

September 10, 1999

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

SUBJECT: NRC SECURITY INSPECTION REPORT 50-282/99010(DRS);
50-306/99010(DRS)

Dear Mr. Wadley:

On August 12, 1999, the NRC completed a routine, pilot program inspection at your Prairie Island Nuclear Generating Plant. The enclosed report presents the results of that inspection. The results of this inspection were discussed with Mr. D. Schuelke and other members of your staff on that date.

The inspection was an examination of activities conducted under your license as they relate to the Safeguards Strategic Performance Area and compliance with the Commission's rules and regulations and with the conditions of your license. Within this area, the inspection consisted of a selected examination of procedures and representative records, observation of activities, and interviews with personnel. Specifically, this inspection focused on performance involving the Physical Protection cornerstone.

Based on the results of this inspection, the NRC identified two findings, each of low risk significance. The first finding, relating to the training requirement, was determined to be a violation of NRC requirements, and because of the low risk significance, the violation is not being cited. This violation is being treated as a Non-Cited violation, consistent with Appendix C of the Enforcement Policy. The NCV is described in the inspection report. If you contest the violation or severity level of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 29555-001, with a copy to the Regional Administrator, Region III, and the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001. This issue has been entered in your corrective action program.

The second finding pertained to the minimum number of armed personnel needed to respond to the security design basis threat at the plant. The details for this finding are also addressed in the enclosed inspection report. Our understanding of your commitment to resolve this finding is identified in Section 3PP3.b.2 of the report details.

In addition to the above, NRC identified that incomplete information was gathered for the security equipment performance indicator. This finding has also been entered in your corrective action program.

M. Wadley

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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 (PDR).

Sincerely,

Original /s/ James R. Creed

James R. Creed
Safeguards Program Manager
Division of Reactor Safety

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

Enclosure: Inspection Report 50-282/99010(DRS);
50-306/99010(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 Nos: 50-282/99010(DRS); 50-306/99010(DRS)

Licensee: Northern States Power Company

Facility: Prairie Island Nuclear Generating Plant

Location: 1717 Wakonade Dr. East
Welch, MN 55089

Dates: August 9 -12, 1999

Inspectors: G. Pirtle, Physical Security Inspector
T. Madedo, Physical Security Inspector

Approved by: James R. Creed, Safeguards Program Manager
Division of Reactor Safety

SUMMARY OF FINDINGS

Prairie Island Nuclear Generating Plant
NRC Inspection Report 50-282/99010; 50-306/99010

The report covers a four day, announced inspection by two regional security specialists. This inspection focused on the Physical Protection Cornerstone, within the Safeguards Strategic Assessment area, and included a partial review of response to contingency events; performance indicator verification for security equipment; changes to the security plan; and review of previous inspection findings.

Inspection findings were evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW, or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent little effect on safety. WHITE findings indicate issues with some increased importance to safety, which may require additional NRC inspections. YELLOW findings are more serious issues with an even higher potential to effect 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 significance actions that could include ordering the plant shut down. Those findings that can not be evaluated for a direct effect on safety with the significance determination process, such as those findings that effect the NRC's ability to oversee licensees, are not assigned a color.

Cornerstone: Physical Protection - Response to Contingency Events (Section 3PP3)

Green. A weapon-related annual training requirement identified in the Security Training and Qualification Plan was not completed in 1998, as required by the Commission approved Security Plan for the Prairie Island plant. The licensee has entered this issue in their corrective action program. The inspectors identified this failure to meet a training requirement as a Non-Cited Violation (Section 3PP3.b.1).

Green. The licensee's security staff have not confirmed through procedures, training, or exercises and drills that the minimum number of immediately available armed response personnel identified in the security plan can counter the security design basis threat (DBT). Defensive strategy, training, and evaluation processes include at least one more person than the minimum number required by the security plan to respond to the DBT. The licensee has agreed to continue to maintain security shift manning at the higher level confirmed by their strategy, training, and evaluation processes as adequate to counter the DBT until an analysis is completed. (Section 3PP3.b.2).

Cornerstone: Physical Protection - Performance Indicator Verification (Section 4OA2)

The inspectors identified that a licensee personnel error involving a failure to transfer data used to calculate and identify the index value for the Protected Area Security Equipment Performance Indicator (PI) resulted in a failure to capture all applicable PI related information. Subsequent calculation using the corrected data did not result in the crossing of a response threshold or lowering of the PI index number. The response band

remained green. The licensee has entered this issue in their corrective action system.
(Section 40A2.b).

Report Details

1. REACTOR SAFETY Cornerstone: Physical Protection

1RO2 Change to License Conditions (Physical Protection) (IP 71111.02)

a. Inspection Scope

The inspectors reviewed Revision 38 of the Prairie Island Nuclear Generating Plant which was submitted by licensee letter, dated March 31, 1999, to verify that the change did not decrease the effectiveness of the security plan. The security plan revision was submitted in accordance with 10 CFR 50.54 (p).

1. Observations and Findings

There were no findings identified and documented during this inspection.

2. SAFEGUARDS Cornerstone: Physical Protection

3PP3 Response to Contingency Events (IP 71130.03)

a. Inspection Scope

The inspectors observed stress firing with contingency weapons at an off site firing range; conducted a walk down of the protected area boundary and alarm system; observed testing of selected protected area alarm zones; evaluated alarm station operator performance and closed circuit television assessment capability during alarm system testing; walked down security defensive positions; discussed defense strategy and procedures with licensee security personnel; observed two table top exercises; and reviewed procedures, training records, and licensee drill and exercise critiques pertaining to response to security contingency events.

b. Observations and Findings

- .1 Green. A violation was identified in reference to a weapons-related training requirement that was not completed on an annual basis. The initial evaluation of this violation using the significance determination process (SDP) concluded that this is a green finding, because it did not represent "some risk" of radiological sabotage. The finding was within the "licensee's response band" and was entered in their corrective action system.

Section 4.4.3 of the Prairie Island Security Plan and Section 3.1 of the Security Training and Qualification Plan (ST&QP) requires training identified in the ST&QP to be completed on an annual basis. Both plans define "annual" as every 12 months plus or minus 25% (three months). Record reviews and interviews concluded that the ST&QP training requirement for night familiarization training for assigned weapons (section 5.2.2)

was last conducted in 1997 and not conducted in 1998. Additionally, stress firing with firearms that had been completed in calendar year 1998 was not documented on the individual training qualification forms for security officers. This Severity Level IV violation is being treated as a Non-Cited Violation, consistent with Appendix C of the NRC Enforcement Policy. This violation has been entered into the licensee's corrective action program as Condition Report No. 19992386, dated August 12, 1999 (50-282/99010-01; 50-306/99010-01).

- .2 Green. A finding was identified pertaining to the difference between the minimum number of armed response personnel actually needed to provide an adequate level of protection against the design basis threat (DBT), and the minimum capability identified in the security plan.

The site security plan requires a specified minimum number of armed security force personnel to respond to the DBT. (NOTE: The site specific minimum number of armed security officers required to respond to the DBT is considered Safeguards Information and is exempt from public disclosure in accordance with 10 CFR 73.21.) Record reviews and interviews with licensee security managers showed that security contingency procedures, the site defense strategy, and actual security shift staffing levels relied on the availability of a larger number of armed responders than the minimum number required by the security plan. Falling below that minimum number could result in the licensee being unable to meet the DBT as required by 10 CFR 75.55(a). However, security managers stated that the security shift staffing level has never been below the higher number, even though the security plan would allow the staffing level to meet only the smaller number of armed responders.

The licensee used drills and exercises to validate the ability of security personnel to counter the DBT. Those validations have consistently used a number of armed responders larger than the security plan minimum. (NOTE: The number differential of responders is considered Safeguards Information and exempt from public disclosure in accordance with 10 CFR 73.21.) A performance based confirmation that the DBT could be countered by the minimum number of armed responders specified in the security plan has not been completed by the licensee. The security staff has agreed to continue to maintain security shift staffing at the higher level of armed responders until a "Probabilistic Risk Analysis" is completed. According to the licensee, the additional criteria would include a goal of preventing a 10 CFR Part 100 release. This would be different from the past use of "core damage" as the radiological sabotage threshold. Also included in the evaluation will be the effect of reactor operator initiated mitigation actions. These criteria are also currently being evaluated by the NRC, and it is currently not known whether it will be adopted. This commitment has been entered in the licensee's Management Tracking System as item number 19992558.

This finding is green, and within the licensee's response band, because it did not represent an increase in the risk of radiological sabotage, as determined by the Significance Determination Process (SDP). The licensee never utilized fewer than the minimum number of responders verified as necessary.

4. OTHER ACTIVITIES

4OA1 Identification and Resolution of Problems (IP 71130,03)

a. Inspection Scope

The inspectors reviewed a sample of licensee self-assessments, audits, security logged events and security drills regarding the licensee's response to contingency events. In addition, the inspectors interviewed security managers to evaluate their knowledge and use of the licensee's corrective action system.

b. Observations and Findings

There were no findings identified and documented during this inspection.

4OA2 Performance Indicator Verification (IP 71151)

a. Inspection Scope

The inspectors reviewed the licensee's program for the gathering and submitting data for the Security Equipment Performance Indicator (PI). Specifically, a sample of plant reports related to security events, and other applicable security records were reviewed.

b. Observations and Findings

An unresolved item was identified relating to the accuracy of the Protected Area Security Equipment Performance Indicator (PI). The licensee has entered this issue in their corrective action program.

In July of 1999, the licensee submitted data to the NRC for the Protected Area Security Equipment PI for the period between June 1998 and June 1999. The data showed equipment performance in the green response band for that period (four quarters). On August 10, 1999, the inspectors discovered an anomaly between the actual number of hours that the equipment was out-of-service and which should have been used for the PI index number for the most recent calendar quarter (2nd quarter 1999), and the number of hours actually reported for that quarter.

The missing information involved a protected area intrusion alarm zone failure occurring during a routine test in June 1999, and the zone being out-of-service for approximately 14 hours because of the test failure. This out-of-service time was not captured for PI reporting. The licensee's security representative responsible for gathering and documenting the PI data confirmed during interviews that this out-of-service time should have been included in the PI data. He had forgotten to transfer the data from the event log to the PI data input form. This appeared to be an isolated failure. The licensee's security staff calculated that the error did not change the index value previously reported (.01) for the 2nd quarter of 1999, and security equipment performance remained in the green response band.

The inspectors discussed this PI reporting discrepancy with the licensee security staff and verified that they entered the discrepancy into their corrective action program (Condition Report No. 19992387). The additional out-of-service time for the specific alarm zone did not increase risk. The inspectors determined that regulatory requirements were met because compensatory measures were implemented for the alarm zone outage in accordance with their security plan requirements. To ensure consistency in NRC actions relating to compliance with 10 CFR 50.9, the matter is being categorized and processed as an Unresolved Item. (50-282/99010-02; 50-306/99010-02).

4OA4 Other

- .1 (Closed) Unresolved Item 50-282;306/97013-01: One alarm station could cause a response to an alarm not to be initiated without concurrence of the other alarm station. This issue was evaluated and resolved by NRC Headquarters. Not providing a response to an alarm requires documented agreement or concurrence from the other alarm station operator. Specific details for resolution of this issue will be forwarded to the licensee by separate letter. This item is closed.
- .2 (Closed) Inspection Followup Item, 50-282;306/99003-01: The portal control room operator procedure required revision. This was a minor administrative matter which the licensee staff has entered into their corrective action program and is being tracked by Condition Report No 19992366, dated August 9, 1999. This item is closed.
- .3 (Closed) Unresolved Item, 50-282;306/99003-02: A required contingency security post was not manned on a continuous basis as committed to in correspondence to the NRC. This issue has been entered into the licensee's corrective action program under Issue Tracking Module No 19991942, dated April 16, 1999. This tracking system documentation stated that the questionable practice would be discontinued until justification for a change was more thoroughly addressed and the NRC was advised of the justification for the change in practice. This issue was evaluated using the SDP as falling in the green response band. This item is closed.
- .4 (Closed) Inspection Followup Item, 50-282;306/99003-03: On two occasions, the protected area ingress and access control process was disrupted to an unacceptable level because of many alarms caused by personnel changing carpets in the search area, and searches being conducted in the normal personnel flow path through the search equipment. Deficiencies noted were corrected and the inspector observed no deficiencies during observation of the ingress and access control process during this inspection. This issue was evaluated using the SDP as falling in the green response band. This item is closed.

4OA5 Management Meetings

Exit Meeting Summary

The inspectors presented the inspection results to Mr. D. Schuelke, and other members of the licensee's staff at the conclusion of the onsite inspection on August 12, 1999. The meeting attendees were informed that the evaluation of the performance indicator unresolved item would continue to be evaluated by the NRC. The inspectors confirmed the licensee's commitment noted in Section 3PP3.b.2 of this report. The licensee representatives and the inspectors agreed that the minimum number of armed responders required to be immediately available would be considered as safeguards information and exempt from public disclosure. There was no other proprietary or safeguards information identified.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

D. Axt, Senior Security Coordinator
J. Corwin, Administrative Lieutenant, The Wackenhut Corporation, (TWC)
J. Eirikis, District Manager, TWC
R. Glad, 1st Training Lieutenant, TWC
T. Grosse, 2nd Training Lieutenant, TWC
D. Hutchison, Nuclear Security Specialist
C. Johnson, Operations Supervisor, TWC
G. Miserendino, Corporate Security Director
H. Nyberg, Self-Assessment Supervisor, TWC
D. Schuelke, Plant Manager
M. Sleigh, Superintendent, Security
E. Timmer, Nuclear Security Specialist

NRC

J. Belanger, Senior Physical Security Inspector, Region III
S. Ray, NRC Region III Senior Resident Inspector

ITEMS OPENED, CLOSED AND DISCUSSED

Opened

50-282/99010-01	NCV	A Training Requirement was Not Completed in1998
50-306/99010-01	NCV	A Training Requirement was Not Completed in1998
50-282/99010-02	URI	Incomplete Data Collected for Security Equipment Performance Indicator
50-306/99010-02	URI	Incomplete Data Collected for Security Equipment Performance Indicator

Closed

50-282/97013-01	URI	Single Alarm Station Can Prevent Dispatch to Alarms
50-306/97013-01	URI	Single Alarm Station Can Prevent Dispatch to Alarms
50-282/99003-01	IFI	The Procedure For The Portal Control Room Operator Required Revision
50-306/99003-01	IFI	The Procedure For The Portal Control Room Operator Required Revision
50-282/99003-02	URI	Required Manning For a Designated Security Post
50-306/99003-02	URI	Required Manning For a Designated Security Post
50-282/99003-03	IFI	Disrupted Ingress Search and Access Control
50-306/99003-03	IFI	Disrupted Ingress Search and Access Control
50-282/99010-01	NCV	A Training Requirement was Not Completed in1998

50-306/99010-01 NCV A Training Requirement was Not Completed in1998

PARTIAL LIST OF DOCUMENTS REVIEWED

Security Implementing Procedure 3.4, "Security Patrols," Revision 5
Security Implementing Procedure 1.3, "Vehicle Admittance/Control, Revision 12
Security Implementing Procedure 3.05, "Protective Strategy and Response Procedure,"
Revision 0
Security Event Logs - January 1999 to July 1999
Vulnerability Assessment Report, Revision 0, dated September 15, 1993
Licensee Target Set Review, June 1999
Condition Reporting Process (5 AWI 1.10.1), Revision 0
Security Drill Logs, January - August 1999
Security Drill and Exercise Manual, (5 AWI 1.10), dated October 15, 1991
Condition Report No. 19992366, (Procedure for PCR Operator), dated August 9, 1999
Condition Report No. 19992386, (Training Requirements), dated August 12, 1999
Issue Tracking Module Number 19991942, dated June 11, 1999
Weapon Qualification Records For Ten Randomly Selected Security Officers
Quarterly Security Report for First and Second Quarters of 1999
Revision 38 to the Prairie Island Security Plan, dated March 31, 1999