

July 25, 2001

Mr. J. Sorensen
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
NRC INSPECTION REPORT 50-282/01-10; 50-306/01-10

Dear Mr. Sorensen:

On June 30, 2001, the NRC completed an inspection at your Prairie Island Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed on June 29, 2001, with you and other members of your staff.

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

No findings of significance were identified.

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Sincerely,

/RA by Michael Kunowski Acting for/

Roger D. Lanksbury, Chief
Projects Branch 5
Division of Reactor Projects

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

Enclosure: Inspection Report 50-282/01-10; 50-306/01-10

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Tribal Council, Prairie Island Indian Community
J. Silberg, Esquire
Shawn, Pittman, Potts, and Trowbridge
A. Neblett, Assistant Attorney General
Office of the Attorney General
S. Bloom, Administrator
Goodhue County Courthouse
Commissioner, Minnesota Department
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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: 50-282/01-10; 50-306/01-10

Licensee: Nuclear Management Company, LLC

Facility: Prairie Island Nuclear Generating Plant

Location: 1717 Wakonade Drive East
Welch, MN 55089

Dates: May 12 through June 30, 2001

Inspectors: S. Ray, Senior Resident Inspector
S. Thomas, Resident Inspector
S. Burton, Senior Resident Inspector, Monticello
M. Mitchell, Radiation Specialist

Approved by: Roger D. Lanksbury, Chief
Projects Branch 5
Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000282-01-10; IR 05000306-01-10, on 05/12-06/30/2001; Nuclear Management Company, Prairie Island Nuclear Generating Plant, Units 1 & 2. Resident inspector and public radiation safety report.

This report covers a 6-week routine resident inspection and a baseline public radiation safety inspection. The inspection was conducted by resident inspectors and a radiation specialist inspector. No findings of significance were identified. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using IMC 0609, "Significance Determination Process" (SDP). The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described at its Reactor Oversight Process website at <http://www.nrc.gov/NRR/OVERSIGHT/index.html>. Findings for which the SDP does not apply are indicated by "No Color" or by the severity level of the applicable violation.

A. Inspector-Identified Findings

No findings of significance were identified.

B. Licensee-Identified Findings

No findings of significance were identified.

Report Details

Summary of Plant Status

Unit 1 was operated at or near full power for the entire inspection period except that power was briefly reduced to about 45 percent on June 17, 2001, for routine turbine valve testing. Unit 2 was in cold shutdown while conducting repairs to the D5 and D6 emergency diesel generators (EDGs) until the reactor was taken critical on June 4, 2001. The Unit 2 generator was placed on-line on June 6 and the Unit reached full power on June 7, 2001. Unit 2 operated at or near full power for the remainder of the inspection period.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather (71111.01)

a. Inspection Scope

The inspectors performed a walkdown of the licensee's preparations for adverse weather, including conditions that could lead to loss of offsite power and conditions that could result from high temperatures or high winds. The inspectors verified that the licensee's procedures and preparation for the impending tornado season were adequate. The inspectors focused on design features and the licensee's procedures that mitigated or were used to respond to adverse weather conditions. Additionally, the inspectors reviewed the Updated Safety Analysis Report (USAR) and performance requirements for systems selected for inspection, and verified operator actions specified in procedures.

b. Findings

No findings of significance were identified.

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed a partial walkdown of the accessible portions of the 12 auxiliary feedwater train during a time when that train was of increased importance as a mitigating system because the 121 instrument air compressor, the D5 EDG, and the 12 charging pump were unavailable. The inspectors also reviewed outstanding work orders (WOs) and condition reports (CRs) associated with the train to verify that there were no known conditions that could affect its function.

b. Findings

No findings of significance were identified.

1R05 Fire Protection (71111.05)

a. Inspection Scope

The inspectors conducted fire protection walkdowns which were focused on availability, accessibility, and the condition of fire fighting equipment; the control of transient combustibles; and on the condition and operating status of installed fire barriers. The inspectors selected the following fire areas for inspection based on their overall contribution to internal fire risk, as documented in the Individual Plant Examination of External Events (IPEEE), or their potential to impact equipment which could initiate a plant transient.

- Area 94 (service building, elevation 695');
- Areas 10 & 79 (bus 112 and train A event monitoring rooms, elevation 735');
- Areas 16 & 82 (bus 122 and train B event monitoring rooms, elevation 735'); and
- Areas 22 & 80 (bus 111 and 121 switchgear rooms, elevation 715' 10").

b. Findings

No findings of significance were identified.

1R12 Maintenance Rule Implementation (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 problem constituted a maintenance rule functional failure;
- 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 inspectors reviewed the licensee's implementation of the maintenance rule requirements for the following SSCs:

- feedwater system;
- 4.16 kilovolts alternating current electrical; and
- Electric Machinery Manufacturing Company motors (horizontal slice inspection).

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 associated with bypassing of pressure switch 16048 and replacement of instrument tubing for the Unit 2 feedwater suction pressure switch (PS). This activity was chosen based on the increased probability of an initiating event caused by a loss of feedwater or a reactivity transient. The inspection was conducted to verify that evaluation, planning, control, and performance of the work were done in a manner to reduce risk where practical, and that contingency plans were in place where appropriate.

b. Findings

No findings of significance were identified.

1R14 Personnel Performance Related to Non-routine Plant Evolutions and Events (71111.14)

a. Inspection Scope

The inspectors reviewed two Licensee Event Reports (LERs) issued during the inspection period for events that were the result of human performance errors or other performance problems. The following events were reviewed:

- LER 1-01-01, "Failure to Physically Lock Valves Associated with Technical Specification Required Safety Injection Flow Path," and
- LER 2-01-01, "Failure to Meet Technical Specification Limiting Condition for Operation Verification Within Eight Hour Limit Due to Personnel Error."

b. Findings

The inspectors determined that the LERs represented two licensee-identified minor violations. These issues are discussed further in Sections 4OA3 and 4OA7.

1R15 Operability Evaluations (71111.15)

.1 Shutdown Bank A Control Rod E3 Individual Rod Position Indicator

a. Inspection Scope

The inspectors reviewed the evaluations for the shutdown bank A control rod E3 individual rod position indication channel, with regard to its continued operability while experiencing periodic spikes. This evaluation was performed to determine whether operability was justified, whether availability was affected, and whether an unrecognized increase in risk had occurred.

b. Findings

No findings of significance were identified.

.2 D5 and D6 EDGs Subsequent to Resolving Issues Associated With Operation With Incompatible Lubricating and Fuel Oils

a. Inspection Scope

The inspectors reviewed operability documentation regarding D5 and D6 EDG operability subsequent to resolving issues associated with incompatible lubrication and fuel oils. This evaluation was performed to determine whether operability was justified, whether availability was affected, and whether an unrecognized increase in risk had occurred.

b. Findings

No findings of significance were identified.

.3 Tornado Analysis Impact on Unit 1 EDG Operability

a. Inspection Scope

The inspectors reviewed the technical adequacy of an operability evaluation that was performed on Unit 1 tornado affected equipment. The inspectors reviewed the documentation to evaluate the impact on Technical Specifications, the significance of the evaluations, and to ensure that adequate justifications for operability were documented. The operability evaluation was selected based upon the importance of the EDGs as a mitigating system for a tornado-caused loss of offsite power.

b. Findings

The licensee initiated CR 20014805, "Inadequate D1/D2 Diesel Tornado Damage Analysis," as a result of the identification by the licensee of inadequacies in the calculations and analysis discovered during the extent of condition review for CR 2001435. CR 20014805 identified several concerns with Prairie Island calculations ENG-PI-002, "Probabilistic Risk Assessment of D1 EDG Room Door Vulnerability to Tornado Missile," and ENG-PI-005, "Tornado & Seismic Evaluation of D1/D2 Components."

Specifically, CR 20014805 noted that the assumptions of the number of missiles was first assumed to be approximately 6,000, a more realistic number was estimated at 60,000; the tornado frequency utilized was not site specific and may be non-conservative; the tornado strike frequencies utilized a reference that the NRC indicated was non-conservative; the wrong tornado data was extracted from reference data in the preparation of the calculation; the methodology for adjusting generic data to plant specific was questioned; identical assumptions in each calculation used different numbers and the calculations were not cross referenced; the statistical methodology for combining damage to multiple components was questioned; atmospheric pressure

changes due to the tornado were not evaluated against the impact on diesel instrumentation and protective features; and the effect on the building and framework, including superstructure, were not fully evaluated.

The inspectors reviewed the conclusions associated with the evaluation and were unable to determine whether the Unit 1 EDG building superstructure was capable of withstanding the design basis tornado event. Because the rooms and material constructed above the D1/D2 building were unevaluated, the inspectors postulated that a shift in the superstructure, which is common to both EDG exhaust pipes, could impact the operability of both EDGs. Further review with the licensee indicated that the superstructure was adequate based upon engineering judgement, with further evaluation needed for both tornado and seismic events. Because this issue relates to a potential common mode failure for both Unit 1 EDGs, the inspectors consider this item an Unresolved Item (URI 50/282-01-10-01) pending the inspectors' review of the results of the evaluation being performed by the licensee.

b. Findings

No findings of significance were identified.

1R16 Operator Workarounds (71111.16)

a. Inspection Scope

The inspectors reviewed Operator Workaround (OWA) 20015183 which added manual operator actions to the response to a carbon dioxide fire protection system actuation in the relay and cable spreading room to determine whether a mitigating system function or the operator's ability to implement abnormal or emergency operating procedures was affected.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed post-maintenance testing activities to ensure that the testing adequately verified system operability and functional capability with consideration of the actual maintenance performed. The post-maintenance testing activities were selected based on the respective system's importance to mitigating core damage or protecting barrier integrity.

The inspectors observed post-maintenance testing associated with the following work:

- testing of D5 EDG following work to address fuel oil/lube oil compatibility issues, and
- testing of D6 EDG following work to address fuel oil/lube oil compatibility issues.

b. Findings

No findings of significance were identified.

1R20 Refueling and Other Outage Activities (71111.20)

a. Inspection Scope

The inspectors observed portions of activities associated with the Unit 2 forced outage due to EDG oil incompatibility issues that continued from the last inspection period. The inspectors observed the licensee's control of plant configuration and risk during a period of reduced reactor coolant inventory necessary to repair a leaking steam generator primary manway, the Operations Committee review of the reactor trip report and startup hold list, and the reactor heatup to normal temperature and pressure.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors witnessed selected surveillance testing and reviewed test data to verify that the equipment tested using the surveillance procedures (SPs) met Technical Specifications, the USAR, Design Basis Documents (DBDs), and licensee procedural requirements, and also demonstrated that the equipment was capable of performing its intended safety functions. The activities were selected based on their importance in verifying barrier integrity or mitigating systems capability. The following tests were evaluated:

- SP 2269, "SI [Safety Injection] Accumulator Check Valves Refueling Leak Test";
- and
- SP 2093, "D5 Diesel Generator Monthly Slow Start Test."

b. Findings

No findings of significance were identified.

1R23 Temporary Plant Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed the installation and testing of Temporary Modifications 01T083, "Secondary Coil Circuit of E3 Rod Position Indication and E3 Rod Position Indication Shield Wire at TB-1134," and Temporary Modification 01T086, "E3 Rod Position Indication Signal Conditioner Card in Rack 1RPI." These temporary modifications were installed to reduce an intermittent spiking problem present on the Unit 1 shutdown bank

control rod E3 individual rod position indicator. The inspectors reviewed the applicable documentation associated with these modifications.

b. Findings

No findings of significance were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems (71122.01)

.1 Liquid and Gaseous Release Systems Walkdowns

a. Inspection Scope

The inspectors performed walkdowns of specific components of the liquid and gaseous effluent treatment and monitoring systems (e.g., radiation and flow monitors, tanks, and pumps) to verify that the current system configuration was as described in the USAR and the Offsite Dose Calculation Manual (ODCM).

The inspectors also observed ongoing activities, including electronic calibration of gaseous effluent monitoring systems. The inspectors conducted these observations to verify that personnel followed the proper test procedures and tagged out redundant systems to avoid creating an unmonitored pathway.

b. Findings

No findings of significance were identified.

.2 Effluent Monitor and Analytical Instrument Quality Controls

a. Inspection Scope

The inspectors reviewed records of calibrations performed since the last inspection for selected point of discharge effluent process radiation monitors, to verify that each monitor was calibrated as required by the licensee's ODCM. The inspectors reviewed the current effluent radiation monitor alarm set point values to assess the accuracy and agreement with the ODCM requirements.

b. Findings

No findings of significance were identified.

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 most current Annual Environmental Monitoring Report (2000), along with the monthly progress reports for the first quarter of 2001. Sampling location commitments, monitoring and measurement frequencies, land use census, the vendor laboratory's interlaboratory comparison program, and data analysis were assessed to verify that the Radiological Environmental Monitoring Program (REMP) was implemented as required by Technical Specifications and the ODCM. The inspectors also reviewed the environmental monitoring station locations to assure they were consistent with the ODCM, and to verify that changes did not affect the licensee's ability to monitor the impacts of radioactive effluent releases on the environment.

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 the environmental air sampling stations and selected thermoluminescent dosimeters (TLDs) to verify that they were located as described in the ODCM, and to evaluate the equipment material condition. The inspectors reviewed a sample of 2000 and first quarter 2001, monthly equipment operability reports for the onsite meteorological monitoring program's data recovery rates, routine calibration and maintenance activities, and non-scheduled maintenance activities, to confirm that the equipment was acceptably maintained and operable. The inspectors observed that readouts of wind speed, wind direction, and atmospheric stability measurements were available in the control room and verified they were operable.

b. Findings

No findings of significance were identified.

.3 Review of REMP Sample Collection and Analysis

a. Inspection Scope

The inspectors accompanied a REMP technician to observe the collection and preparation of a variety of environmental samples, including surface water, air filters (particulate), and charcoal cartridges (iodine), to verify that representative samples were being collected in accordance with procedures and the ODCM. The inspectors

observed the technician perform air sampler field check maintenance to verify that the air samplers were functioning acceptably. Selected air sampler calibration and maintenance records for 2000 and 2001 were reviewed to verify that the equipment was being maintained as required by the licensee's procedures. Additionally, the inspectors reviewed results of the vendor laboratory's inter-laboratory comparison program and quality assurance program to verify that the vendor was capable of making adequate radiochemical 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, procedure, and practices for the unrestricted release of material from radiologically controlled areas. Specifically, the inspectors reviewed documentation 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 REMP Data and Changes to the ODCM

a. Inspection Scope

The inspectors reviewed the 2000 Annual Radioactive Effluent Release and Radiation Environmental Monitoring Program Reports and REMP data for January 2001 through April 2001, to verify that the REMP program was implemented as described in the ODCM.

b. Findings

No findings of significance were identified.

.6 Identification and Resolution of Problems

a. Inspection Scope

The inspectors selectively reviewed year 2000 to 2001 licensee quality assurance audits and chemistry/radiation protection department's self-assessments which were used to evaluate, identify, characterize, and prioritize problems with the REMP. This review was conducted to verify that radiological effluent issues were adequately addressed. The inspectors also reviewed CRs related to the REMP generated in years 2000 and 2001, to date, to confirm that identified problems were entered into the licensee's corrective action program and were timely and appropriately resolved.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES (OA)

4OA1 Performance Indicator Verification (71151)

.1 Radiological Effluent Technical Specifications/ODCM Radiological Effluent Occurrence Performance Indicator

a. Inspection Scope

The inspectors conducted a review to verify that the licensee had accurately assessed data and reported the performance indicator for the public radiation safety cornerstone consistent with guidance in Nuclear Energy Institute (NEI) 99-02. Additionally, the inspectors reviewed the licensee's CRs for 2000 and offsite dose calculations (January 2000 through December 2000) to ensure that there were no performance indicator occurrences that were not identified by the licensee.

b. Findings

No findings of significance were identified.

.2 Unplanned Scrams per 7000 Critical Hours

a. Inspection Scope

The inspectors reviewed the performance indicator data submitted by the licensee for completeness and accuracy for the Unplanned Scrams per 7000 Critical Hours performance indicator in the initiating events cornerstone. The inspectors reviewed handwritten and electronic control room logs, NRC inspection reports, and monthly operating reports for the periods of April 2000 through March 2001 to verify that the licensee had reported all unplanned scrams and the proper number of critical hours for those four quarters in accordance with the guidance provided by NEI.

b. Findings

No findings of significance were identified.

4OA3 Event Followup (71153)

.1 (Closed) LER 1-01-01: Failure to Physically Lock Valves Associated with Technical Specification Required Safety Injection Flow Path

This event report described the licensee's discovery, on March 14, 2001, that two valves in the boric acid flow path to the safety injection pumps, on both Unit 1 and Unit 2, that were required by Technical Specifications to be locked, were in the proper position but not locked.

This issue was screened out from further review as being a minor issue using the Group 1 screening questions of the SDP because the boric acid supply valves were in their correct positions and, at the time of the event, the licensee had already determined that the Technical Specification requirement to lock the valves was no longer required. An amendment request to remove that requirement had already been submitted and was approved by the NRC on April 16, 2001. The licensee entered the issue into its corrective action system as CR 20012503. See Section 4OA7 for further discussion.

.2 (Closed) LER 2-01-01: Failure to Meet Technical Specification Limiting Condition for Operation Verification Within 8-Hour Limit Due to Personnel Error

This event report described the licensee's failure to verify the operability of the two required electrical paths from the grid to the 4.16-kilovolt safeguards distribution system of Unit 2 for one 8-hour period during a time when the verification was required by Technical Specifications because the D6 EDG was inoperable.

The issue was screened out from further review as being a minor issue using the Group 1 screening questions of the SDP because the error was administrative only and the two required sources from the grid were always available. Operators would have been alerted by annunciators if one of the paths would have been lost. The licensee entered the issue into its corrective action system as CR 20013265. See Section 4OA7 for further discussion.

.3 (Closed) LER 2-01-02: Emergency Diesel Generator Out of Service Longer than Technical Specification Allowed Outage Time

This event was discussed in Special Inspection Report 50-306/01-13.

4OA6 Meeting(s)

Exit Meeting

The resident inspectors presented the inspection results to Mr. J. Sorensen and other members of licensee management at the conclusion of the inspection on June 29, 2001. The licensee acknowledged the findings presented. No proprietary information was identified.

Interim Exit Meeting Summary

Senior Official at Exit:	Mr. J. Sorensen, Site Vice-President
Date:	June 22, 2001
Proprietary:	No
Subject:	Public Radiation Safety Program
Change to Inspection Findings:	No

4OA7 Licensee-Identified Violations

The following issues were identified by the licensee and were violations of NRC requirements which meet the criteria of Section IV of the NRC Enforcement Policy, NUREG-1600 for being dispositioned as minor violations. Both minor violations were corrected by the licensee and are being documented in the inspection report because they involve the extenuating circumstances criterion for closing an LER.

NRC Tracking Number

Requirement Licensee Failed to Meet

N/A

Technical Specification 3.2.B.7. required that certain valves in the safety injection system be locked when RCS temperature exceeds 200 degrees Fahrenheit. Contrary to this, on March 14, 2001, two valves between the boric acid storage tanks and the safety injection pumps were not locked when RCS temperature exceeded 200 degrees Fahrenheit. A month later, the NRC approved the removal of this requirement from the Technical Specifications. (Section 4OA3.1)

N/A

Technical Specification 3.7.B.1. required that the operability of the two required paths from the grid to the Unit 4-kilovolt safeguards distribution system be verified within one hour and at least once per eight hours thereafter when one of the Unit's emergency diesel generators is not operable. Contrary to this, on April 8, 2001, the licensee verified the operability of the two paths about 1½ hours after the eight-hour limit. (Section 4OA3.2)

KEY POINTS OF CONTACT

Licensee

T. Allen, General Superintendent Engineering, Nuclear Generation Services
T. Amundson, General Superintendent Engineering
T. Breene, Manager Nuclear Performance Assessment
L. Gard, General Superintendent Plant Maintenance
A. Johnson, General Superintendent Radiation Protection and Chemistry
Y. Shen, Probabilistic Risk Assessment Project Manager
T. Silverberg, General Superintendent Plant Operations
M. Sleight, Superintendent Security
J. Sorensen, Site Vice President
M. Werner, Plant Manager
P. Wildenborg, Site Health Physicist

NRC

R. Lanksbury, Chief, Projects Branch 5

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-282/01-10-01 URI Ability of D1 and D2 Exhaust Lines to Survive a Design Basis Tornado or Seismic Event (Section 1R15.3)

Closed

1-01-01 LER Failure to Physically Lock Valves Associated with Technical Specification Required Safety Injection Flow Path (Section 4OA3)

2-01-01 LER Failure to Meet Technical Specification Limiting Condition for Operation Verification Within Eight Hour Limit Due to Personnel Error (Section 4OA3)

2-01-02 LER Emergency Diesel Generator Out of Service Longer than Technical Specification Allowed Outage Time (Section 4OA3)

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
CFR	Code of Federal Regulations
CR	Condition Report
CVCS	Chemical and Volume Control System
DBD	Design Basis Document
EDG	Emergency Diesel Generator
IMC	Inspection Manual Chapter
IPEEE	Individual Plant Evaluation of External Events
IR	Inspection Report
LER	Licensee Event Report
NCV	Non-Cited Violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OA	Other Activities
ODCM	Offsite Dose Calculation Manual
OR	Observation Report
OWA	Operator Workaround
PARS	Publicly Available Records
PS	Pressure Switch
RCS	Reactor Coolant System
REMP	Radiological Environmental Monitoring Program
RPIP	Radiation Protection Implementing Procedure
SDP	Significance Determination Process
SI	Safety Injection
SP	Surveillance Procedure
SSC	Structure, System, or Component
TCN	Temporary Change Notice
TLD	Thermoluminescent Dosimeter
TP	Test Procedure
USAR	Updated Safety Analysis Report
WO	Work Order

LIST OF DOCUMENTS REVIEWED

1R01 Adverse Weather

CR 19980577	RYND01-AB2-Tornadoes	
CR 19981111	RYND01-AB2-Tornadoes	
CR 19961848	E960754: Recycle Dumpster Was Not Chained in Place as Required from May 1 st -Oct. 31 st (Tornado Hazard Season)	
CR 19961954	Should the Following Item, Found on 8/28/96 Be Moved/Secured to Meet the Requirements of SP1039 Tornado	
CR 20014805	Inadequate D1/D2 Diesel Tornado Damage Analysis	
CR 20014351	Failure to Identify & Remove Potential Tornado Missiles	
CR 20015147	NRC Senior Resident Inspector Found Dumpster Near Old Admin Building Smoke Vestibule Not Chained Down	
TP [Test Procedure] 1636	Summer Plant Operation	Revision 9
SP 1039	Tornado Hazard Monthly Site Inspection	Revision 5
USAR Section 2.3.3.2	Tornadoes	Revision 18

1R04 Equipment Alignment

System Prestart Checklist C28-2	Auxiliary Feedwater System Unit 1	Revision 39
	Daily At-Power Risk Report	May 30, 2001, 06:00

1R05 Fire Protection

IPEEE NSPLMI-96001 Appendix B	Internal Fires Analysis	Revision 2
Plant Safety Procedure F5 Appendix A	Fire Strategies	Revision 9
F5 Appendix D	Impact of Fire Outside Control/Relay Room	Revision 5
F5 Appendix F	Fire Hazard Analysis	Revision 12

1R12 Maintenance Rule Implementation

General

2000 Equipment Performance Annual Report	April 20, 2001
Maintenance Rule System Basis Document	Volume 1A
Quarterly Equipment Performance Report - 1 st Quarter 2001	May 4, 2001

Feedwater System

WO 0003873	Cut Out and Examine Broken Part on 2-FWH-74
WO 0003875	Repair Hanger 2-FWH-74
WO 0101015	CV-311287 B Main Feedwater Regulating Valve Failed Closing Time
WO 0101075	Re-Install 4 Solenoid Operated Valves on Correct Feed Regulating Valves and Feed Regulating Bypass Valves
WO 0107201	22 Feedwater Pump Auxiliary Lube Oil Pump Cycles On and Off Every 30 Seconds
WO 9908258	Valve and Pipe Cap Leaking by F-22-5, 15 Feedwater Heater Drain
WO 9912731	CV-31875, 12 Feedwater Pump Recirc Control Valve Does Not Open Without Assistance
CR 20001703	Feedwater to Steam Generator Isolation Valves May Not Have Closed After Unit 1 Reactor Trip
CR 20001472	Feedwater Pipe Support 2-FWH-74 Was Found with a Failed Support Component During the Unit 2 2000 Refueling Outage
CR 20011093	Found Discrepancy Between 11 and 12 Feedwater Pump Recirc Valve Circuitry During ICPM-1-333
CR 20011118	MV-32023, Feedwater to 11 Steam Generator Isolation Valve, Has Evidence of External Carbon Steel Corrosion

4.16-Kilovolt Alternating Current System

CR 20000593	Bus 25 Load Sequencer Problems During the Performance of SP 2094
-------------	--

CR 20001079 External Event Assessment: Offsite Power Voltage Inadequacies

CR 20001754 WO 0002747 Ran SP 2094 and Had a Failure During Test #4 Which Tests the Software and Hardware Operability of Bus 25 Load Sequencer

CR 20005356 Bus 15 Sequencer Failed SP 1094 - Previous Failure of Bus 15 Sequencer and Occasional SP 1094 Failures Need Investigation

CR 20012514 External Event Assessment: Circuit Breaker Fault Results in Fire, Loss of Offsite Power, Reactor Scram, and Severe Turbine Damage

Electric Machinery
Manufacturing Company
Motors

WO 0003403 23 Heater Drain Tank Pump High Vibrations on Upper Bearing

WO 0104308 12 Heater Drain Tank Pump Locked Out When Starting Pump

Technical Manual X-HIAW-41-14 Heater Drain Pump Revision 3

Technical Manual X-HIAW-113-11 Containment Spray Pump Motors Revision 3

Technical Manual X-HIAW-258-24 Auxiliary Feedwater Pumps Revision 21

1R13 Maintenance Risk Assessment and Emergent Work Control

WO 0107738 Leak on Line to 21/22 Feedwater Pump Suction Low Pressure Switch 16048 Root Valve

Draft Safety Evaluation 585 Bypass Pressure Switch 16048 to Perform Repairs on Instrument Line to Pressure Switch Revision 0

Temporary Instruction 01-48 PS-16048

Unit 2 Configuration Risk Assessment June 13, 2001, 2:00 PM

1R14 Personnel Performance Related to Non-Routine Plant Evolutions and Events

CR 20012503	C12.6 Sections 5.4 to 5.7 Fail to Relock In Service Boric Acid Storage Tank Outlet Isolation Valves - Investigated and Found SI-8-1 and 8-2 Unlocked
CR 20013265	SP 2118 Not Completed Within 8 Hours - Failed to Meet Technical Specification Action Statement
LER 1-01-01	Failure to Physically Lock Valves Associated With Technical Specification Required Safety Injection Flow Path
LER 2-01-01	Failure to Meet Technical Specification Limiting Condition for Operation Verification Within Eight Hour Limit Due to Personnel Error

1R15 Operability Evaluations

CR 20014430	Unit 1 Individual Rod Position Indicator E-3 Periodically Spikes and Gives Rod at Bottom Alarm	
Prairie Island Technical Specification 3.10.F	Rod Position Indication System	Revision 139
Prairie Island Temporary Instruction 01-44	Rod At Bottom and Rod Deviation Alarms	
Alarm Response Procedure C47013-0507 Temporary Change Notice 2001-1166	Computer Alarm Rod Deviation/Sequencing	
Work Order 0107595	Install Temporary Resistor in Shield Lead for RPI E-3	
CR 20014150	Issue: 1996070 Action : 1 Lube Oil - Fuel Oil Incompatibility in Emergency Diesel Generator Set (OE7869) - Reassess This External Operations Experience	
CR 20014805	Inadequate D1/D2 Diesel Tornado Damage Analysis	
SP 1039	Tornado Hazard Monthly Site Inspection	Revision 5

1992-0162	NRC Commitment for Tornado Hazards in the Vicinity of Unit 1 Diesel Generators 1989 Response to Station Blackout Rule, 10CFR50.63
Calculation ENG-PI-002	Probabilistic Risk Assessment of D1 EDG Room Door Vulnerability to Tornado Missile
Calculation ENG-PI-005	Tornado & Seismic Evaluation of D1/D2 Components

1R16 Operator Workarounds

Temporary Change Notice (TCN) 20010996 to Operating Procedure C31	Fire Protection Systems	April 25, 2001
CR 20015183	TCN 20010996 Results in Operator Workaround	
Plant Safety Procedure F5 Appendix A	Fire Strategies	Revision 9

1R19 Post-Maintenance Testing

Maintenance Standards Implementing Procedure 4019	D5/D6 5 Year Inspection	Revision 0
WO 0107516	Perform D5 Break-in Run	
WO 0107517	Perform D5 Boroscope After Break-in Run	
WO 0107522	Perform SP 2295, D5 Diesel Generator 6 Month Fast Start Test	
WO 0107309	Perform Break-in Run on D6 After Engine Repair	
WO 0107308	Perform Boroscope Inspection of D6 After Break-in Run	
WO 0107321	Perform SP 2307 D6 Diesel Generator 6-Month Fast Start Test	

1R20 Refueling and Other Outage Activities

Outage Hold List	D5-D6 Forced Outage May 2001 Hold List	May 30, 2001
CR 20014365	21 Steam Generator Hot Leg Primary Manway was Inspected and Evidence of Past Leakage was Observed	

WO 0107342	Remove Primary Manway Cover on 21 Steam Generator Hot Leg	
Operating Procedure 2C1.2	Unit 2 Startup Procedure	Revision 23
Special Operating Procedure 2D2	RCS [Reactor Coolant System] Reduced Inventory Operation	Revision 11

1R22 Surveillance Testing

SP 2269	SI Accumulator Check Valves Refueling Leak Test	Revision 9
SP 2093	D5 Diesel Generator Monthly Slow Start Test	Revision 67
DBD SYS-38A	Emergency Diesel Generator System	Revision 2

1R23 Temporary Plant Modifications

Temporary Modification 01T083	Secondary Coil Circuit of E3 Rod Position Indication and E3 Rod Position Indication Shield Wire at TB-1134.	
Safety Evaluation Screening 878	Rod Position Indication Filtering	Revision 0
Safety Evaluation Screening 876	Rod Position Indication Shield Filtering	Revision 0
Work Order 0107651	T-Mod Filter Installation and Testing	Revision 0
Drawing NF-40174-2	Penetration Cabinets 1134 and 1135 Wiring Diagrams (Penetration C3)	Revision F
Temporary Modification 01T086	E3 Rod Position Indication Signal Conditioner Card in Rack 1RPI	
WO 0107667	Install E3 Temporary Modification 01T086	
Safety Evaluation Screening 1020	T-mod #01T086	Revision 0

2PS1 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems

RPIP [Radiation Protection Implementing Procedure] 1302	Unconditional Release of Materials	Revision 13
RPIP 4501	Spectrum Analysis Efficiency Calibration	Revision 5

RPIP 4502	Gamma Spectrum Analysis Energy Calibration	Revision 7
RPIP 4505	Liquid Waste Tank Release Instructions	Revision 9
RPIP 4509	Containment Release Instruction	Revision 7
RPIP 4510	Liquid Continuous Release Report	Revision 10
RPIP 4511	Airborne Continuous Release Report	Revision 5
RPIP 4515	Release Summary Report	Revision 4
RPIP 4517	Integration of Airborne Stack Monitors	Revision 5
RPIP 4518	Septic Tank Sampling	Revision 5
RPIP 4526	Composite Sample Preparation	Revision 9
RPIP 4528	Effluent Surveillance Sample Collection	Revision 11

2PS3 Radiological Environmental Monitoring and Radioactive Material Control Programs

RPIP 4700	Radiological Environmental Monitoring Program	Revision 8
RPIP 4710	Annual Land Use Census and Critical Receptor Identification	Revision 4
RPIP 4715	REMP Calibration of Rotameter	Revision 3
RPIP 4734	REMP Cultivated Crops Sampling	Revision 3
RPIP 4731	REMP Air Sampling	Revision 7
RPIP 4732	REMP Water Sampling	Revision 7
RPIP 4733	REMP Milk Sampling	Revision 5
RPIP 4735	REMP Miscellaneous Sampling	Revision 3
RPIP 4736	REMP Measurement of Direct Radiation by TLDs	Revision 4
C21.1-5.11	Releasing 121 CVCS [Chemical and Volume Control System] Monitor Tank to the River	Revision 20
TCN 2001-1212	Releasing 121 CVCS Monitor Tank to the River	
TCN 2001-1223	Liquid Waste Tank Release Procedure	
CR 20001657	REMP Air Sample Station P-4 Filtration from Trees	
CR 20002431	Missed REMP Iodine and Particulate Samples	

CR 20003154	Effluent Release Filters Found Incorrectly Installed
CR 20003227	RPS Incorrectly Calculated and Used the Wrong Sample Volume-Unit 2 Particulate Sample
CR 20003696	Four Day Decay Samples Not Decay Corrected in SP-1057
CR 20004103	Material Stored Around 2R30/47 Preventing Access to Area
CR 20005000	Abnormal Activity in Unit 1 SGBD Not Detected During Spectrum Analysis Review
CR 200005678	REMP Air Sampler 4019 At Site P-1 had Slightly High As-Found (-8%)
CR 20005839	Investigate Cause and Corrective Action of Non-Conservative Correlation Between 1R22 and Grab Samples
CR 20010474	Resolve Conflict of Opening Containment Doors Before the In-service Purge is Complete
CR 20010991	Resolve Conflict of Opening Containment Doors Before the In-service Purge is Complete. Possible ODCM Violation
CR 20011334	Evaluate Why Some Flow Meters for Rad and Effluent Sampling are Calibrated and Some are Not
CR 20011607	Inadequate Fan Configuration Used in Airborne Volume from Shield Building
CR 20013890	REMP Drinking Water Year 2000 Annual Gross Beta resulted in Relatively High Results
CR20014423	Born Goats No Longer Sampled for REMP
OR 2000071	Observation Report Prairie Island REMP
OR [Observation Report] 2000121	Observation Report Prairie Island Radioactive Effluent Controls
OR 2000131	Observation Report Prairie Island Radiation Protection Department Problem Identification
OR 2000136	Observation Report Prairie Island REMP
Self-Assessment	2001 Efficiency Calibrations and 47mm Particulate Filter Issues

	Annual Report to the NRC - Radiation Environmental Monitoring Program, January 1 to December 31, 2000	May 15, 2001
	Annual Radioactive Effluent and Waste Disposal Report for January through December 2000	May 15, 2001
USAR, Appendix H	The Meteorological Program	Revision 4
USAR, Section 2.7	Radiological Environmental Monitoring Program	Revision 18

4OA1 Performance Indicator Verification

NEI 99-02	Regulatory Assessment Performance Indicator Guideline	Revision 1
	Monthly Effluent Release and Offsite Dose Summary	2000 and 2001
	Monthly Effluent Monitor Setpoint Determinations	2001
	Unit 2 Handwritten Control Room Logs	March 1 - June 30, 2000
	Unit 1 and Unit 2 Electronic Control Room Logs	July 1, 2000 - March 31, 2001
	Monthly Operating Reports (12 reports)	April 2000 - March 2001
LER 2-00-01	Reactor Trip from 22% Power While Shutting Down for Refueling, Caused by Feedwater Heater Hi Hi Level Turbine Trip Signal	

4OA3 Event Followup

LER 1-01-01	Failure to Physically Lock Valves Associated with Technical Specification Required Safety Injection Flow Path
LER 2-01-01	Failure to Meet Technical Specification Limiting Condition for Operation Verification within Eight Hour Limit Due to Personnel Error
LER 2-01-02	Emergency Diesel Generator Out of Service Longer than Technical Specification Allowed Outage Time