

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-282/93022(DRSS); 50-306/93022(DRSS)

Docket Nos. 50-282; 50-306

License Nos. NPF-42; NPF-60

Licensee: Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Facility Name: Prairie Island Generating Plant, Units 1 and 2

Inspection Dates: December 13-17, 1993 onsite
January 3-14, 1994 in NRC Region III Office

Type of Inspection: Announced Special Nuclear Material Control and
Accountability Inspection

Inspector: Gary L. Pirtle
Gary L. Pirtle
Physical Security Inspector

2/3/94
Date

Approved By: James R. Creed
James R. Creed, Chief
Safeguards and IR Section

2/3/94
Date

Inspection Summary

Inspection Between December 13, 1993 and January 14, 1994 (Report No. 50-282/930022(DRSS); 50-306/93022(DRSS))

Areas Inspected: Routine, announced inspection of the licensee's Special Nuclear Material Control and Accountability (SNMC&A) Program involving SNMC&A procedures; audits; Inventories; Receipt and Shipment Records; SNM Possession and Use; Location of SNM; SNM Transfer Records; Material Status reports; Protection of Safeguards Information and Followup on Previous Inspection Findings.

Results: A violation was cited for one instance of failure to properly secure unattended Safeguards Information. Protection of Safeguards Information documents still requires strong management oversight to prevent further repeat violations. Past corrective actions have not been effective in preventing recurrence. A licensee identified violation was noted in reference to the inventory of SNM.

Five previous inspection findings were reviewed and closed based upon the licensee's actions.

The SNMC&A program was adequately managed and the procedures and documents reviewed were adequate.

REPORT DETAILS

1. Key Persons Contacted

In addition to the key members of the licensee's staff listed below, the inspector interviewed other employees, contractor personnel, and members of the security organization. The asterisk (*) denotes those present at the onsite Exit Interview conducted on December 17, 1993.

- *E. Watzl, General Manager, Prairie Island, Northern States Power (NSP)
 - *M. Wadley, Plant Manager, NSP
 - *G. Miserendino, Manager, Corporate Security, NSP
 - *F. Evitch, Superintendent, Security, NSP
 - T. Breene, Special Nuclear Material Custodian, NSP
 - *R. Cleveland, Supervisor, Personnel Security, NSP
 - *J. Kuhn, Quality Specialist, NSP
 - *D. Matz, Nuclear Security Specialist, NSP
 - *G. Larson, Site Access Coordinator, NSP
 - *S. Gunterson, Site Manager, Burns International Security Services, Inc. (BISSI)
 - *K. Kulow, Operations Supervisor, BISSI
- M. Dapas, Senior Resident Inspector, NRC Region III
R. Bywater, Resident Inspector, NRC Region III

2. Followup on Previous Inspection Items

- a. (Closed) Inspection Followup Item (Reports No. 50-282/93009-02; 50-306/93009-02): This item was described in Section 7.a of the above report and pertained to the need to increase awareness and sensitivity to detect behavior changes involving trustworthiness or reliability through the supervisor's training program.

Module 2 of the Prairie Island Training Center Initial Fitness-For-Duty Self Study Program was revised. The training literature now addresses indications of behavior changes that can affect trustworthiness and reliability. This issue is considered closed.

- b. (Closed) Inspection Followup Item (Reports No. 50-282/93009-03; 50-306/93009-03): This item was described in Section 7.b of the above report and pertained to need for better guidance relating to self-reporting of arrests for personnel granted unescorted access to the protected area as required by Section 9.0 of NUMARC 89-01 (an attachment to Regulatory Guide 5.66 which the licensee committed to follow).

By memorandum dated October 1, 1993, and addressed to all personnel badged for unescorted access, the Vice President of Nuclear Generation clarified the requirement for personnel granted unescorted access to the licensee's nuclear plants to report all charges, arrests, or convictions, regardless of type to their

supervisors for evaluation. The Fitness-For-Duty Policy was also revised on October 1, 1993 to include the change. The guidance noted above was included in the General Employee Training Program on October 15, 1993. This item is considered closed.

- c. (Closed) Inspection Followup Item (Reports No. 50-282/93009-04; 50-306/93009-04): This item was described in Section 7.c of the above report and pertained to the access authorization behavioral observation program for personnel who do not use their security badge for 30 or more days. The access authorization program requires personnel granted unescorted access to the protected area to be under the purview of a behavior observation program (BOP) except for periods of 30 days or less. Some personnel who do not use their security badge for 30 or more days may not have been covered by a BOP for that period and would therefore require evaluation of their activities for the period of absence. This process is referred to as "reinstatement". The licensee was not monitoring nonuse of security badges and therefore was not able to effectively determine when reinstatement of personnel was necessary.

The licensee has developed a security computer software program that monitors the frequency of security badge use by contractor personnel (All licensee personnel badged for unescorted access are included in a BOP program). If a contractor arrives on site and he/she has not used their security badge within the past 30 days, the computer will inactivate the security badge and the person's badge will not be reactivated until the reinstatement process has been completed by the security department. The reinstatement process consists of making inquiries from the individual of their activities for the period of time they have not been under a BOP Program. Additional actions may be taken based upon the inquiry results. Security Procedure SPD-14 "Contractor Observation", effective December 17, 1993, was prepared to describe the program to monitor contractor use of security badges. This issue is considered closed.

- d. (Closed) Inspection Followup Item (Reports No. 50-282/93013-01; 50-306/93013-01): This issue was described in Section 5.a of the above report and pertained to the need to revise Section 12.2 of the security plan to accurately describe the power sources for specified security equipment. On July 27, 1993, the security plan revision was submitted to NRC Region III for review. The results of the licensing review will be addressed by separate correspondence. This issue is considered closed.
- e. (Closed) Inspection Followup Item (Reports No. 50-282/93019-04; 50-306/93019-04): This issue was addressed in Section 7 of the above report and pertained to minor damage (cracked window) to the new administration building caused from a bullet fired in the direction of the building from an off site location. The incident was reported to the security department on October 25, 1993.

Subsequent investigation concluded that the incident did not represent a security threat to the plant. This incident is considered to be a law enforcement issue rather than a regulatory issue. The appropriate law enforcement agencies have been advised of the incident. The licensee's security staff frequently advised the NRC Region III staff of their findings as their investigation progressed. This issue is considered closed.

3. Entrance and Exit Interviews

- a. At the beginning of the inspection, Mr. M. Wadley, Plant Manager, and other members of the licensee's staff were informed of the purpose of this inspection, its scope and the topical areas to be examined.
- b. The inspector met with the licensee representatives, denoted in Section 1, at the conclusion of onsite inspection activities. A general description of the scope and conduct of the inspection was provided. Briefly listed below are the findings discussed during the exit interview. The licensee representatives were invited to provide comments on each item discussed. Those comments are included if appropriate. The details of each finding listed below are referenced, as noted, in the report.
 - (1) Personnel present were advised that a violation would be cited for failure to adequately secure a Safeguards Information document (site security plan) left unattended outside of the protected area (See Section 6).
 - (2) A licensee identified violation was noted pertaining to failure to inventory some items of SNM (See Section 5). No other violations, unresolved items, or deficiencies were noted in reference to the SNM Control and Accountability inspection.
 - (3) Five previous inspection findings were reviewed and closed (See Section 2).
- c. Personnel present were also advised that documents pertaining to the SNM Control and Accountability program would be further reviewed at the NRC Region III office and that they would be advised of the review results at a later time. On January 21, 1994, Mr. T. Breene, the SNM Custodian, was advised that the review had been completed and no deficiencies were identified, except for the licensee identified violation addressed in Section 5 of the Report Details. On January 27, 1994, contact with the Nuclear Materials Management and Safeguards System at Oakridge, Tennessee confirmed that the licensee's SNM accounts YWV and XBB were reconciled.

4. Program Areas Inspected

Listed below are the areas examined by the inspector in which no findings (violations, deviations, unresolved items or inspection followup items) were identified. Only findings are described in subsequent Report Detail sections.

The below listed clear areas were reviewed and evaluated by the inspector. Sampling reviews included interviews, observations, and document reviews that provided independent verification of compliance with requirements. Gathered data was also used to evaluate the adequacy of the reviewed program and practices to adequately protect the health and safety of the public. The scope and depth of inspection activities were conducted as deemed appropriate and necessary for the Special Nuclear Material Control and Accountability (SNMC&A) program. An independent inventory of SNM was not performed during this inspection.

The areas inspected in which no findings were noted and compliance was adequate included:

Material Control and Accounting - Reactors (IP 85102): SNMC&A Procedures; Audits; Receipt and Shipment Records; SNM Possession and Use; Transfer Records; Material Status reports; and Location of SNM.

5. Material Control and Accounting - Reactors (IP 85102)

One licensee identified violation was noted pertaining to the inventory of all items of Special Nuclear Material (SNM) and is described below.

While performing an inventory of SNM during August 1993, the SNM custodian noted several discrepancies, to include:

- one incore detector had not been inventoried for several years because it was missed during the initial inventory conducted in 1990.
- One detector was listed under an incorrect serial number.
- The location of three natural uranium pins was not listed on the surveillance procedure for SNM inventory.
- A fuel rod from one assembly was not listed on the surveillance procedure as in the proper location.

The Plant Manager was advised of the above deficiencies by memorandum dated August 24, 1993. The surveillance procedure (SP1170, Rev. 14, Approved November 30, 1993) was revised to include specific line items to document the inventory of all detectors, natural uranium pins, and the rod from the fuel assembly. The serial number for the detector was verified as being accurate. Additionally, a verification requirement

was added to the surveillance procedure. Both the preparation and verification will be required to be performed by a Nuclear Engineer.

The deficiencies noted above constitute a violation of 10 CFR 70.51(d) which requires licensees to inventory all SNM on an annual basis, and 10 CFR 70.51(c) which requires written material control and accountability procedures to be followed.

None of the above deficiencies constituted a loss of possession of SNM under the control of the licensee. This violation meets the criteria of Section VII.B, 10 CFR Part 2, Appendix C, as a licensee identified violation. Therefore, a Notice of Violation will not be issued.

6. Protection of Safeguards Information (IP 81810)

A repeat violation was cited for failure to adequately protect a Safeguards Information document (site security plan) while left unattended outside of the protected area (282/93022-01; 306/93022-01).

On August 19, 1993, at approximately 1:00 P.M. at the security section within the Nuclear Projects Department (NPD) Building a security specialist asked another security specialist who was copying some security procedures to maintain custody of a security plan until he (first person) returned. The second security specialist accepted responsibility for the document and placed the document on a shelf above a copying machine he was using at the time and continued to make copies of some security procedures. When the first security specialist returned, they both continued copying and assembling the copies of the security procedures. After completing that task, they both left the copying machine and visited another security specialist at his office about 15 feet from the copying machine but out of sight of the plan laying on the shelf. The visit lasted for about two minutes or less. During this time, the security plan was left unattended on the shelf above the copying machine. While the two security specialists were visiting the other person, two Quality Assurance (QA) auditors were in the vicinity conducting an audit of protective measures for safeguards information and one of the auditors noticed the security plan left unattended on the shelf above the copying machine. The QA auditor picked up the plan and maintained custody of the security plan until the incident was reported to the security section and the security section retrieved the security plan from the auditors.

This incident is a violation of 10 CFR 73.21(d)(2) which states in part, "While unattended, Safeguards Information shall be stored in a locked security storage container." Although the duration of time that the security plan was left insecure (no more than two minutes) and the location where the document was left insecure (security section) significantly lessens the potential for compromise, this was the third occasion of safeguards information being found unattended in the NPD Building since March 1992. The root cause for this and the other incidents was personnel error and inattention to detail in fulfilling individual responsibilities to protect safeguards information. Previous

corrective actions for the earlier incidents have not been effective in preventing recurrence. The repetitive nature of this violation prevents it from being considered a licensee identified violation as permitted by Section VII.B of Appendix C to 10 CFR Part 2.

It should be noted that the site specific security plan did not contain detailed drawings of security component installation, detailed security system descriptions, or identify security component deficiencies which could be used to circumvent or nullify the effectiveness of the security system. As a result of the above described incident, the licensee relocated all safeguards information to locations within the protected area, and strengthened administrative controls pertaining to the protection of safeguards information. The adequacy of the long term corrective actions will be evaluated upon receipt of the licensee's written response to the Notice of Violation.