August 17, 1999

Mr. M. Wadley
President, Nuclear Generation
Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Dear Mr. Wadley:

SUBJECT: NRC PRAIRIE ISLAND EMERGENCY PREPAREDNESS INSPECTION REPORT 50-282/99009(DRS); 50-306/99009(DRS)

On July 22, 1999, the NRC completed an inspection at your Prairie Island Units 1 & 2 reactor facilities. The enclosed report presents the results of that inspection. The results of this inspection were discussed on July 22, 1999, with Mr. J. Sorensen and other members of your staff.

The inspection was an examination of activities under your license as they relate to emergency preparedness and to compliance with the Commission's rules and regulations and with the conditions of your license. Within those areas, the inspection consisted of a selective examination of procedures and representative records, interviews with personnel, and observation of activities in progress. Specifically, this inspection focused on the implementation of your emergency preparedness program.

This inspection included a review and evaluation of current emergency preparedness Performance Indicators. Records reviewed supported statistical data which had been reported.

Your staff initially identified a White performance indicator related to Emergency Response Organization Drill and Exercise Participation, and your staff implemented corrective actions to improve performance in this area. Before the end of the inspection period, your staff additionally identified that a data error involving a single individual had been included in this performance indicator, and the indicator was in the Green response band. At this time, we do not plan any additional oversight of this area above the baseline inspection program.

During this inspection, no significant findings were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be placed in the NRC Public Document Room.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

Original /s/ G. L. Shear

Gary L. Shear, Chief
Plant Support Branch

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

Enclosure: Inspection Report 50-282/99009(DRS); 50-306/99009(DRS)

cc w/encl: Site General Manager, Prairie Island
Plant Manager, Prairie Island
S. Minn, Commissioner, Minnesota
Department of Public Service
State Liaison Officer, State of Wisconsin
Tribal Council, Prairie Island Dakota Community

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Nos:	50-282; 50-306
License Nos:	DPR-42; DPR-60
Report No:	50-282/99009(DRS); 50-306/99009(DRS)
Licensee:	Northern States Power Company
Facility:	Prairie Island Nuclear Generating Plant Units 1 & 2
Location:	1717 Wakonade Dr. East Welch, MN 55089
Dates:	July 19-22, 1999
Inspectors:	J. Foster, Senior Emergency Preparedness Analyst D. Funk, Emergency Preparedness Analyst
Approved by:	G. L. Shear, Chief, Plant Support Branch Division of Reactor Safety

SUMMARY OF FINDINGS

Prairie Island Nuclear Generating Plant, Units 1 & 2
NRC Inspection Report 50-282/99009(DRS); 50-306/99009(DRS)

This report covers a four-day period of announced inspection by two regional Emergency Preparedness Analysts. This inspection focused on Reactor Safety, Emergency Preparedness and included a review of the Performance Indicators for Reactor Safety, Emergency Preparedness.

Inspection findings were assessed according to potential risk significance, and were assigned colors of green, white, yellow or red. Green findings are indicative of issues that, while not necessarily desirable, represent little risk to safety. White findings would indicate issues with some increased risk to safety, and which may require additional NRC inspections. Yellow findings would be indicative of more serious issues with higher potential risk to safe performance and would require the NRC to take additional actions. Red findings represent an unacceptable loss of margin to safety and would result in the NRC taking significant actions that could include ordering the plant shut down. The findings, considered in total with other inspection findings and performance indicators, will be used to determine overall plant performance.

REACTOR SAFETY

Cornerstone: Emergency Preparedness

- During this inspection, no significant findings were identified.

Report Details

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Drills, Exercises, and Actual Event Evaluation

1. Inspection Scope

The inspectors reviewed emergency plan activation (October 28, 1997, and January 5, 1999) documentation to assess whether the event classifications were correct, whether notifications were of sufficient detail and timely, and whether the response was adequately self-assessed. Shift logs, facility logs, notification forms, chronologies, event critique records, and corrective actions identified as a result of the events were reviewed. The inspectors compared plant conditions with those in the emergency action levels to determine if the classifications were correct. Event critique documentation was reviewed, including items requiring corrective action. Resulting corrective action items were reviewed to assure that they were adequately tracked and addressed.

2. Observations and Findings

The emergency plan was effectively implemented during two events, and appropriate event critiques were conducted. Items requiring corrective action were properly identified and tracked.

1EP2 Alert and Notification System Testing

a. Inspection Scope

The inspectors discussed the design of the equipment for alert and notification system (sirens) testing with the licensee, reviewed the procedure for system testing, and observed a routine periodic test of the system. Reviews were also conducted of siren testing and related corrective action documentation. The statistics gathered to determine overall siren reliability were also reviewed.

2. Observations and Findings

The equipment for alert and notification system testing was appropriate and the testing procedure provided an effective test methodology. Siren system testing had been appropriately conducted and timely corrective actions taken when testing identified problems. System reliability was appropriate.

1EP3 Emergency Response Organization Augmentation

1. Inspection Scope

The inspectors reviewed the semi-annual augmentation test procedure, augmentation call lists, results from augmentation tests, and the licensee's analysis of test results. Corrective actions related to augmentation testing were reviewed to ensure that they were properly tracked and action taken as appropriate.

2. Observations and Findings

The augmentation test procedure was appropriate, and tests had been conducted as procedurally required. An effective analysis of augmentation results had been conducted, and related corrective actions were placed in the licensee's corrective action system.

4. OTHER ACTIVITIES

4OA1 Identification and Resolution of Problems

1. Inspection Scope

The inspectors interviewed members of the emergency planning staff and reviewed the licensee's self assessments, audits, corrective action program procedures, and problem identification forms concerning the emergency preparedness program.

2. Observations and Findings

The inspectors verified that the emergency planning staff was effectively using the corrective action program to identify and correct problems or track emergency preparedness program enhancements.

4OA2 Performance Indicator Verification

1. Inspection Scope

The inspectors verified the licensee's system for identifying the data utilized to determine the values for the three performance indicators for emergency preparedness, comprised of Alert and Notification System, Emergency Response Organization (ERO) Drill Participation, and Drill and Exercise Performance. The procedure for emergency preparedness performance indicator data gathering was reviewed and discussed with the licensee, and documentation relative to the raw data for each indicator reviewed. Current and historical records for each performance indicator were reviewed. Simulator training, siren testing, and maintenance, and drill/exercise records were also reviewed.

2. Observations and Findings

The licensee's draft procedure for determining emergency preparedness performance indicators was adequate, and records reviewed supported statistical data which had been reported.

Immediately prior to the inspection period, the performance indicator for ERO Drill

Participation entered the White (<80%) response band. Discussion with licensee personnel and a review of records determined that this was due to recent revision of ERO position assignments. Six individuals were involved in these position reassignments, and had not had opportunities to function in the newly-assigned positions in a drill or exercise due to the drill/exercise schedule. Several of the individuals reassigned positions had significant plant experience in other key ERO positions, and licensee personnel indicated that they were well capable of performing in the new positions.
A Condition Report had been generated to document the performance indicator moving into the White band, and corrective action of significantly revising the method of training ERO members was in process. The revised training program would provide additional drills so that ERO members would have additional participation opportunities.

Before the end of the inspection period, the licensee determined that one ERO individual's exercise participation had been miscalculated. Correction of this data was enough to move the ERO Drill/Exercise Participation performance indicator back into the Green (>80%) band. The error in the performance indicator data did not adversely affect the NRC's ability to assess licensee performance. Pending a final decision on how to resolve errors in performance indicator data, this issue will be tracked as an Unresolved Item (URI 50-282/99009-01(DRS); 50-3036/99009-01(DRS)).

Additional NRC response to this performance indicator entering the White band was determined to be unnecessary.

4OA4 Other

1. Inspection Scope

The inspectors toured the Technical Support Center, Operations Support Center, and Emergency Operations facility.

2. Observations and Findings

There were no findings identified in this inspection.

4OA5 Management Meetings

.1 Exit Meeting Summary

The inspectors presented the inspection results to Mr. J. Sorensen and other members of your staff at the conclusion of the inspection on July 22, 1999. The licensee acknowledged the findings presented and did not identify any information discussed as proprietary.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

M. Agen, Emergency Plan Sr. Nuclear Consultant
T. Amundson, General Superintendent Engineering
L. Finholm, Emergency Plan Senior. Technical Instructor
A. Johnson, General Superintendent Radiation Protection and Chemistry
M. Ladd, Training Process Manager
M. Pfeffer, Emergency Plan Technical Instructor
J. Sorensen, Site General Manager

NRC

S. Ray, Senior Resident Inspector
S. Thomas, Resident Inspector

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-282/306/99009-01(DRS)	URI	Error in EP performance indicator data

Closed

None

Discussed

None

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
DPR	Demonstration Power Reactor
DRP	Division of Reactor Projects
DRS	Division of Reactor Safety
EP	Emergency Preparedness
ERO	Emergency Response Organization
EPIP	Emergency Preparedness Implementing Procedure
ERO	Emergency Response Organization
MN	Minnesota
NRC	Nuclear Regulatory Commission
NRR	Nuclear Reactor Regulation
NUE	Notice of Unusual Event
OSC	Operations Support Center
PANS	Public Alert and Notification System
PDR	Public Document Room
PINGP	Prairie Island Nuclear Generating Plant
PRR	Public Reading Room
SRI	Senior Resident Inspector

LIST OF DOCUMENTS REVIEWED

Assessments and Audits

Generation Quality Services Internal Audit Report AG-1999-S-1,Plant Support, Emergency Preparedness (10CFR 50.54t), conducted January 1, 1999 - March 3, 1999, dated May 13, 1999.
1997 E-Plan Drill Critique - August 6, 1997, dated September 22, 1997.
Emergency Plan Exercise Critique Report Conducted July 22, 1998, dated August 26, 1998.
Emergency Plan Drill Report Conducted on June 10, 1998, dated September 3, 1998.
Memorandum, M. Agen, "Implementation of E-Plan October 28, 1997," dated December 3, 1997.
"E-Plan Activation Evaluation January 5, 1999 NUE," (NUE9901.doc), dated January 19, 1999.
Observation Reports related to EP, exercise evaluation, EP equipment:

1998074	EOF
1998165	EP. Communications. Mtg.
1998173	EOF Simulator
1998179	E-Plan TSC
1998169	PI E-Plan Exercise EOF
1999027	IN-98-02, Respiratory Protection
1999018	PI Emergency Plan Equipment Checks
1999053	Corporate EP Training
1999058	EP Training, E plans, EPIPS
1999059	EP Plan & Program Review

Problem Identification Forms

Condition Report 19992162, "ERO Drill Participation Performance Indicator fell into white (<80%) band," dated July 14, 1999.

Performance Indicator Related Documentation

"PINGP Emergency Plan Performance Indicator Program (EPPIP)," July 18, 1999 draft.
Prairie Island Nuclear Generating Plant NRC Emergency Plan Performance Indicator, May, June, July 1999 EP Participant Status Report printouts generated July 21, 1999.
Prairie Island Nuclear Generating Plant NRC Emergency Plan Performance Indicator, September 1999 EP Participant Status (predicted) Report printout generated July 21, 1999.
Prairie Island Nuclear Generating Plant NRC Emergency Plan Performance Indicator, Alert & Notification System Reliability, May, June, July, 1999 Report printouts generated July 19, 1999.
Prairie Island Nuclear Generating Plant NRC Emergency Plan Performance Indicator (for Exercise Performance), May, June, July, 1999 Report printouts generated July 19, 1999
Memorandum and attachments, Joe Loesch to Dennis Wesphal, "EP Performance," dated April 7, 1999.

Procedures

Administrative Work Instruction 5AWI 1.10.0, Corrective Action Process, Revision 2, dated June 4, 1999.
Administrative Work Instruction 5AWI 1.10.1, Corrective Action Process, Revision 0, dated June 4, 1999.
Radiation Protection Implementing Procedure 6052, Revision 3, "Monthly Fixed Siren Alert Test," dated December 15, 1997.
Surveillance Procedure (SP) SP 1728,"Encoder Validation Equipment Weekly Test," revision 25, dated March 1, 1999.
Radiation Protection Implementing Procedure 6020, "Emergency Preparedness Action Item Tracking," revision 3, dated December 20, 1998.
Simulator Exercse Guide, Evaluation #2, Revision 13, undated

Miscellaneous

Memorandum, M. Agen to Don Schuelke, "1998 Annual PANS Review Report," dated December 22, 1998.
Memorandum, M. Agen to A. Johnson, Subject:"E-Plan Action Items 2nd Quarter Status," dated July 15, 1999.
Northern States Power Nuclear Emergency Preparedness Telephone Directory, May-July 1999.
Procedure PINGP 581, Revision 61, "Emergency Organization Call List," undated.
PINGP 948, "Switchboard Operator Call List," Revision 40, undated.
PINGP 580, "Emergency Notification Call List for an Alert, Site Area, or General Emergency," Revision 92, undated.
PINGP 1202, "ATS Auto Dial System Weekly Test," Revision 1, undated.
PINGP 579, "Emergency Notification Call List for a Notification of Unusual Event," Revision 84, undated.
NRC Preliminary Notification PNO-III-99001, "Station Auxiliary Transformer Explosion and Fire," dated January 6, 1999.
Printout of Siren operability Notes for June, 1999.
Siren Status report May 24, 1999, Siren pre-test (for June).
Siren Status, June 2, 1999 - Siren Test.
Prairie Island Plant Monthly Siren Verification Test, dated June 2, 1999.
PANS Fixed Siren Trend Report dated June 11, 1999.
Monthly trend report 1999, failure matrix, test date June 2, 1999.
Monthly Trend Report 1999, System Operability, PINGP 1120, Rev. 2, dated June 11, 1999.
Failure Matrix, Public Alert Notifications System, Sirens Form, dated June 9, 1999.
Causes of Siren Equipment Failure for 1999, undated.
Simulator Team Evaluation Forms for 1999.