

December 12, 2001

Mr. Mano Nazar
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 50-282/01-17; 50-306/01-17

Dear Mr. Nazar:

On November 15, 2001, the NRC completed an inspection at your Prairie Island Nuclear Generating Plant. The enclosed report documents the inspection findings which were discussed on November 15, 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.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosures 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/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Sincerely,

Original signed by
Roger D. Lanksbury

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 50-282/01-17; 50-306/01-17

See Attached Distribution

DOCUMENT NAME: G:\PRA\PRA2001017DRP.WPD

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

OFFICE	RIII		RIII							
NAME	MKunowski:ntp		RLanksbury							
DATE	12/12/01		12/12/01							

OFFICIAL RECORD COPY

M. Nazar

-2-

cc w/encl: Plant Manager, Prairie Island
R. Anderson, Executive Vice President
and Chief Nuclear Officer
Site Licensing Manager
Nuclear Asset Manager
J. Malcolm, Commissioner, Minnesota
Department of Health
State Liaison Officer, State of Wisconsin
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
of Commerce

cc w/encl: Plant Manager, Prairie Island
R. Anderson, Executive Vice President
and Chief Nuclear Officer
Site Licensing Manager
Nuclear Asset Manager
J. Malcolm, Commissioner, Minnesota
Department of Health
State Liaison Officer, State of Wisconsin
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
of Commerce

ADAMS Distribution:

WDR
DFT
TJK3
RidsNrrDipmlipb
GEG
HBC
SPR
C. Ariano (hard copy)
DRPIII
DRSIII
PLB1
JRK1

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

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

Report No: 50-282/01-17; 50-306/01-17

Licensee: Nuclear Management Company, LLC

Facility: Prairie Island Nuclear Generating Plant

Location: 1717 Wakonade Drive East
Welch, MN 55089

Dates: October 1 through November 15, 2001

Inspectors: S. Ray, Senior Resident Inspector
S. Thomas, Resident Inspector
M. Mitchell, Radiation Specialist
R. Jickling, Emergency Preparedness Analyst

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

SUMMARY OF FINDINGS

IR 05000282-01-17; IR 05000306-01-17, on 10 /01-11/15/2001; Nuclear Management Company, Prairie Island Nuclear Generating Plant, Units 1 & 2, Resident Inspector Report, Emergency Preparedness Specialist Report, and Radiation Safety Specialist Report.

This report covers a 7 week routine resident inspection, a baseline emergency preparedness inspection, and a baseline radiation protection inspection. The inspection was conducted by resident and specialist inspectors. 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. Unit 2 was operated at or near full power until October 31, 2001, except that power was reduced to about 50 percent from October 27 through 28 for routine turbine valve testing. On October 31, 2001, Unit 2 was manually tripped from full power due to loss of condenser vacuum resulting from a maintenance activity. The reactor remained in hot shutdown mode until it was brought critical on November 2. Unit 2 was placed online on November 3 and reached full power on November 4, 2001. Unit 2 was operated at full power for the remainder of the inspection period.

1. REACTOR SAFETY

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

1R04 Equipment Alignment (71111.04)

a. Inspection Scope

The inspectors performed a partial walkdown of the accessible portions of equipment trains to verify that critical portions of the redundant system or train, or other significant protected equipment, were in the correct lineup while one safety significant system or train was out-of-service. The inspectors used the checklists and drawings listed at the end of this reports to determine the correct lineups. The inspectors also reviewed outstanding work orders (WOs) and condition reports (CRs) associated with each train to verify that these documents did not reveal issues that could affect train function. Significant WO's and CRs reviewed are listed at the end of this report. During the walkdowns, the inspectors also observed the material condition of the equipment to verify that there were no significant conditions not already in the licensee's work control system.

The following walkdowns were conducted:

- the D2 emergency diesel generator while the D1 emergency diesel generator was out-of-service for preventive maintenance;
- the 21 motor-driven auxiliary feedwater (MDAFW) pump train while the 22 turbine-driven auxiliary feedwater (AFW) train was unavailable due to surveillance testing; and
- the 12 diesel-driven cooling water pump (DDCLP) train while the 22 DDCLP was unavailable due to preventive and corrective maintenance.

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 fire areas for inspection based on their overall contribution to internal fire risk, as documented in the Individual Plant Examination of External Events (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. Using the documents listed at the end of this report, the inspectors verified that fire hoses and extinguishers were in their designated locations and available for immediate use, that fire detectors and sprinklers were unobstructed, and that transient material loading was within the analyzed limits, and that fire doors, dampers, and penetration seals appeared to be in satisfactory condition.

The following areas were inspected:

- Fire Area 117: Bus 25 and Motor Control Center (MCC) 2TA1 Room;
- Fire Area 118: Bus 26 and MCC 2TA2 Room;
- Fire Area 89: Security Guardhouse; and
- Fire Area 90: Security Diesel Generator Building.

b. Findings

No findings of significance were identified.

1R11 Licensed Operator Requalification Program (71111.11)

a. Inspection Scope

The inspectors observed an operating crew on the simulator during requalification testing activities. 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 were compared to licensee management expectations and guidelines as presented in Section Work Instruction (SWI) O-0, "Conduct of Operations," SWI O-2, "Shift Organization, Operation, and Turnover," SWI O-10, "Operation Manual Usage," SWI O-25, "Periodic Data Acquisition and Logkeeping," Emergency Plan Implementing Procedure F3-2, "Classification of Emergencies," and Emergency Plan Implementing Procedure F3-5, "Emergency Notification."

The inspectors also observed the performance of the examination evaluators, their critique of the crew's performance, and the self-critique done by the operating crew to verify that any observed weaknesses were identified and documented by the licensee. Additionally, the inspectors reviewed the simulator configuration compared to the actual control room to verify that they were as identical as practical.

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;
- 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 CRs 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. In addition, the inspectors reviewed CRs to verify that minor deficiencies identified during these inspections were entered in the licensee's corrective action system.

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

- 480 volt electrical;
- fire detection and protection (FP); and
- instrument air; and
- fuel oil.

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 or activities during a time when more than one significant system or train was unavailable. 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 inspection was conducted to verify 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 inspectors used the licensee's daily configuration risk assessments, observations of shift turnover meetings, observations of daily plant status meetings, and the documents listed at the end of this report, 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 maintenance activities:

- evaluation of a new type of flow detector for the 21 safety injection (SI) pump minimum recirculation line;
- closing of the D1 and D2 emergency diesel generator cross-flow control valves to prevent keep-warm water from circulating through the air intercoolers;
- isolation of MCC 1T2 for installation of a transfer switch;
- troubleshooting of Unit 1 control room annunciator problems; and
- troubleshooting and development of contingency plan for 2RX transformer lockout.

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 observed operator performance during an attempt to isolate the Unit 2 main condenser steam jet air ejectors after a maintenance problem, a partial loss of main condenser vacuum, a manual reactor trip, closing of the main steam isolation valves, and establishment of stable plant conditions. The inspectors also observed the subsequent reactor startup which was considered non-routine because it was accomplished during a period of rapidly changing xenon concentration. The inspection was completed to determine whether operator errors contributed to the unplanned transient, whether operator response to the event was proper and in accordance with

established procedures, and whether operator errors affected the functioning of any mitigation systems. The inspectors used the documents listed at the end of this report to verify that operator performance was acceptable.

b. Findings

No findings of significance were identified. However, the licensee determined that an inadequate evaluation of a maintenance activity resulted in a pipe failure and the need to isolate the air ejector, and an operator error in the development of the isolation contingency plan resulted in the loss of vacuum and the required manual trip. These issues have been entered into the licensee's corrective action system and the event will contribute to the Scram with Loss of Normal Heat Removal performance indicator. The response of the operators and mitigating systems to the trip was normal. Therefore, the errors were not risk significant and they were not evaluated using the SDP.

1R15 Operability Evaluations (71111.15)

a. Inspection Scope

The inspectors selected CRs for risk significant components and systems in which the operability issues were discussed. These CRs were evaluated to determine whether the operability of the components and systems was justified. The inspectors compared the operability and design criteria in the appropriate sections of the Technical Specifications and Updated Safety Analysis Report to the licensee's evaluations presented in the CRs below and documents listed at the end of this report to verify that the components or systems were operable.

The conditions evaluated were:

- CR 20018009 regarding the fact that the current D1 and D2 emergency diesel generator heat exchanger analysis did not reflect the D2 configuration with the keep-warm cross-connect line open and heat exchanger tubes plugged;
- CR 20016687 regarding questions about the ampacity rating of the Busses 25 and 26 bus bars;
- CR 20017658 regarding the need to fill the D5 emergency diesel generator, engine 2, high temperature (HT) coolant expansion tank; and
- CR 20018401 regarding an error affecting two cooling water calculations.

b. Findings

No findings of significance were identified.

1R19 Post-Maintenance Testing (71111.19)

a. Inspection Scope

The inspectors reviewed post-maintenance testing activities associated with maintenance on important mitigating and support systems to ensure that the testing adequately verified system operability and functional capability with consideration of the actual maintenance performed. The inspectors used the appropriate sections of Technical Specifications and the Updated Safety Analysis Report, as well as the documents listed at the end of this report, to evaluate the scope of the maintenance and verify that the post-maintenance testing performed adequately demonstrated that the maintenance was successful and that operability was restored. In addition, the inspectors reviewed CRs to verify that minor deficiencies identified during these inspections were entered into the licensee's corrective action system.

Testing subsequent to the following activities were observed and evaluated:

- testing following the D1 emergency diesel generator 18-month inspection;
- testing following wire code changes on the 22 DDCLP damper CD-34139;
- testing following annual preventive maintenance on the 22 DDCLP;
- testing following annual preventive maintenance on the 21 residual heat removal (RHR) pump and heat exchanger; and
- testing following replacement of a test valve on the 11 component cooling (CC) heat exchanger outlet temperature control valve.

b. Findings

No findings of significance were identified.

1R22 Surveillance Testing (71111.22)

a. Inspection Scope

The inspectors witnessed selected surveillance testing and/or reviewed test data to verify that the equipment tested using the surveillance procedures (SPs) met Technical Specifications, the Updated Safety Analysis Report, 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 mitigating systems capability. The inspectors used the documents listed at the end of this report to verify that the testing met the Technical Specifications frequency requirements; that the tests were conducted in accordance with the procedures, including establishing the proper plant conditions and prerequisites; that the test acceptance criteria were met; and that the results of the tests were properly reviewed and recorded. In addition, the inspectors verified that minor deficiencies identified during these inspections were entered into the licensee's corrective action system.

The following tests were observed and evaluated:

- SP 2295, “D5 Diesel Generator 6 Month Fast Start Test”;
- SP 1102, “11 Turbine-Driven AFW Pump Monthly Test”;
- SP 2102, “22 Turbine-Driven AFW Pump Monthly Test”; and
- SP 2088A, “Train A Safety Injection Quarterly Test.”

b. Findings

No findings of significance were identified.

1R23 Temporary Modifications (71111.23)

a. Inspection Scope

The inspectors reviewed Temporary Modification 01T088, “Unit 1 Operation with 1M Transformer Isolated.” The purpose of the inspection was to verify that the temporary modification had been properly evaluated against the design criteria in the Updated Safety Analysis Report, that it posed no unanalyzed increase in risk, that it did not create an unanalyzed safety question or require a change to the Technical Specifications, and that the plant was in a configuration consistent with the temporary modification documentation. The inspectors also reviewed the licensee’s plans and schedule for returning the system to a normal configuration to verify that they were reasonable. The inspectors used the documents listed at the end of this report to perform this evaluation.

b. Findings

No findings of significance were identified.

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 reactor facility’s emergency planning zone to verify that the system was properly tested and maintained. The inspectors also reviewed procedures and records for a 12-month period ending June 2001 related to ANS testing, annual preventive maintenance, and non-scheduled maintenance. The inspectors reviewed the licensee’s criteria 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 licensee's 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 semi-annual, off-hours staff augmentation drill procedures, related July 2000 through June 2001 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.

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

a. Inspection Scope

The inspectors reviewed the Nuclear Performance Assessment staff's audit for 2000 and observation reports for 2000 and 2001 to ensure that these assessment activities 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 self-assessments, critiques, and an event evaluation to evaluate the EP staff's efforts to identify and correct weaknesses and deficiencies. Additionally, the inspectors reviewed a sample of EP items and CRs 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

2OS3 Radiation Monitoring Instrumentation (71121.03)

.1 Source Tests and Calibration of Radiological Instrumentation

a. Inspection Scope

The inspectors reviewed the most recent calibration records for radiological instruments associated with transient high and very high radiation areas (area radiation monitors (ARMs)) and instruments used for providing surveys of high radiation work and/or for air monitoring for jobs with the potential for workers to receive greater than 100 millirem

committed effective dose equivalent (CEDE). The inspectors reviewed these records to verify that radiological instrumentation had been calibrated in accordance with procedures and that alarm set-points (if applicable) were properly set. In particular, the inspectors reviewed selected ARMs (spent fuel pool, primary coolant sampling station room, and shipping and receiving room) to verify that they had been appropriately calibrated and (function and operation) tested in calendar year 2001. The inspectors reviewed the calibration procedures and calendar year 2001 calibration records to verify that selected portable radiation survey instruments had been properly calibrated consistent with the licensee's procedures. The inspectors also reviewed the calibration procedures and calendar year 2001 calibration records for the whole body counter to verify that it had been properly calibrated. The inspectors observed the calibration of two AM-2 area monitoring instruments to verify that the instruments were calibrated in compliance with the appropriate procedures.

b. Findings

No findings of significance were identified.

.2 Self-Contained Breathing Apparatus (SCBA) Program

a. Inspection Scope

The inspectors reviewed Radiation Protection Implementing Procedure (RPIP) 1210, "Charging SCBA Air Cylinders;" RPIP 1214, "Respiratory Protection Equipment Testing;" and RPIP 1215, "Respiratory Equipment Control," to verify the adequacy of the program to provide SCBA for unknown or emerging conditions. The inspectors walked down the available SCBA equipment and filling stations, reviewed the status and surveillance records of SCBA staged for use in the plant, assessed the licensee's capability for refilling and transporting SCBA bottles for use in the control room and support locations in the plant, and reviewed calendar year 2001 training and qualification records of selected individuals to verify compliance with Subpart H of 10 CFR Part 20 and with station procedures.

b. Findings

No findings of significance were identified.

.3 Identification and Resolution of Problems

a. Inspection Scope

The inspectors reviewed a 2001 radiation protection department self-assessment of occupational radiation protection instrument control to evaluate the effectiveness of the self-assessment process to identify, characterize, and prioritize problems and to verify that previous radiological instrumentation related issues were adequately addressed. The inspectors also reviewed selected year 2001 CRs that addressed radiation instrument deficiencies. The review was used to determine if any significant radiological incidents involving radiation instrument deficiencies had occurred during the year 2001.

The review was also conducted to verify that the licensee had effectively implemented the corrective action program.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

.1 Reactor Coolant System Leakage

a. Inspection Scope

The inspectors reviewed the PI data submitted by the licensee for completeness and accuracy for the Reactor Coolant System Leakage PI in the Barrier Integrity cornerstone. The inspectors compared the data reported by the licensee to the definitions and guidance contained in Nuclear Energy Institute (NEI) 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 1. The inspectors reviewed the results of the Unit 1 and Unit 2 daily reactor coolant system leakage surveillance tests for the period of July 2000 through June 2001 and other documents listed at the end of this report.

b. Findings

No findings of significance were identified.

.2 Emergency Preparedness

a. Inspection Scope

The inspectors reviewed the PI data to verify that the licensee had accurately reported these indicators: ANS, ERO Drill Participation, and Drill and Exercise Performance (DEP) for the EP cornerstone. Specifically, the inspectors reviewed the licensee's PI records, data reported to the NRC, and condition reports for the period July 2000 through June 2001, 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 scenarios and related evaluations were also reviewed.

b. Findings

No findings of significance were identified.

.3 Occupational Exposure Control Effectiveness

a. Inspection Scope

The inspector reviewed the licensee's assessment of its PI for occupational exposure control effectiveness to determine if indicator related data was adequately assessed and reported. Since no reportable elements were identified by the licensee for the last four quarters, the inspector compared the licensee's data with 4th quarter 2000 and the first three quarters of 2001 with CRs to verify that there were no occurrences concerning the occupational radiation safety cornerstone.

b. Findings

No findings of significance were identified.

4OA3 Event Followup (71153)

.1 Manual Reactor Trip and Closing of the Main Steam Isolation Valves on Unit 2

a. Inspection Scope

As discussed in Section 1R14 of this report, the inspectors observed plant response following a manual reactor trip of Unit 2 on October 31, 2001. The purpose of the inspection was to verify that all required mitigating systems performed as expected, that the correct operator actions were performed, that the event was properly classified and reported, and that the licensee properly resolved event issues prior to restart. The inspectors also provided information to the NRC risk analysts for their estimation of conditional core damage probability. The inspectors used control room logs and other documents listed at the end of this report in the evaluation.

b. Findings

No findings of significance were identified. The NRC risk analysts determined that there was no significant impact on the conditional core damage probability as a result of this event above, an uncomplicated reactor scram. Therefore, the event had low risk significance, and additional inspection, except for routine review of the Licensee Event Report (LER), when issued, was not warranted.

.2 (Closed) LER 1-01-04: Water Intrusion Into a Control Rod Electrical Cabinet Results in Dropped Rods Causing a Negative Flux Reactor Trip

This event was discussed in Inspection Report 50-282/01-15; 50-306/01-15, Section 1R20. No significant new issues were identified.

.3 (Closed) LER 1-01-05: Fault and Fire in Non-Safeguards Circuit Breaker Results in Reactor Trip and Auxiliary Feedwater System Actuation

This event was discussed in Inspection Report 50-282/01-15; 50-306/01-15, Sections 1R20 and 4OA3.2. No significant new issues were identified.

- .4 (Open) LER 2-01-03, Revision 1 and (Closed) LER 2-01-03, Revision 0: Technical Specification Required Shutdown of Unit 2 Due to Declared Inoperability of Both Emergency Diesel Generators

This event was discussed in Special Inspection Report 50-306/01-13. The revision corrected an NRC-identified error in the reported scope of the laboratory analysis discussed in the EVENT DESCRIPTION section of the LER. The revised LER will remain open pending resolution of Unresolved Item 50-306/01-13-01.

4OA6 Meeting(s)

Exit Meeting

The resident inspectors presented the inspection results to Mr. M. Nazar and other members of licensee management at the conclusion of the inspection on November 15, 2001. The licensee acknowledged the findings presented. No proprietary information was identified.

Interim Exit Meetings

Senior Official at Exit:	M. Werner, Plant Manager
Date:	October 19, 2001
Proprietary:	No
Subject:	Emergency Preparedness Program and Performance Indicators
Change to Inspection Findings:	No

Senior Official at Exit:	M. Werner, Plant Manager
Date:	October 19, 2001
Proprietary:	No
Subject:	Radiation Monitoring Instrumentation, Occupational Radiation Safety, and Performance Indicator
Change to inspection findings:	No

KEY POINTS OF CONTACT

Licensee

M. Agen, Emergency Preparedness Coordinator
T. Allen, General Superintendent Plant Operations
T. Amundson, General Superintendent Engineering
T. Breene, Manager Nuclear Performance Assessment
B. Jefferson, Director Site Operations
A. Johnson, General Superintendent Radiation Protection and Chemistry
L. Meyer, General Superintendent Plant Maintenance
M. Nazar, Site Vice President
Y. Shen, Probabilistic Risk Assessment Project Manager
J. Waddell, Superintendent Security
M. Werner, Plant Manager
L. Williams, Director Site Engineering

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

1-01-04	LER	Water Intrusion Into a Control Rod Electrical Cabinet Results in Dropped Rods Causing a Negative Flux Reactor Trip (Section 4OA3.2)
1-05-05	LER	Fault and Fire in Non-Safeguards Circuit Breaker Results in Reactor Trip and Auxiliary Feedwater System Actuation (Section 4OA3.3)
2-01-03, Revision 0	LER	Technical Specification Required Shutdown of Unit 2 Due to Declared Inoperability of Both Emergency Diesel Generators (Section 4OA3.4)

Discussed

2-01-03, Revision 1	LER	Technical Specification Required Shutdown of Unit 2 Due to Declared Inoperability of Both Emergency Diesel Generators (Section 4OA3.4)
------------------------	-----	--

LIST OF ACRONYMS USES

ADAMS	Agencywide Documents Access and Management System
AFW	Auxiliary Feedwater
ANS	Alert and Notification System
ARM	Area Radiation Monitor
AWI	Administrative Work Instruction
CC	Component Cooling
CEDE	Committed Effective Dose Equivalent
CFR	Code of Federal Regulations
CR	Condition Report
CV	Control Valve
DDCLP	Diesel-Driven Cooling Water Pump
DDFP	Diesel-Driven Fire Pump
DEP	Drill and Exercise Performance
EP	Emergency Preparedness
ERO	Emergency Response Organization
FP	Fire Detection and Protection
HT	High Temperature
IMC	Inspection Manual Chapter
IPEEE	Individual Plant Examination of External Events
IPP	Integrated Planning Process
IR	Inspection Report
LER	Licensee Event Report
LT	Low Temperature
MCC	Motor Control Center
MDAFW	Motor-Driven Auxiliary Feedwater
MDFP	Motor-Driven Fire Pump
NEI	Nuclear Energy Institute

NMC	Nuclear Measurements Corporation
NNC	National Nuclear Corporation
NRC	Nuclear Regulatory Commission
PANS	Public Alert and Notification System
PARS	Publicly Available Records
PI	Performance Indicator
PINGP	Prairie Island Nuclear Generating Plant
PM	Preventive Maintenance
RHR	Residual Heat Removal
RPIP	Radiation Protection Implementing Procedure
RWST	Refueling Water Storage Tank
SCBA	Self-Contained Breathing Apparatus
SDP	Significance Determination Process
SI	Safety Injection
SP	Surveillance Procedure
SSC	Structure, System, or Component
SWI	Section Work Instruction
TCN	Temporary Change Notice
TP	Test Procedure
WBC	Whole Body Counter
WO	Work Order

LIST OF DOCUMENTS REVIEWED

1R04 Equipment Alignment

Drawing NF-39255-1	Diesel Generators D1 & D2 Units 1 and 2 Flow Diagram	Revision Z
Integrated Checklist C1.1.20.7-5	D2 Diesel Generator Valve Status	Revision 15
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	Diesel Generator D2 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 15
Operating Procedure C18.1	Engineering Safeguards Equipment Support Systems	Revision 11
CR 20014348	D2 Jacket Water and Air Coolant Heat Exchanger Drain Isolation Valve Has No Tag and Is Not Found on Drawing NF-39255-1	
CR 20017479	Handle on 2DG-22 and 1DG-22 Found in Partially Closed Position - Wear in the Stem/Ball Connection Is Possible	
CR 20017887	122 D2 Diesel Exhaust Fan	
WO 0111751	122 D2 Diesel Generator Exhaust Fan Did Not Start	
Drawing NF-39223	Flow Diagram Feedwater System	Revision AX
System Prestart Checklist C28-7	Auxiliary Feedwater System Unit 2	Revision 45
System Prestart Checklist C28-16	21 Motor Driven Auxiliary Feedwater Pump	Revision 2
CR 20000410	Valve AF-18-11, 21 MDAFW Pump Discharge Drain Is Not on Checklist C28.7	
Drawing NF-39216-1	Flow Diagram Unit 1 & 2 Cooling Water - Screenhouse	Revision AD
Integrated Checklist C1.1.35-3	Cooling Water System	Revision 19
CR 20001911	12 DDCLP Fell in Performance Curve Action Range During Performance of SP 1106A	

CR 20015161	12 DDCLP A Filter - Upon Opening Filter Outlet Valve, Mud Left Over from Previous Filter Change Plugged Piping Going to Bearing
CR 20017842	12 Diesel-Driven Cooling Water Pump Is In the Alert Range of the Performance Curve
WO 0107982	Oil Leak on 12 DDCLP Starting Air Compressor
WO 0108071	Broken Foot Mount on 12 DDCLP Starting Air Compressor
WO 0108109	Oil Leak on 12 DDCLP Governor
WO 0114408	12 DDCLP Seal Water Piping Is Plugged

1R05 Fire Protection

Plant Safety Procedure F5	Fire Fighting	Revision 25
Plant Safety Procedure F5 Appendix F	Fire Hazard Analysis	Revision 12
Plant Safety Procedure F5 Appendix A	Fire Strategies	Revision 8
IPEEE NSPLMI-96001 Appendix B	Internal Fires Analysis	Revision 2
F5 Appendix D	Impact of Fire Outside Control/Relay Room	Revision 6

1R11 Licensed Operator Requalification Program

Lesson Plan P9160S-001	Simulator Cycle Quiz # 32	Revision 0
SWI O-0	Conduct of Operations	Revision 1
SWI O-2	Shift Organization, Operation, and Turnover	Revision 45
SWI O-10	Operation Manual Usage	Revision 39
Emergency Plan Implementing Procedure F3-2	Classification of Emergencies	Revision 28
Emergency Plan Implementing Procedure	Emergency Notification	Revision 20

1R12 Maintenance Rule Implementation

General

	2000 Equipment Performance Annual Report	April 20, 2001
	Maintenance Rule System Basis Document, Volume 1A	Revision 3
	Quarterly Equipment Performance Report - 1 st Quarter 2001	May 4, 2001
	Quarterly Equipment Performance Report - 2 nd Quarter 2001	August 7, 2001
NUMARC 93-01	Nuclear Energy Institute Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	Revision 2
Regulatory Guide 1.160	Monitoring the Effectiveness of Maintenance at Nuclear Power Plants	Revision 2

480-Volt Electrical System

CR 20010064	Breaker A0222-060192 Has Loose Bolt Following Planned Maintenance
CR 20010380	Two MCC Cubicles Found On 1T1 Without Mechanical Interlocks. Determine Scope and Resolution of Problem
CR 20010785	Breaker A023-030192 Had Moving Contact Assembled Incorrectly. Found Spacers Not Properly Installed During Planned Maintenance of Breaker
WO 0000421	Breaker 121C-15, 22 Cooling Water Pump Left Jacket Water Heater
WO 0010297	MCC 1T1: Isolate and Disconnect Feeder Cables at MCC Main Lugs. Pull Back at Transfer Switch Line Side Fusing. Restore Power and Perform Preop Testing
WO 0010775	11 Battery Room Special Exhaust Fan Thermals Tripped
WO 0011132	Bus 112 Inspection
WO 0012875	Inspect Secondary Contact Mounting Screws
WO 0100325	Breaker 112G-11 [121 control room water chiller] Would Not Close
WO 0107981	Inspect MCC's for Door Interlocks

Northern States Power Company Engineering Department Drawing NF-40022-1	Circuit Diagram - 4KV and 480V Safeguard Busses Unit 1	Revision E
Northern States Power Company Engineering Department Drawing NF-40022-2	Circuit Diagram - 4KV and 480V Safeguard Busses Unit 2	Revision D

Fire Detection and Prevention System

Calculation ENG-ME-203	Evaluation of Screenhouse Internal Flooding	Revision 1
Calculation ENG-ME-458	Highest Acceptable Leak Rate in the Cooling Water Pump Rooms	Revision 0
CR 20005898	Investigate Possible Flooding of Safeguards Screenhouse Assuming Failure of a Vertical Cooling Water Pump Air and Vacuum Valve	
CR 20006149	No Restriction from Using Flashlights Under D5/D6 That May Activate the Flame Detectors and Trip the Deluge Valve	
CR 20010666	Potential Leak in FP Line in 121 Cooling Water Pump Room	
CR 20013734	121 MDFP [motor-driven fire pump] Failed to Shutdown When Performing C31, Section 5.2	
CR 20014015	Review of Licensing Correspondence Reveals Two Statements for Which No Supporting Documentation Can Be Found	
CR 20014750	WO 0107220 Was Routed as Non-Critical - Work Was to be Performed on FP System - WO Should Have Been Critical	
CR 20016443	D6 Deluge Tripped Shortly After Shutdown of D6 Diesel Generator Per SP 2305	
CR 20016848	121 MDFP Failed to Meet Acceptance Criteria in SP 1202 - Evaluate Pump Operability	
CR 20017612	Evaluate the Effects of Other Equipment from Pinhole Leak on 10-FP-17 in the Intake Screenhouse	
CR 20017765	Remove Section of Screenhouse Piping with Pinhole Leak	

CR 20017766	Inspect Screenhouse 10-Inch Header Piping After Removal for Extent of Microbiological Influenced Corrosion of the System
CR 200185153	Oil Soak Blankets in DDCLP Rooms Not Considered in Flood Analysis - Determine Potential Flood and Fix or Remove Blankets
CR 200185157	Oil Absorbent Rags on Floor of 12/22 DDCLP Rooms - Rags Present Flooding Concern
CR 200185943	Create Controls to Ensure Internal Flood Protection Features are Documented and Remain in Effect
WO 0106957	Remove Fire Detection Zone 59 from Service
WO 0106958	Restore Fire Detection Zone 59 to Service
WO 0110346	122 DDFP [diesel-driven fire pump] Backwash Line Has Pinhole Leak
WO 0110633	FP 97-20 Alarmed and Tripped Deluge Valve
WO 0110635	MV-32134 Did Not Open During 121/122 Fire Pump Test
WO 0111583	Pinhole Leak in Supply Header to Traveling Screens
WO 0111715	Pinhole Leak in FP Line to Screenwash Supply
WO 0111718	FP Line Elbow Below Minimum Wall Thickness
WO 0113942	Inspect/Repair MV-32134
WO 0113947	122 DDFP Needs a Radiator Cap

Instrument Air System

WO 0004382	Tighten 121 Instrument Air Compressor Valve Set Screw
WO 0013187	P3505-2-121 121 Air Compressor 4000 Hour PM [preventive maintenance]
WO 013188	P3505-1-121 121 Air Compressor 1000 Hour PM
WO 0104202	P3505-1-121 121 Air Compressor 1000 Hour PM

WO 0107593	Galled Set Screw On 121 Instrument Air Compressor
WO0013264	Perform 1000 Hour PM For 122 Instrument Air Compressor
WO 0100479	Replace 122 Air Compressor Unloader Supply Line
WO 0106964	P3505-1-122 122 Air Compressor 1000 Hour PM
WO 0006640	123 Instrument Air Compressor Not Unloading Properly
WO 0007996	P3505-1-123 123 Air Compressor 1000 Hour PM
WO 0013531	P3505-1-123 123 Air Compressor 1000 Hour PM
WO 0013532	P3505-2-123 123 Air Compressor 4000 Hour PM
WO 0104203	P3505-1-123 123 Air Compressor 1000 Hour PM

Fuel Oil

CR 20005666	Moisture Is Entering D6 Fuel Level Transmitter Housing For 2LT-5001 and 5002 Causing Corrosion	
CR 20012216	Manway Covers For Fuel Oil Storage Tanks. Water Leakage Onto Fuel Oil Storage Tank Pump Motors Causing Motor/Pump Degradation	
CR 20013741	Complete Work Orders to Seal and/or Insulate Covers Above The Pump Motors Before Winter Season	
CR 20013742	Dry Out Motors and Pumps to Allow Operation	
CR 20013966	Reevaluate Failure of 121 and 122 Heating Boiler Fuel Oil Storage Tank Pumps	
WO 0100962	122 Heating Boiler Fuel Oil Transfer Pump Won't Start	
Fluor Daniel Drawing NF-118252	D5/D6 Diesel Generator Fuel Oil System Flow Diagram	Revision D

Prairie Island Nuclear
Generating Plant Drawing
NF-39232

Flow Diagram, Fuel and Diesel Oil System
Unit 1 and 2

Revision A0

1R13 Maintenance Risk Assessment and Emergent Work Control

WO 0107450	Measure SI Minimum Recirculation Flow with Portable Flowmeter	
WO 0108026	Pressure Indicator-11825 Failed Calibration on IC-25I-1	
WO 0109804	SP 2088A Train A Safety Injection Pump Quarterly Test	
TP [test procedure] 2087A	Train A SI Pump Monthly Lubrication	Revision 0
SP 2088A	Train A Safety Injection Quarterly Test	Revision 0
TCN [temporary change notice] 2001-1366	Train A SI Pump Monthly Lubrication	
TCN 2001-1368	Train A SI Quarterly Test	
Temporary Modification 01T092	D1 and D2 Diesel Generators - Close Cross-Flow Valve to Prevent Keep-Warm Water from Circulating Through the Air Intercoolers	
NMC Standard 10 CFR 50.59 Screening, No. 1204	Temporary Modification 01T092, TCNs to C1.1.20.7-1, C1.1.20.7-5 and TCNs to Alarm Response Procedures 55300-0105, 55800-0105, TCNs to SWI-0-3 and SP 1210, "Safeguards Hold Verification"	Revision 0
WO 0111815	Close Keep-Warm Cross-Flow Valve for Intercooler [for D1]	
WO 0111814	Close Keep-Warm Cross-Flow Valve for Intercooler [for D2]	
WO 0010298	Design Change 99EB01 - MCC 1T2 Isolate, Disconnect, and Reland at Transfer Switch	
Computerized Load Lists CR 200185393	MCC 1T2, Panel 219, and Panel 1RPB8 Effect of Unavailability of MCC 1T2 on Unit 2 Was Not Assessed	
WO 0114371	Panel C Alarms-All Alarming at Same Time	
WO 0115020	Investigate 2RX Transformer Lockout	
WO 0115050	2RX Transformer Inspection Following Lockout	

WO 0115051	Ground 2RX Transformer and/or 2RX Bus Duct	
WO 0115052	2RX Bus Duct Inspection	
	Operator's Risk Report	November 8, 2001
	2RX Transformer Lockout Recovery Plan	November 8, 2001
CR 200185890	2RX Transformer Locked Out	
Abnormal Operating Procedure C20.3 AOP4	Electric Power System Operating Restrictions and Limitations Loss of 2RX Transformer	Revision 3
CR 200185959	Investigation of 2RX Bus Duct Following Lockout of 2RX Transformer Revealed Fault and Raises Questions on 2RY Bus Duct	

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

CR 200185657	Manual Reactor Trip Due to Condenser Vacuum Differential Greater Than 2.5 Inches	
Emergency Operating Procedure 2E-0	Reactor Trip or Safety Injection	Revision 19
Emergency Subprocedure 2ES-0.1	Reactor Trip Recovery	Revision 16
Operating Procedure 2C1.2	Unit 2 Startup Procedure	Revision 24
Operating Procedure C1B	Appendix - Reactor Startup	Revision 9
Xcel Energy internal correspondence from J. Peacock to C. Kurle	Cursory Failure Analysis - CV [control valve]-31385 Pipe Failure	November 2, 2001
Automated Engineering Services Corp. letter to C. Kurle	Evaluation of Main Steam Supply to 21 Air Ejector 1 Inch Diameter Pipe Failure at CV-31385 Unit 2	November 1, 2001
WO 0115103	Replace Valve Body Due to Internal Corrosion	

1R15 Operability Evaluations

CR 20018009	Current D1/D2 Heat Exchanger Analysis Do Not Reflect D2 Configuration with Keep-Warm Cross-Connect Open and Heat Exchanger Tubes Plugged	
-------------	--	--

Prairie Island Engineering Calculation ENG-ME-479	Tube Plugging Criteria for Unit 1 Diesel Generator Heat Exchangers
Prairie Island Engineering Calculation ENG-ME-480	Operability Determination for Unit 1 Diesel Generator Heat Exchangers with Tubes Plugged and 85F Cooling Water
CR 20016687	Pre-Station Blackout Project Bus 25/26 Were Thought to be 2000 Amp and Are Now Thought to Have Been 1200 Amp - Evaluate and Document
CR 20017658	D5 Engine 2 HT Expansion Tank Level Decreased to 9% During 24-Hour Run - Low Level Alarm During Cooldown Required Level to be Increased
CR 20003452	D5 Coolant Expansion Tanks Filled with Portable Pump and Tubing Versus Installed System - Safety/Spill/Efficiency Concern
CR 20003489	Installed Equipment Not Being Used for Adding to D5/D6 Coolant Expansion Tanks
CR 20005307	Installed Equipment Not Being Used for D6 Coolant Addition
CR 20013604	Adding Coolant to D5 Engine 2 HT Tank - Tank and Pump Installed to Do This but Tank Is Full of Scale
CR 20017684	D5/D6 Coolant Expansion Tank Levels Need Greater Attention
CR 20017709	Identify if D5/D6 Coolant Makeup System Can Be Rebuilt or if IPP [Integrated Planning Process] 010194 Should Redesign the System
WO 9506632	Add Coolant to D5 HT/LT [Low Temperature] Circuits
WO 9510444	Add Coolant to the D6 HT/LT Expansion Tanks
WO 9708201	Add Fluid to D6 Engine 1 HT Expansion Tank
WO 9804111	Add Corrosion Inhibitor to D5 HT and LT Cooling
WO 9812033	D6 Engine 1 HT Expansion Tank Level Indication Indicating 56%
WO 9812040	Add Coolant to D5 Engine 1 and 2 HT Expansion Tanks

WO 9912615	Add Glycol to D5 HT Expansion Tanks	
WO 9912616	Add Glycol to D6 HT Expansion Tanks	
WO 0008301	Add Coolant to D5 Engine 1 and 2 HT Expansion Tanks	
WO 0013485	Add Coolant to the D6 HT Expansion Tank	
WO 0101147	D5 Engine 2 HT Coolant Tank at 59% - Add Coolant	
WO 0107468	Add Coolant to the D6 HT/LT Expansion Tanks	
WO 0111657	Fill D5 HT Expansion Tanks Per Attached Procedure Not to Exceed 80%	
Operating Procedure 2C20.7	D5/D6 Diesel Generators	Revision 16
Updated Safety Analysis Report Section 8.4	Plant Standby Diesel Generator Systems	Revision 23
CR 20018401	Error Discovered That Affects Two Cooling Water Calculations	
Prairie Island Engineering Calculation ENG-ME-474	Cooling Water System Operation During Post Loss of Coolant Accident Recirculation	

1R19 Post-Maintenance Testing

PM 3001-2-D1	D1 Diesel Generator 18-Month Inspection	Revision 16
SP 1295	D1 Diesel Generator 6-Month Fast Start Test	Revision 28
SP 1093	D1 Diesel Generator Monthly Slow Start	Revision 71
SP 1334, (marked-up copy per WO 0104905)	D1 Diesel Generator 18-Month 24-Hour Load Test	Revision 6
WO 01137886	Replace #10 OCS Fuel Injector to Fix Fuel Leak	
WO 0113781	Replace Air Regulator for CV-31953 [D1 Diesel Generator Start Air Control Valve A]	
WO 0104905	P3001-2-D1 Diesel Generator 18-Month Inspection	
WO 9406648	Change Wire Codes at Damper CD-34139	
WO 0014368	22 DDCLP Discharge Check Valve Inspection	
WO 0100465	22 DDCLP Constant Lube Oil Pump Making Noise	

WO 0104909	P3002-2-22 22 DDCLP Annual Inspection	
WO 0104910	P3002-3-22 22 DDCLP Annual Electrical Inspection	
WO 0107772	Governor Hunts on 22 DDCLP	
WO 0108967	22 DDCLP Instruments 12-Month Preventive Maintenance Calibration	
CR 200185655	22 DDCLP Constant Lube Oil Pump Motor Replaced - Rotation Was Incorrect	
CR 200185879	Spare UG8 Governor for 22 DDCLP Was Not a Like-For-Like Replacement	
CR 200185880	Revise PM 300202022 Per TCNs Written During WO 0104909	
SP 2089A	Train A RHR Pump and Suction Valve from the RWST [refueling water storage tank] Quarterly Test	Revision 0
WO 0104942	P3124-1-21 - 21 RHR Pump Annual Inspection	
WO 0107581	P32128 - 21 RHR Heat Exchanger Component Cooling Inlet D70 Inspection	
WO 0109431	SP 2089A - Train A RHR Pump and Suction Valve from the RWST Quarterly Test	
WO 0108114	Test Valve Does Not Operate Correctly	
SP 1155A	CC System Quarterly Test Train A	Revision 0

1R22 Surveillance Testing

SP 2295	D5 Diesel Generator 6-Month Fast Start Test	Revision 21
Procedure H12	Plant Check Valve Program	Revision 3
CR 20018442	D5/D6 Starting Air Receiver Inlet Check Valve Testing Per SP 2295 and 2307 Inappropriately Test Pressure Maintaining Valve	
SP 1102	11 Turbine-Driven AFW Pump Monthly Test	Revision 73
SP 2102	22 Turbine-Driven AFW Pump Monthly Test [dated 10/24/01]	Revision 66
SP 2102	22 Turbine-Driven AFW Pump Monthly Test [dated 4/23/01]	Revision 66
SP 2102	22 Turbine-Driven AFW Pump Monthly Test [dated 1/29/01]	Revision 64

SP 2102	22 Turbine-Driven AFW Pump Monthly Test [dated 7/25/00]	Revision 62
SP 2102	22 Turbine-Driven AFW Pump Monthly Test [dated 4/24/00]	Revision 62
CR 200185669	SP 2102 and SP 1102 Contain Human Factor Weakness	
SP 2088A	Train A Safety Injection Quarterly Test	Revision 0

1R23 Temporary Modifications

Temporary Modification 01T088	Unit 1 Operation with 1M Transformer Isolated	
Updated Safety Analysis Report, Section 8	Plant Electrical Systems	Revision 22
WO 0107863	1M Fire Detection - Install New Conduit/Cable	
WO 0107864	1M Fire Detection - Install New Detector Heads	
WO 0109642	Remove Deluge Sprinkler Piping for 1M Transformer	
WO 0110719	Isolate 1M Transformer for Unit 1 Operation	
WO 0111095	Rebuild 1MX and 1MY Bus Ducts as Required	
WO 0111270	Remove Temporary Modification 01T088 to Reconnect and Energize 1M Transformer	
WO 0111278	Provide Isolation of 1M Transformer	
CR 20017096	Investigate the Cause for the 1MX/1MY Degradation and Determine Susceptibility of Other Site Bus Ducts	
CR 20017100	Inspection of Bus 11 Revealed Signs of Corrosion, Aging of Insulation Boots, and Loss of Silver Plating on Connections	
CR 20017243	Assess the Ampacity Rating of 1MY Bus Duct	
CR 20017244	Assess Adequacy of Cooling of 4 Kilovolt Busses 11,12 and 1MY Bus Duct	
Schedule	Project: 1M Bus Duct	9/28/01
Temporary Change Notice 2001-1648 to Operating Procedure 1C1.2	Unit 1 Startup Procedure	9/6/01

1EP2 Alert and Notification System (ANS) Testing

Public Alert and Notification System (PANS)
Implementing Procedure
PANS Implementing Procedures and
Supplemental Documents
Dakota, Goodhue, and Pierce County Route June 1, 1984
Alerting Guides for Prairie Island Area
PANS
PANS Fixed Siren Monthly Trend Reports
July 2000-June 2001
Monthly (Siren) Trend Report 2000 Failure
Matrix July 2000-June 2001
Monthly (Siren) Trend Report 2000 System
Operability July 2000-June 2001
Failure Matrix-Public Alert Notification July 11, 2000
System
Causes of Siren Equipment Failures for
2000
Siren Test Results July 2000-June 2001
Prairie Island Nuclear Generating Plant
Monthly Siren Verification Test July
2000-June 2001
Siren History - Siren Operability Notes 2000
& 2001
Nelson Corporation Services Reports - 2001

1EP3 ERO Augmentation Testing

Emergency Plan Section 5	Organizational Control of Emergencies	Revision 23
Emergency Plan Section 6	Emergency Measures	Revision 23
Emergency Plan Section 8	Maintaining Emergency Preparedness	Revision 23
SP 1744	Semi-Annual Emergency Organization Augmentation Response Test	May 4, 2001
CR 20015405	Evaluate If There Is a Better Method of Determining Each Person's Response Time During the August Test	June 29, 2001

1EP5 Correction of Emergency Preparedness Weaknesses and Deficiencies

Administrative Work Instruction (AWI) 5AWI 1.10.0	Corrective Action Process	Revision 4
5AWI 1.10.1	Condition Reporting Process	Revision 5
5AWI 1.10.2	Actions to Correct Conditions or Prevent Recurrence	Revision 4
5AWI 1.10.5	Self-Assessment	Revision 1
RPIP 6030	Emergency Plan Activation Evaluation	Revision 4
RPIP 6035	Emergency Plan Self-Assessment Teams	Revision 2
	NRC Event Notification Form	August 3, 2001
CR 20011611	Assess NEI 99-02 Revision 1 Draft 9 February 2001 Changes to Determine EP Implications	February 14, 2001
CR 20016491	Emergency Plan Activation Evaluation of August 3, 2001 Unusual Event	August 3, 2001
CR 20016521	Prairie Island Nuclear Plant Post Bus 12 Fire Review Team Report	
CR 200185169	Review Simulator Evaluations and the Counting of Classifications When Only One Shift Supervisor on Simulator	October 18, 2001
CR 200185168	Establish Copies of Siren Contractor Post Maintenance Testing Procedure and Annual Preventive Maintenance at Plant	October 18, 2001
Generating Services Audit AG 2001-S-1	Emergency Preparedness	April 30, 2001
2000146	Generation Quality Services Observation Report	July 14, 2000
2000148	Generation Quality Services Observation Report	July 18, 2000
2001001	Generation Quality Services Observation Report	March 6, 2001
2001024	Generation Quality Services Observation Report	March 19, 2001
2001017	Generation Quality Services Observation Report	March 20, 2001
2001029	Generation Quality Services Observation Report	April 11, 2001

2OS3 Radiation Monitoring Instrumentation

RPIP 1210	Charging SCBA Air Cylinders	Revision 7
RPIP 1214	Respiratory Protection Equipment Testing	Revision 9
RPIP 1215	Respiratory Equipment Control	Revision 4
RPIP 1224	Calibration and Manager Menu Operations for the FASTSCAN WBC [Whole Body Counter]	Revision 2
RPIP 1524	NNC [National Nuclear Corporation] Friskall Description, Operation and Calibration	Revision 9
RPIP 1531	J. L. Shepard Source Calibrator Operation	Revision 5
RPIP 1608	RO-2, RO-2A, RO-20, RSO-5 Instrument Description, Operation and Calibration	Revision 6
RPIP 1614	RM-14, AMS-2 Calibration and Description	Revision 9
RPIP 1621	AM-2 Area Monitor Description, Operation and Calibration	Revision 9
RPIP 1638	Source Calibration Tables	Revision 19
SP 1783.1	Westinghouse Radiation Monitor Electronic Calibration	Revision 5
SP 1783.2	NMC [Nuclear Measurements Corporation] Radiation Monitor Electronic Calibration	Revision 6
CR 20010170	Found High Radiation Area Boundary Down to #11 Steam Generator	
CR 20010276	The "Locked for Radiologically Control" Sign	
CR 20010284	Keys Left in Operations Support Center Continuous Air Monitor Source Drawer	
CR 20011054	High Radiation Area Lock Was Used to Lock Area "Locked for Radiologically Control"	
CR 20011536	Trash Bags in Containment Dose Rated	
CR 20011548	Temporary Area by Hot Machine Shop Postings	
CR 20014536	Radiation Area Posting Taken Down on 695 Foot Elevation	
CR 20017753	Ladder Lock for Unit 2 755-Foot Elevation Pressurizer Entrance	
	Self-Assessment of Radiation Protection Instrument Control	October 9, 2001

4OA1 Performance Indicator Verification

NEI 99-02	Regulatory Assessment Performance Indicator Guideline	Revision 1
Computerized Control Room Logs	Unit 1 and Unit 2 Control Room Log Entries for Completion of SP 1001A, 1001AA, 1001AAA, 2001A, 2001AA, and 2001AAA	7/1/00 - 6/30/01
SP 1001A	Reactor Coolant System Leakage Test Manual Method	Revision 4
SP 1001AA	Daily Reactor Coolant System Leakage Test	Revision 35
SP 1001AAA	Reactor Coolant System Leakage Investigation	Revision 8
SP 2001A	Reactor Coolant System Leakage Test Manual Method	Revision 3
SP 2001AA	Daily Reactor Coolant System Leakage Test	Revision 32
SP 2001AAA	Reactor Coolant System Leakage Investigation	Revision 4
H Procedure H33.4	Emergency Preparedness Performance Indicator Reporting Instructions	Revision 1
	Prairie Island Nuclear Generating Plant Alert and Notification System Reliability Quarterly Results July 2000 - June 2001	
	Prairie Island Nuclear Generating Plant NRC Emergency Plan Participation Performance Indicator - Quarterly July 2000 - June 2001	
	Prairie Island Nuclear Generating Plant Emergency Preparedness Key ERO Record - July 2000-June 2001	
	Northern States Power Company Attendance/EP Participation Codes Form July 2000-June 2001	
Lesson Plan	Simulator Cycle Quiz #30	Revision 1
PINGP [Prairie Island Nuclear Generating Plant] Form 1326	EP Performance Records	
	EP Performance Simulator Records	September 2000

	Prairie Island Nuclear Generating Plant NRC Emergency Plan Performance Indicator ERO-DEP July 2000-September 2001	
	Monthly Shift Communicator Evaluated Performances For NRC EP DEP PI	September 14, 2001
	Monthly Simulator Classification Evaluation for NRC EP DEP PI	September 24, 2001
	Monthly Simulator Classification Evaluation for NRC EP DEP PI July 2000-June 2001	
PINGP 577	Emergency Notification Report Form July 2000-June 2001	
PINGP 1328G	Performance Indicator - Emergency Preparedness 2000-2001	
	Prairie Island Nuclear Generating Plant - Alert and Notification System Reliability-Quarterly 2000 & 2001	
	Prairie Island Nuclear Generating Plant NRC Emergency Plan Performance Indicator - Monthly 2000 & 2001	

4OA3 Event Followup

CR 200185657	Manual Reactor Trip Due to Condenser Vacuum Differential Greater Than 2.5 Inches	
Emergency Guideline 2E-0	Reactor Trip or Safety Injection	Revision 19
Emergency Subguideline 2ES-0.1	Reactor Trip Recovery	Revision 16
Operating Procedure 2C1.2	Unit 2 Startup Procedure	Revision 24
Operating Procedure C1B	Appendix - Reactor Startup	Revision 9
Meeting Agenda	Unit 2 Scram Recovery and Restart Meeting	3:00 p.m. November 1, 2001
LER 1-01-04	Water Intrusion Into a Control Rod Electrical Cabinet Results in Dropped Rods Causing a Negative Flux Reactor Trip	
LER 1-01-05	Fault and Fire in Non-Safeguards Circuit Breaker Results in Reactor Trip and Auxiliary Feedwater System Actuation	

LER 2-01-03	Technical Specification Required Shutdown of Unit 2 Due to Declared Inoperability of Both Emergency Diesel Generators	Revision 0
LER 2-01-03	Technical Specification Required Shutdown of Unit 2 Due to Declared Inoperability of Both Emergency Diesel Generators	Revision 1