2003.
- Safeguards inspection with Mr. J. Solymossy on June 27, 2003.

.2 Exit Meeting

The resident inspectors presented the inspection results to Mr. M. Werner and other members of licensee management on June 30, 2003. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

4OA7 Licensee-Identified Violations

The following violations of very low significance were identified by the licensee and are violations of NRC requirements which meets the criteria of Section VI of the NRC Enforcement Manual, NUREG-1600, for being dispositioned as Non-Cited Violations.

Cornerstone: Mitigating Systems

Failure of the 12 Residual Heat Removal Heat Exchange Outlet Flow Control Valve

Prairie Island Technical Specifications, Section 5.4 requires that written procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A shall be established, implemented and maintained. Administrative Work Instruction 5AWI 8.5.0, "Housekeeping and Material Control," Revision 4 establishes requirements for the control of work activities, conditions, and environment that could affect quality. Section 6.5 requires the control of tools used during maintenance activities be removed upon completion of the work. On or about December 4, 2002, an adjustable wrench was inappropriately left behind at the work site. The wrench was apparently left resting on the positioner for the Unit 1, B train residual heat removal heat exchanger outlet valve CV-31236. The wrench fell off the positioner becoming entangled with the positioner feedback linkage causing the linkage to bind and fail. The licensee entered this condition into their corrective action program with AR CAP 028703. Because the resulting linkage failure did not cause a loss of safety function of the affected train and the redundant train remained operable this violation is not more than of very low safety significance, and is being treated as a Non-Cited Violation.

KEY POINTS OF CONTACT

Licensee

M. Agen, Emergency Planning Manager
T. Allen, Production Planning Manager
T. Amundson, Manager Business Support
R. Best, Maintenance Rule Coordinator
L. Finholm, Emergency Planning Coordinator
P. Huffman, Manager of System Engineering
A. Johnson, Radiation Protection Manager
J. Kivi, Licensing Engineer
M. Ladd, General Superintendent Plant Maintenance
D. Larimer, Radiochemistry Supervisor
R. Lingle, Operations Manager
M. McKeown, Manager of Design Engineering
M. Nazar, Senior Vice-President
S. Northard, Director of Engineering
J. Payton, Emergency Planning Coordinator
M. Pfeffer, Emergency Planning Trainer
J. Solymossy, Site Vice-President
A. Qualantone, Superintendent Security
M. Werner, Plant Manager
P. Wildenborg, Lead Technical Health Physicist
R. Womack, Manager of Engineering Programs
D. Blaskley, Senior Nuclear Security Consultant
J. Corwin, Nuclear Security Consultant
C. Glover, Training Coordinator (The Wackenhut Corporation)
T. Qualentone, Security Manager

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None.

Closed

50-282, 306/00-10-02	URI	Calculation Method of IDS Unavailability Index
50-306/01-13-02	URI	Potential Failure to Provide Complete and Accurate Information
50-282/03-001-00	LER	Residual Heat Removal Valve CV-31236 Positioner Linkage Found Broken
50-282, 306/03-002-00	LER	Appendix R Safe Shutdown Analysis Issues

Discussed

None.

LIST OF DOCUMENTS REVIEWED

1R01 Adverse Weather

SP 1039; Tornado Hazard Monthly Site Inspection; Revision 7

Test Procedure 1636; Summer Plant Operation; Revision 14

Abnormal Procedure AB-2; Tornado/Severe Thunderstorm; Revision 20

Operating Procedure C18.1; Engineered Safeguards Equipment Support Systems; Revision 12

Design Basis Document TOP-05; Hazards; Revision 2W

AR CAP 029758; Screenhouse Doghouse Wall Louver Screens Significantly Obstructed; April 16, 2003

AR CAP 029893; Number of Test Procedure 1636 Fans in the Plant Exceeds 50.59 Screening # 1476 Total; April 23, 2003

AR CAP 030029; Residual Heat Removal Unit Cooler Safety Evaluation Out of Date; April 30, 2003

1R04 Equipment Alignment

D2 Emergency Diesel Generator

Integrated Checklist C1.1.20.7-5; D2 Diesel Generator Valve Status; Revision 17

Integrated Checklist C1.1.20.7-6; D2 Diesel Generator Auxiliaries and Room Cooling Local Panels; Revision 8

Integrated Checklist C1.1.20.7-7; D2 Diesel Generator Main Control Room Switch and Indicating Light Status; Revision 12

Integrated Checklist C1.1.20.7-8; D2 Diesel Generator Circuit Breakers and Panel Switches; Revision 16

12 Motor-Driven AFW Pump

System Prestart Checklist C28-15; 12 Motor-Driven Auxiliary Feedwater Pump; Revision 2

D5 Emergency Diesel Generator

Integrated Checklist C1.1.20.7-9; D5 Diesel Generator Valve Status; Revision 10

Integrated Checklist C1.1.20.7-10; D5 Diesel Generator Auxiliaries and Room Cooling Local Panels; Revision 6

Integrated Checklist C1.1.20.7-11; D5 Diesel Generator Main Control Room Switch and Indicating Light Status; Revision 4

Integrated Checklist C1.1.20.7-12; D5 Diesel Generator Circuit Breakers and Panel Switches; Revision 8W

21 Safety Injection Pump

Integrated Checklist C1.1.18-2; Safety Injection, Containment Spray, Caustic Addition, and Hydrogen Control System Checklist, Unit 2; Revision 35

Design Basis Document 18A; Design Basis Document for the Safety Injection System; Revision 4

System Alignment Problem Identification and Resolution Reviews

AR CAP 030515; Switch Positions Different Between Logic Diagram and Label Plate; May 28, 2003

AR CAP 030521; Unlabeled Drain Valve in Fire Protection Line; May 28, 2003

AR CAP 030524; Safety Injection Recirculation Pump-Isolation Valve Discrepancy; May 28, 2003

1R05 Fire Protection

Fire Zone Walkdowns

Plant Safety Procedure F5, Appendix A; Fire Strategies for Fire Areas 20, 41A, 58, 59, 73, 74, 114, and 116; Revision 13

Plant Safety Procedure F5, Appendix F; Fire Hazard Analysis for Fire Areas 20, 41A, 58, 59, 73, 74, 114, and 116; Revision 17

IPEEE NSPLMI-96001, Appendix B; Internal Fires Analysis; Revision 2

Annual Fire Drill

Plant Safety Procedure F5; Fire Fighting; Revision 27

Plant Safety Procedure F5, Appendix A; Fire Strategies for Fire Area 62; Revision 11

Plant Safety Procedure F5, Appendix F; Fire Hazard Analysis for Fire Area 62; Revision 17

Plant Safety Procedure F5, Appendix J; Fire Drills; Revision 9

Fire Protection Problem Identification and Resolution Reviews

AR CAP 026351; Structural Columns Sprayed with Fireproofing Need Periodic Inspection; November 16, 2002

AR CA 003024; Structural Columns Sprayed with Fireproofing Need Periodic Inspection; November 19, 2002

AR CAP 027629; Fire Detection Zone #4 Was Found in Alarm Without Causing an Annunciator Alarm; January 13, 2003

AR CAP 030250; Welding Carts Not Meeting Minimum Separation Criteria; May 12, 2003

AR CAP 030297; Polyethylene Tanks on 695' Aux Building for ZX [Containment Cooling] Project; May 14, 2003

1R06 Flood Protection Measures (External)

USAR 2.4.3.5; Floods; Revision 24

Calculation ENG-ME-529; Flood Barrier Leakage Criteria; Revision 0

SP 1293; Inspection of Flood Control Measures; Revision 11

AB-4; Flood; Revision 22

AR CAP 029164; All Flood Control Sealant On Site is 22 Months Old; March 21, 2003

AR Condition Evaluation (CE) 002374; Evaluate Why Sealant Is Not Included in Shelf Life Program; March 25, 2003

AR CAP 029197; Bottom Anchor Bolts for Door 257 & 258 Flood Panels Corroded and/or Dirty; March 24, 2003

AR CAP 029207; Contents of Flood Panel Storage Boxes Not Checked During Recent SP 1293; March 24, 2003

AR CAP 029215; AB-4 Flood Sealant Application Process Differs from Manufacturer's Process; March 24, 2003

AR CE 002386; AB-4 Flood Sealant Application Process Differs from Manufacturer's Process; March 27, 2003

AR CAP 029332; Flood Control Gasket Inspection Not Completed Per SP 1293 Expectations; March 28, 2003

AR CA 005152; Inadequate Guidance in AB-4 Regarding Caulking of Flood Door 164; April 15, 2003

AR CAP 029800; Corrective Action (CA 005152) Issued Instead of CAP Resulting in 'Orphan' CA; April 18, 2003

AR CAP 029815; Inadequate Guidance in AB-4 Regarding Caulking of Flood Door 164; April 18, 2003

1R06 Flood Protection Measures (Internal)

NSPLMI-94001; Prairie Island Nuclear Generating Plant Individual Plant Examination; Revision 0

Design Basis Document TOP-05; Design Bases Document for in Hazards; Revision 2

Plant Procedure H36; Plant Flooding; Revision 0

5AWI 8.9.0; Internal Flooding Drainage Control; Revision 1

1R07 Heat Sink Performance

Inspection of D1 EDG Lubricating Oil and Jacket Water Heat Exchangers

Prairie Island Nuclear Generating Plant Form 1066; Cooling Water Heat Exchanger Internal Inspection for the D1 Diesel Generator Jacket Water Heat Exchanger; April 21, 2003

Prairie Island Nuclear Generating Plant Form 1066; Cooling Water Heat Exchanger Internal Inspection for the D1 Diesel Generator Lubricating Oil Heat Exchanger; April 21, 2003

Engineering Analysis ENG-ME-409; Unit 1 Emergency Diesel Generator Heat Exchanger Performance with Reduced Cooling Water Flow; Revision 0

Engineering Analysis ENG-ME-479; Tube Plugging Criteria for Unit 1 Diesel Generator Heat Exchangers; Revision 0

Engineering Analysis ENG-ME-480; Operability Determination for Unit 1 Diesel Generator Heat Exchangers with Tubes Plugged and 85 °F Cooling Water; Revision 0

Heat Sink Problem Identification and Resolution Reviews

AR CAP 025841; 124 Air Compressor Cooling Jacket Full of Mud; October 17, 2002

AR CA 002659; 124 Air Compressor Cooling Jacket Full of Mud; October 22, 2002

AR CAP 030899; Inadequate Formal Guidance to Ensure Flushing of Station Air Compressors; June 17, 2003

1R11 Licensed Operator Requalification Program

5AWI 3.15.0; Plant Operation; Revision 13

1R12 Maintenance Rule Implementation

Unit 1 and 2 Instrument and Station Air Systems

USAR Section 10.3.10; Compressed Air System; Revision 23

Plant Procedure B34; Instrument and Station Air; Revision 4

Top 10 Equipment Issues List; April 23, 2003

Maintenance Rule System Specific Basis Document; Revision 5

Maintenance Rule Monthly Equipment Performance Report; January 2003

Summary of PINGP Maintenance Rule Scope Determination and Performance Criteria; May 1, 2003

AR CAP 008161; Air Compressor Required Rework After Valved Back Into Service; May 31, 2001

AR CAP 023021; Degradation of Pipe On Discharge of 121 Air Compressor; April 3, 2002

AR CAP 023544; Instrument Air System Improper Operation; May 17, 2002

AR CAP 024485; Needed to Reisolate 124 Air Compressor Due to Loose Belts; August 6, 2002

AR CAP 024564; Air Compressors Inclusion On Top 10 Equipment List; August 8, 2002

AR CAP 024623; Replacement of CV31191 Does Not Correct Problem with Unloader Leaking Air; August 13, 2002

AR CAP 025841; 124 Air Compressor Cooling Jacket Full of Mud; October 17, 2002

AR CAP 026355; Potential Silting/Sediment Concerns with Plant Equipment and Systems; November 16, 2002

AR CAP 027805; CV-39194 Has an Air Leak; January 23, 2003

AR CAP 028600; 123 Instrument Air Compressor Had to Be Shut Down Due to Lack of Cooling Water; February 27, 2003

AR CAP 029180; Failure of 124 Station Air Compressor to Start; March 23, 2003

Cooling Water Pump Packing and Shaft Bearing Lubrication

AR CAP 030128; 21 Cooling Water Pump; May 5, 2003

AR MRE 000158; Maintenance Rule Evaluation; May 6, 2003

AR Apparent Cause Evaluation (ACE) 008704; 21 Cooling Water Pump; May 6 2003

Maintenance Rule A(1) Action Plan; Cooling Water System; Revision 1

SP 1845; Test Three-Way Valve Actuation to Cooling Water Supply for 12 DDCLP [Diesel-Driven Cooling Water Pump] Bearing Water; Revision 0; May 19, 2003

SP 1846; Test Three-Way Valve Actuation to Cooling Water Supply for 12 DDCLP Bearing Water; Revision 0; May 1, 2003 and May 20, 2003

SP 1847; Test Three-Way Valve Actuation to Cooling Water Supply for 12 DDCLP Bearing Water; Revision 0; May 4, 2003

Operator Work Arounds; June 13, 2003

AR CAP 030227; Well Water Restoration Did Not Resolve CL [Cooling Water] Pump Seal Filter Operator Burden; May 11, 2003

1R13 Maintenance Risk Assessments and Emergent Work Control

Planned Maintenance on 1RYBT, 2RYBT, and Breakers 14-4,13-1, 24-9, and 23-9

Plant Status Report; April 15, 2003

Risk Assessment for Proposed Work for Week of 3205A; April 15, 2003

Operations Log Entries; April 14 -15, 2003

Section Work Instruction O-59; Protected Equipment Program; Revision 1

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

Planned Maintenance 12 Diesel-Driven Cooling Water Pump, the 11 Turbine-Driven Auxiliary Feedwater Pump, and the 11 Component Cooling Water Pump

Plant Status Report; April 22, 2003

Risk Assessment for Proposed Work for Week of 3206A; April 20, 2003

Operations Log Entries; April 21-22, 2003

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

Planned Maintenance on the D1 EDG and 12 Diesel-Driven Cooling Water Pump

Plant Status Report; April 23, 2003

Risk Assessment for Proposed Work for Week of 3206A; April 20, 2003

Operations Log Entries; April 22-23, 2003

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

Emergent Work on 21 Cooling Water Pump

Plant Status Report; May 6, 2003

Risk Assessment for Proposed Work for Week of 3208B; May 6, 2003

Operations Log Entries; May 5 - 6, 2003

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

Planned Maintenance on the 22 Safety Injection Pump, 22 Residual Heat Removal Pump, and the Unavailability of the Residual Heat Removal Pump Discharge to Safety Injection Pump Suction Motor-Operated Valve MV-32209

Plant Status Report; May 28, 2003

Risk Assessment for Proposed Work for Week of 3211B; May 27, 2003

Operations Log Entries; May 27 - 28, 2003

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

Planned Maintenance on the 122 Instrument Air Dryer and the 22 Turbine-Driven Auxiliary Feedwater Pump

Plant Status Report; May 30, 2003

Risk Assessment for Proposed Work for Week of 3211B; May 27, 2003

Operations Log Entries; May 29 - 30, 2003

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

Planned Maintenance on the 12 Safety Injection Pump, 12 Residual Heat Removal Pump, 122 Instrument Air Compressor, and the Unavailability of the Residual Heat Removal Pump Discharge to Safety Injection Pump Suction Motor-Operated Valve MV-32207

Plant Status Report; June 5, 2003

Risk Assessment for Proposed Work for Week of 3212B; June 3, 2003

Operations Log Entries; June 4 - 5, 2003

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

Emergent Work on 21 Residual Heat Removal Pump

Prairie Island Work Week 3301A; High Level Summary

Risk Assessment for Proposed Work for Week of 3301A; June 9, 2003

Operations Log Entries; June 10 - 11, 2003

Plant Procedure H24.1; Assessment and Management of Risk Associated with Maintenance Activities; Revision 5

AR CAP 030769; Unplanned Limiting Condition for Operation Not Met Due to 21 Residual Heat Removal Pump Out-of-Service

Risk Assessment Problem Identification and Resolution Reviews

AR CAP 024708; Protected Equipment Signs Continue to be Ineffective; August 17, 2002

ACE 008536; Protected Equipment Signs Continue to be Ineffective; August 20, 2002

AR CAP 024726; Signs; August 19, 2002

AR CA 001982; Signs; August 20, 2002

AR CAP 030128; 21 Cooling Water Pump; May 5, 2003

AR CAP 030772; 21 RHR [Residual Heat Removal] Pump Removed from Service and No Reevaluation of Risk was Performed

1R15 Operability Evaluations

Inadequate Thread Engagement on the 12 Safety Injection Pump

AR CAP 028899; Inadequate Thread Engagement on 12 Safety Injection Pump Seal Water Supply and Return Flanges; March 12, 2003

Maintenance Procedure D63; Installation Guidelines for Threaded Fasteners; Revision 11

AR CAP 029432; Flange on 11 Feedwater Pump Discharge Line Has Inadequate Thread Engagement on One Stud; April 1, 2003

AR CAP 029535; Concerns with the Adequacy of Thread Engagement Corrective Actions; April 6, 2003

AR CAP 029534; Weakness in Calculation ENG-CS-080, “Acceptable Thread Engagement;” April 6, 2003

AR CAP 029624; Inadequate Thread Engagement on Body-to-Bonnet Studs on Motor Valves MV-32335 and MV-32336; April 10, 2003

AR 029655; Degraded Studs on Two Safety Injection Valves; April 10, 2003

Degraded 122 Safeguards Traveling Screen

AR CAP 029638; Degraded Screen Condition Noted On Safeguard Traveling Screen; April 10, 2003

Design Basis Document System 35; Cooling Water System; Revision 4W

Prairie Island Drawing NF-38607-2B; Circulating Water System Emergency Cooling Water Intake Crib Details; Revision B

AR CAP 030789; Issues with Operability Evaluations in CAPs; June 11, 2003

AR CAP 030825; 122 Safeguard Traveling Screen Degraded Due to Enlargement of Holes in the Mesh; June 12, 2003

21 RCP Seal Leakoff

AR CAP 029823; Significant Perturbation in 21 RCP Seal Leakoff; April 19, 2003

AR CE 002513; Significant Perturbation in 21 RCP Seal Leakoff; April 19, 2003

Temporary Change Notice 2003-0459; Component Cooling Heat Exchanger Quarterly Test; May 9, 2003

Operator Log Entries; April 19, 2003

Emergency Response Computer System Trend Display; 21 RCP; April 18 - 21, 2003

Abnormal Operating Procedure 1C3AOP3; Failure of a Reactor Coolant Pump Seal; Revision 11

Operating Information No. 03-74; 21 RCP; April 17, 2003

Three Holes in Flood Door 73

AR CAP 030191; Existence of Three Small Holes in Flood Door 73; May 9, 2003

OPR 000408; Existence of Three Small Holes in Flood Door 73; May 9, 2003

AR CAP 030217; Inadequate Operability Review for Flood Door 73; May 9, 2003

14 Containment Fan Cooler Unit High Vibrations

AR CAP 030359; 14 Containment Fan Cooler Unit Has High Vibrations in the Danger Range; May 17, 2003

CE 002701; 14 Containment Fan Cooler Unit Has High Vibrations in the Danger Range; May 19, 2003

AR CAP 030789; Issues with Operability Evaluations in CAPs; June 11, 2003

Breaker 26-10, 22 Safety Injection Pump Oil Leak

AR CAP 030519; Breaker 26-10 (22 Safety Injection Pump) Found Puddle of Oil on Cubicle Floor Under Charging Motor; May 28, 2003

OPR 000415; Breaker 26-10 (22 Safety Injection Pump) Found Puddle of Oil on Cubicle Floor Under Charging Motor; May 28, 2003

1R16 OWAs

21 RCP Seal Leak-Off

Operator Workarounds List; May 1, 2003

AR CAP 028083; 21 RCP Number 1 Seal Leak-Off Decreased to Less Than 1.5 GPM; February 5, 2003

AR CAP 030223; Swapped 11 and 121 Cooling Water Pumps for SP 1106C; May 10, 2003

Root Cause Evaluation 000182; 21 RCP Number 1 Seal Leak-Off Decreased to Less Than 1.5 GPM; April 17, 2003

Operating Information No. 03-74; 21 Reactor Coolant Pump; April 17, 2003

Cumulative Effects of OWAs

5AWI 3.10.8; Equipment Problem Resolution Process; Revision 3

PINGP List of Operator Workarounds; May 8, 2003

Operator Work Around Aggregate Impact; First Quarter; May 1, 2003

Operating Information No. 03-83; 13 Charging Pump; May 7, 2003

1R17 Permanent Plant Modifications

Design Change 01RH01; RHR Discharge Pressure Loop 1E/Non-1E Separation; Revision 1

WO 0113782; Remove Interlock & PreOp 1P-628 and MV-32207; June 4, 2003

Plant Procedure 1ES-1.2; Transfer to Recirculation; Revision 16; Temporary Change Notice 2003-0293; March 26, 2003

Plant Procedure 1ES-1.3; Transfer to Recirculation with One Safeguard Train Out of Service; Revision 11; Temporary Change Notice 2003-0294; March 26, 2003

Alarm Response Procedure C47016; 12 RHR Pump Hi Press; Revision 37; Temporary Change Notice 2003-0566; June 5, 2003

AR CAP 004995; Information from Kewaunee Questions Quality Requirements of RHR Discharge Pressure Loops; May 18, 2000

AR CAP 030713; LCO Times for “B” Train ECCS [Emergency Core Cooling System] During WO 0113782 and 0107579; June 6, 2003

AR CAP 030744; Some Reactor Protection and Safeguards Racks are Missing Hinge Bolts; June 8, 2003

1R19 Post-Maintenance Testing

21 Cooling Water Strainer

WO 0209509; 21 Cooling Water Strainer Annual Inspection; March 30, 2003

Preventive Maintenance Procedure PM 3109-1-21; 21 Cooling Water Strainer Annual Inspection Equipment I.D. 258-011; Revision 9

Plant Procedure B35; Cooling Water System; Revision 6

22 Diesel-Driven Cooling Water Pump

WO 0209135; Test Relays/Circuit Logic for 10 Year Relay Replacement; April 6, 2003

SP 1106B; 22 Diesel-Driven Cooling Water Pump Monthly Test; Revision 60

AR CAP 029637; Poor Work Package for WO 0209135; April 10, 2003

AR CAP 029641; Headset Communications Seriously Degraded; April 10, 2003

AR CAP 029701; 22 DDCLP Post Job Comments/Concerns; April 14, 2003

D1 Emergency Diesel Generator

WO 0208525; Correct Air-Coolant Water Leakage at 4 Inch Slip-Joint

WO 0204450; Correct Cause of Oscillating Turbocharger to Blower Air Inlet Check Valve

WO 0211329; Replace Engine Driven Jacket Water Coolant Pump

WO 0114131; Replace Damaged Jacket Water Sensing Line

WO 0202328; Correct Oil Leakage at Pipe and Tubing Connections

WO 0115719; 1DG-20 Valve and Pipe Have External Lubricating Oil Leakage

WO 0210728; Packing Leak on CV-31954, Adjust Valve Packing

WO 0201648; Repair Air Leak at 1DG-26

WO 0212021; Replace Pipe and Tubing on D1 Starting Air Compressor

WO 0212020; Replace D1 Air Compressor Valve Unloaders

Preventive Maintenance Procedure PM 3001-2-D1; D1 Diesel Generator 18 Month Inspection; Revision 18

SP 1295; D1 Diesel Generator 6 Month Fast Start Test; Revision 31

SP 1334; D1 Diesel Generator 18 Month 24 Hour Load Test; Revision 7

AR CAP 029905; Starting Air Valve Leaking By During D1 Restoration; April 24, 2003

12 Diesel-Driven Cooling Water Pump

WO 0209497; 12 DDCLP Annual Electrical Inspection; April 16, 2003

SP 1106A; 12 Diesel-Driven Cooling Water Pump Monthly Test; Revision 62

AR CAP 028246; Spare Governor for DDCL Pump Leaking Oil; February 12, 2003

AR CA 004284; Spare Governor for DDCL Pump Leaking Oil; April 7, 2003

AR CAP 028320; New Allen Bradley Relays for 12 and 22 DDCLP's Are Not in Same As in Installed; February 15, 2003

AR CA 004332; New Allen Bradley Relays for 12 and 22 DDCLP's Are Not in Same As in Installed; April 18, 2003

AR CAP 029917; Moisture and Corrosion Products Found in 12 DDCLP SA Line During WO 0205376

AR CAP 029930; 12 DDCLP Starting Air Compressor Replacement; April 24, 2003

AR CAP 030123; 12 DDCLP Post-Job Critique Comments from Electrical Maintenance; May 5, 2003

AR CAP 03124; Post-Job Critique Comments from Electrical Maintenance; May 5, 2003

22 Containment Spray Pump

WO 0300594; Repair 2CS-25-2

SP 2090B; 22 Containment Spray Pump Test Quarterly Test; Revision 3

AR CAP 030096; Overtime Incurred in an Attempt to Complete Scheduled Work; May 2, 2003

AR CAP 030097; Resource Load Inadequate; May 2, 2003

AR CAP 030088; Work Delayed to Next Day on 22 CS [Containment Spray] Pump; May 2, 2003

21 Pressurizer Heaters

WO 0206118; Replace 480 Volt Capacitors and Test

11 Steam Generator Power-Operated Relief Valve

WO 0213214; Replace Splice for CV-31084

SP 1111A; Train A Monthly Main Steam Power-Operated Relief Valve Test; Revision 4

1R22 Surveillance Testing

22 Turbine-Driven Auxiliary Feedwater Pump

WO 0212440; SP 2102 22 Turbine-Driven AFW Pump Monthly Test; April 4, 2003

SP 2102; 22 Turbine-Driven AFW Pump Monthly Test; Revision 71

Plant Procedure B28B; Auxiliary Feedwater System; Revision 6

D5 Emergency Diesel Generator

WO 0214650; SP 2093 D5 Diesel Generator Monthly Slow Start; April 14, 2003

SP 2093; D5 Diesel Generator Monthly Slow Start Test; Revision 72

NIS Power Range Startup Test

WO 0302065; SP 1198 Nuclear Power Range Startup Test; April 15, 2003

Operations Log Entries; April 15, 2003

AR CAP 029805; Missed Surveillance After Unit Mode Change; April 18, 2003

TS Surveillance Requirement 3.3.1.8; Reactor Trip System (RTS) Instrumentation Surveillance; Amendment No. 158

TS Surveillance Requirement 3.0.3; Surveillance Requirement Applicability; Amendment No. 158

D1 EDG Fast Start Test

SP 1295; D1 Diesel Generator 6 Month Fast Start Test; Revision 31

Safeguards Logic Test and Reactor Protection Logic Test

SP 1032A; Safeguards Logic Test at Power - Train A; Revision 22

SP 1035A; Reactor Protection Logic Test at Power - Train A; Revision 29

1R23 Temporary Modifications

Temporary Modification O3T155, Hot Chemistry Lab Door Alarms

Temporary Modification O3T155; Addition of Hot Chemistry Lab Door Alarms

5AWI 6.5.0; Temporary Modifications; Revision 12

50.59 Screening # 1739; Addition of Hot Chemistry Lab Door Alarms

5AWI 3.3.5; 50.59 Screenings; Revision 11

AR CAP 024185; Auxiliary Building Special Ventilation Zone Boundary at Hot Chemistry Lab; July 16, 2002

OPR 000324; Auxiliary Building Special Ventilation Zone Boundary at Hot Chemistry Lab; July 16, 2002

23 Charging Pump Speed Control Feedback Loop

AR CAP 030038; 23 Charging Pump Speed Feedback Loop Bypassed Without T-Mod; April 30, 2003

USAR 10.2.3; Chemical and Volume Control System; Revision 25

Plant Procedure B12A; Chemical and Volume Control; Revision 7

5AWI 3.9.0; Bypass Control; Revision 6

5AWI 6.5.0; Temporary Modifications; Revision 12

5AWI 15.5.1; Plant Equipment Control and Clearance Process; Revision 9

1EP2 Alert and Notification System (ANS) Testing

PINGP 1120; ANS Monthly Trend Reports; October 2001 through February 2002

SP 1397; Emergency Plan Fixed Siren Test; Revision 1

Sirens Forms; Failure Matrix; November 2001 though March 2002

Nelcom Procedure; Siren Post Maintenance and Post Service Operability

5AWI 6.1.4; Emergency Siren Replacement Project/Design Change 01NS03; Revision 0

NATEK Inc. Letter to Federal Emergency Management Agency; Technical Review of Prairie Island Design Change #01NS03, Update and Replacement of the Public Alert and Notification System; March 19, 2003

Dakota County Emergency Response Plan; Annex A: Warning and Notification; Revision 2

1EP3 Emergency Response Organization (ERO) Augmentation Testing

Sections 5.3 and 8.1; Prairie Island Nuclear Generating Plant; Revision 24

PINGP 581; Emergency Organization Call List; Revision 73

PINGP 948; Switchboard Operator Call List; Revision 55

PINGP 1334; Implementing ERO Duty Roster Change Management Plan

SP 1744; Semi-Annual Emergency Organization Augmentation Response Test; Revision 25

SP 1744; Semi-Annual Emergency Organization Augmentation Response Test; November 6, 2001

SP 1744; Semi-Annual Emergency Organization Augmentation Response Test; January 22, 2002

SP 1744; Semi-Annual Emergency Organization Augmentation Response Test; May 2, 2002

SP 1744; Semi-Annual Emergency Organization Augmentation Response Test; September 18, 2002

SP 1744; Semi-Annual Emergency Organization Augmentation Response Test; November 11, 2002

SP 1744; Semi-Annual Emergency Organization Augmentation Response Test; February 10, 2003

1EP4 Emergency Action Level and Emergency Plan Changes

PINGP Emergency Plan; Revisions 24, 25, 26, and 27

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

5AWI 16.0.0; Action Request Process; Revision 3

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2003-001-6-021; Nuclear Oversight Observation Report; February 6, 2003

EPIP F3-2; Emergency Classification; Revisions 32 and 33

AR ACE 008644; Drill - Radiation Protection Group Failed to Recognize General Emergency EAL [Emergency Action Level] Met in a Timely Manner; January 31, 2003

AR OTH 023756; Evaluate the Emergency Plan Results of the November 3, 2002 Seismic Abnormal Event; January 9, 2003

AR OTH 024673; Review the February 2003 EP Self Assessment for Minor Issues that Need Follow-up; February 20, 2003

AR CAP 023528; Classification Problems During 2002 Emergency Plan Exercise; May 17, 2002

AR CAP 023723; Potentially >30% of Sirens Not Functional During Test; June 5, 2002

AR CAP 023826; Install a Plant Public Address Speaker in the OCA [Owner Controlled Area] Gate House; June 13, 2002

AR CAP 023853; 2002 Exercise OSC [Operational Support Center]-Plant Page Quality Poor in Turbine Building; June 14, 2002

AR CAP 024049; Unreliable Meteorological Information for Emergency Notification; July 2, 2002

AR CAP 024409; One Question on F3-2 Classification Exercise #2 Was Frequently Missed; July 31, 2002

AR CAP 024638; Semi-Annual ERO Augmentation Test Position Substitution Assessment; August 13, 2002

AR CAP 024965; Shield Building High Range Stack Gas Monitor Out of Service; August 30, 2002

AR CAP 025646; F3-2 Classification for Fires Per 11A Need to Re-evaluate; October 8, 2002

AR CAP 025712; Emergency Classification Opportunity Missed on Simulator; October 11, 2002

AR CAP 025952; 2002 EP Fall Drill - Plant Evacuation Ordered in an Untimely Manner; October 24, 2002

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AR CAP 028116; 2002 Emergency Plan Exercise CAPs (Not Closed & No Indication of Screening Results; February 6, 2003

AR CAP 029222; 60 Meter “B” Wind Direction Sticking; March 25, 2003

AR CAP 029512; NRC Observation Made During April 4, 2003 Emergency Plan Inspection Exit Regarding Potential Decrease in Effectiveness for EAL Change; April 4, 2003

AR CE 001283; 2002 EP Fall Drill - Plant Evacuation Ordered in an Untimely Manner; October 30, 2002

2OS1 Access Control to Radiologically Significant Areas

Radiation Work Permit 138; Sluice Resin from Spent Resin Tank to HIC; Revision 0

AR CAP 029837; No Follow-up on Positive Entrance Wholebody Count; April 21, 2003

AR CAP 029945; Radiation Dose Caused by 1000 mr/hr [millirem per hour] Drum on Next Floor Above Work Area; April 25, 2003

AR CAP 030240; Dose Rates on Ion Exchangers; May 12, 2003

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AR CAP 030263; No Procedure for Set-up and Removal of High Level Liner Manifold; May 13, 2003

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2OS3 Radiation Monitoring Instrumentation and Protective Equipment

AR CAP 002803; Manufacturer Notice on Potential SCBA Alarm Proble; November 4, 2002

AR CAP 003894; Prairie Island Management Should Consider Revising Expectation for Use of SCBA During Fire Drills to Conform with Current Norms; January 13, 2000

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AR CAP 030694; Control Room Operator with Goatee Not Meeting Expectations for Fit Test; June 5, 2003

AR CAP 030695; Expected Air Volume Not Immediately Available from CR [Control Room] Breathing Air System; June 5, 2003

AR CAP 030696; Control Room Operator Respirator Fit Test Expired; June 5, 2003

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SP 1783.2; Nuclear Management Company Radiation Monitor Electronic Calibration; Revision 7

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RPIP 1701; Underwater Diving Operations; Revision 7

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AR CAP 029623; REMP Shipment Delayed Due to Missing Label; April 10, 2003

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3PP3 Response to Contingency Events

SIP 3.5, Protective Strategy and Response Procedure, January 17, 2003

SP 1651, Weekly Perimeter Intrusion Detection System (PIDS) Functional Test; Rev 22, October 22, 2002

4OA1 Performance Indicator Verification

Calculated Performance Indicator Data for the Unit 1 and Unit 2 Safety System Unavailability of the Residual Heat Removal System for the 2nd Quarter 2002, 3rd Quarter 2002, 4th Quarter 2002, and the 1st Quarter 2003

Calculated Performance Indicator Data for the Unit 1 and Unit 2 Reactor Scrams for the 2nd Quarter 2002, 3rd Quarter 2002, 4th Quarter 2002, and the 1st Quarter 2003

Calculated Performance Indicator Data for the Unit 1 and Unit 2 Reactor Scrams with Loss of Normal Heat Removal for the 2nd Quarter 2002, 3rd Quarter 2002, 4th Quarter 2002, and the 1st Quarter 2003

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Plant Procedure H33.1; Performance Indicator Reporting Instructions; Revision 5

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AR CAP 029671; Performance Indicator Unavailability Tracking Improvements Needed; April 11, 2003

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4OA2 Identification and Resolution of Problems

4OA3 Event Followup

Failure of the 12 Residual Heat Removal Heat Exchange Outlet Flow Control Valve

LER 50-282/03-001-00; Residual Heat Removal Valve CV-31236 Positioner Linkage Found Broken; Revision 0

Appendix R Safe Shutdown Analysis Issues

LER 50-282, 306/03-002-00; Appendix R Safe Shutdown Analysis Issues; Revision 0

AR CAP 024537; Appendix R Commitment Closed Prematurely; August 7, 2002

AR CAP 028574; Issues Arising from Completion of Appendix R Flow Diversion Analysis; February 26, 2003

Plant Safety Procedure F5, Appendix B; Control Room Evacuation (Fire); Revision 27

Plant Safety Procedure F5, Appendix B; Impact of Fire Outside Control/Relay Room; Revision 11

4OA5 Other Activities

4OA7 Licensee-Identified Violation

Failure of the 12 Residual Heat Removal Heat Exchange Outlet Flow Control Valve

Root Cause Report 000183; 12 Residual Heat Removal Heat Exchange Outlet Flow Control Valve Positioner Found with Broken Linkage; Revision 1

AR CAP 028703; Valve Positioner Feedback Linkage Found Disconnected on CV-31236, 12 Residual Heat Removal Heat Exchange Outlet; March 3, 2003

CE 002363; Valve Positioner Feedback Linkage Found Disconnected on CV-31236, 12 Residual Heat Removal Heat Exchange Outlet; March 24, 2003

Design Basis Document 15; Residual Heat Removal System; Revision 3W

5AWI 8.5.0; Housekeeping and Materiel Condition; Revision 4

LER 50-282/03-001-00; Residual Heat Removal Valve CV-31236 Positioner Linkage Found Broken; Revision 0

LIST OF ACRONYMS USED

ACE	Apparent Cause Evaluation
ADAMS	Agencywide Documents Access and Management System
AFW	Auxiliary Feedwater
ANS	Alert and Notification System
AR	Action Request
AWI	Administrative Work Instruction
CA	Corrective Action
CAP	Corrective Action Program
CCTV	Closed Circuit Television
CE	Condition Evaluation
CFR	Code of Federal Regulations
CL	Cooling Water
CR	Control Room
CS	Containment Spray
CY	Calendar Year
DDCL	Diesel-Driven Cooling Water
DDCLP	Diesel-Driven Cooling Water Pump
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EA	Enforcement Action
EAL	Emergency Action Level
ECCS	Emergency Core Cooling System
ED	Emergency Director
EDG	Emergency Diesel Generator
EP	Emergency Preparedness
EPIP	Emergency Plan Implementing Procedure
ERO	Emergency Response Organization
GQS	Generation Quality Services
HIC	High Integrity Container
ICM	Interim Compensatory Measure
IDS	Intrusion Detection System
IMC	Inspection Manual Chapter
IPEEE	Individual Plant Examination of External Events
IR	Inspection Report
LER	Licensee Event Report
mr/hr	Millirem Per Hour
MOV	Motor-Operated Valve
MRE	Maintenance Rule Evaluation
NIS	Nuclear Instrumentation System
NRC	U.S. Nuclear Regulatory Commission
NUPIC	Nuclear Utilities Procurement Issues Committee
OCA	Owner Controlled Area
OTH	Other
OPR	Operability Recommendation
OSC	Operational Support Center
OWA	Operator Workaround
PARS	Publicly Available Records
PI	Performance Indicator

PINGP	Prairie Island Nuclear Generating Plant
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
REMP	Radiological Environmental Monitoring Program
RETS/ODCM	Radiological Environmental Technical Specifications/Offsite Dose Calculation Manual
RHR	Residual Heat Removal
RPIP	Radiation Protection Implementing Procedure
RTS	Reactor Trip System
RWST	Refueling Water Storage Tank
SCBA	Self-Contained Breathing Apparatus
SG	Steam Generator
SM	Shift Manager
SP	Surveillance Procedure
SS	Shift Supervisor
SSC	Structure, System, or Component
TS	Technical Specification
URI	Unresolved Item
USAR	Updated Safety Analysis Report
WBC	Whole Body Count
WO	Work Order
ZX	Containment Cooling