

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-282/86002(DRSS); 50-306/86002(DRSS)

Docket Nos. 50-282; 50-306

Licenses No. DPR-42; DPR-60

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

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

Inspection At: Prairie Island Site, Red Wing, MN

Inspection Conducted: January 7-10, 1986

Inspectors: *J. P. Patterson*
J. P. Patterson
Lead Inspector

1/24/86
Date

N. R. Williamsen
N. R. Williamsen

1/24/86
Date

Approved By: *M. P. Phillips*
M. P. Phillips, Chief
Emergency Preparedness Section

1/24/86
Date

Inspection Summary:

Inspection on January 7-10, 1986 (Reports No. 50-282/86002; 50-306/86002(DRSS))

Areas Inspected: Routine unannounced inspection of the following areas of the emergency preparedness program: knowledge and performance of duties (training); changes to the emergency preparedness program; licensee audits; maintenance of emergency preparedness; licensee actions on previously-identified items; and activation of the emergency plan. The inspection involved 62 inspector-hours on site by two NRC inspectors.

Results: No violations, deficiencies, or deviations were identified in five areas; however, one violation was identified in one area (knowledge and performance of duties).

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DETAILS

1. Persons Contacted

- *E. Watzl, Plant Manager
- *D. Mendele, Plant Superintendent, Engineering and Radiation Protection
- *D. Schuelke, Superintendent, Radiation Protection
- R. Lindsey, Plant Superintendent, Operations and Maintenance
- *F. Fey, General Superintendent, Radiation Protection and Chemistry (Corporate)
- *M. Ladd, Administrator Emergency Preparedness (Corporate)
- *C. Gjemo, Engineer I, Production Training (Corporate)
- *T. Asmus, Engineer II, Acting Site Emergency Preparedness Coordinator
- *R. Stenroos, Principal Production Engineer
- *M. Agen, Senior Production Engineer, Training
- *M. Reddemann, Technical Superintendent, Training Supervisor
- *A. Hunstad, Staff Engineer
- D. Larimer, Radiochemistry Supervisor
- R. Holthe, Shift Supervisor
- G. Woodhouse, Shift Supervisor
- G. Joachim, Radiation Protection Specialist
- M. Pfeffer, Radiation Protection Specialist
- J. Lundquist, Chemistry Technician
- J. Friedrich, Rad Waste Engineer
- S. Macalus, Communications Representative (Corporate)
- G. Kolle, Radiation Protection Instructor

*Denotes those attending the exit interview.

2. Licensee Actions on Previously-Identified Items Related to Emergency Preparedness

- a. (Closed) Open Item Nos. 282/83013-03, 306/83013-03: Faulty temperature control in the EOF counting laboratory allowed the temperature to increase to approximately 85 degrees F which could cause malfunctioning of the counting laboratory equipment. This was resolved by two changes. (1) A new computer was installed with a lower heat output than the earlier computer. (2) Augmented air-handling was provided by installing a grill in both the counting room door and in the ceiling and installing a variable speed, thermostatically-controlled fan to ensure air circulation. These modifications were completed by April 18, 1985. This item is considered closed.
- b. (Closed) Open Item Nos. 282/84005-01, 306/84005-01: EPIP F3-9, Paragraph 4.2 stated that a plant evacuation may occur at any time during an Alert, Site Area, or General Emergency, contrary to the guidance of NUREG-0654, Paragraph J.4. This was resolved by revising the EPIP to read, "Evacuation may occur during an Alert and SHALL occur during a Site Area Emergency or General Emergency." This item is considered closed.

3. Activation of the Prairie Island Emergency Plan

(Closed) Open Item Nos. 282/850XX-01 and 306/85001-XX: Activation of the Prairie Island Emergency Plan. One of these events was an inadvertent signal for safety injection during a refueling outage. There was no actual discharge into the reactor vessel, and hence this was not a classifiable event. A notification to the NRC was based on 10 CFR 50.72 requirements. Notifications were not made to the State or to local governmental authorities, as no emergency declaration was required. This item is considered closed.

During the period October 1, 1984 to January 6, 1986, the licensee declared two Notifications of Unusual Events (NUEs). The NUEs occurred on October 29, 1984 and August 1, 1985. The licensee provided complete records for both NUEs and the inspector also made a spot check of notification times from other records. The declarations were consistent with the EALs and all notifications were made on a timely basis.

In addition, the inspector reviewed the Shift Supervisor's log book in the Control Room to determine if any other conditions occurred during the inspection period which could have resulted in possible activations of the emergency plan. No information was identified which could have led to additional emergency plan activations.

4. Changes to the Emergency Preparedness Program (82204)

The inspectors determined through a review of documentation and information received from the General Superintendent, Radiation Protection and Chemistry, that changes to the emergency plan and implementing procedures, both Corporate and Prairie Island, have been submitted to Region III within 30 days of such changes as required by 10 CFR 50.54(q) and 10 CFR Appendix E, Section V. A change has been made in the Prairie Island Emergency Plan Implementing Procedures (EPIPs) so that the cover page now lists the effective date as well as the Operations Committee (OC) review date. This change was made as a result of the prior inspection conducted on October 3-5, 1984 (Reports No. 50-282/8412; 306/8414).

The inspectors confirmed that two recommended changes in the emergency plan have been made as a result of the prior inspection. Revision 5 of the Prairie Island Emergency Plan now includes in Section 8.1.2, a more accurate description of what sampling activities are required in the Radiological Monitoring Drills as recommended in NUREG-0654, Planning Standard N.2.d. The second change addresses the requirement for monthly communication checks with the NRC HQ and NRC Region III from the Control Room, TSC, and EOF. This change is incorporated into Section 8.1.2(e).

There have been no significant changes in the licensee's organization since the previous inspection. Records of revisions to the Corporate Emergency Plan and the Prairie Island Emergency Plan as well as their respective implementing procedures are maintained at the corporate office under the direct supervision of the Administrator, Emergency Preparedness.

Based on the above findings, this portion of the licensee's program is acceptable.

5. Knowledge and Performance of Duties (Training) (82206)

Through interviews, discussions with training staff representatives, and review of internal training documentation, the inspector determined that several individuals with emergency related responsibilities had not completed their required training in 1985. This fourth quarter (October through December, 1985) emergency plan training report listed 16 individuals who did not receive emergency plan training in 1985. Some had their last emergency training in November and December of 1984, still within the Technical Specifications guidelines of ± 3 months for an annual or 12 month training, and thus were still complying with the Emergency Plan annual training requirement as listed in Section 8.1.1 of the site Emergency Plan. However, further evaluation by the inspectors narrowed the original list of 16 to 4, whose training span exceeded the annual time requirement for energy plan training. These four individuals included a Shift Supervisor, a Shift Emergency Communicator and two from the Radiation Protection Group with emergency responsibilities. This training lapse is a violation of 10 CFR 50.54(q). However, the licensee's actions met the provisions of 10 CFR 2, Appendix C, Section IV.A. Since the licensee had identified the training lapse, the violation would have been at Severity Level IV, could not have been previously identified, and since steps were being taken to correct it, no Notice of Violation will be issued. The completion of corrective actions will be tracked as Open Item Nos. 282/86002-01; 306/86002-01.

The inspector conducted walkthroughs and interviews with two Shift Supervisors (SS), two designated Emergency Directors, (EDs) one Radiological Emergency Coordinator, two Radiation Protection Specialists, one Chemistry Technician, and one Rad Waste Engineer. All were cognizant and knowledgeable of their emergency functions and appeared competent to fulfill their emergency responsibilities. One SS, who was deficient in Dose Assessment Training according to the licensee's training records, received that training during the inspection period. Training records for the other eight individuals interviewed were found to be current.

A computerized listing of emergency preparedness issues has been incorporated into the training lesson plans. These issues include items from NRC inspection reports, audit findings and recommendations, and drill and exercise critiques. The inspector concluded that the type of issues described are being incorporated into the lesson plans to improve the credibility and applicability of the emergency plan training. Also, emergency training for SS/EDs has been increased from 12 hours in 1984 to 20 hours in 1985. Documentation for individual participation in

emergency drills, exercises and tabletop discussions has been improved and is more available from the vantage point of the licensee's independent audit. These improvements result from items recommended in the prior inspection.

The inspectors emphasized to the Training Department staff that annual training is evaluated based on every 12 months \pm 3 months, not anytime in the calendar year. Obviously, if the latter were followed, an individual could go up to 23 months and still be trained once in each calendar year. This misconception by some licensee representatives was obvious in the review of the 4th quarter Emergency Plan Training Records in this section.

Corporate training records, which reflect annual training requirements for all licensee personnel identified as NSP Corporate Emergency Response Organization, were reviewed by the inspector and found to be current and satisfactory. Offsite annual training has been completed for Dakota, Goodhue and Pierce Counties. This training, which also included emergency personnel from the city of Red Wing, Minnesota was conducted from April to July, 1985. These offsite training sessions, which also included the State of Minnesota, were conducted jointly by a Prairie Island Training Instructor and a representative of the State of Minnesota, Division of Emergency Services. Thus, all required corporate emergency personnel training and training for State and local governmental agencies has been conducted.

Corporate Nuclear Emergency Plan Implementing Procedure, EPIP 1.2.1, Revision 5, titled "Emergency Plan Training" lists the type of training requirements for Northern States Power Company and support agency emergency response plan personnel. Under Scheduling, Section 5.4.1, the Manager of Production Training receives documentation of completed training from the Plant Training Supervisor. A summary report of the completed training is then sent to the General Superintendent, Radiation Protection and Chemistry. As followup on those who did not attend a required emergency planning course or makeup session in the three month grace period, the names are removed from Emergency Response Organization duties. Corporate management up to the General Manager, Nuclear Plants are notified. The latter then notifies the Prairie Island Plant Manager to remove those individual's names from the emergency response roster. These provisions are all incorporated through Corporate EPIP 1.2.1, as described above. With cooperation of the plant Training Department and the supervisors of those assigned to emergency response functions, better assurance can be obtained that all emergency response training is completed on schedule.

Based on the above findings this portion of the licensee's program is acceptable; however, the following item must be completed:

- Required emergency training must be completed for all individuals listed in the 4th Quarter Emergency Plan Training Report, or any others subsequently identified lacking in annual emergency planning training up to December 31, 1985.

6. Licensee Audits (82210)

The Nuclear Operations - Quality Assurance Branch conducted the annual independent audit of the licensee's emergency preparedness program on an intermittent basis from February 1, to March 21, 1985. The prior audit was conducted between March and April 1984. The inspector's evaluation was based on a review of the audits of the Corporate and Plant Emergency Plans, Drills and Exercises, other internal documentation, and interviews with key corporate and plant personnel.

The inspector determined that this audit included an evaluation for adequacy of interfaces with State and local governments. Responses by the State and the three counties to this evaluation were received by telephone or in personal contacts at subsequent meetings. The inspector recommended to the Administrator, Emergency Preparedness, (EP) that these responses be documented so that official acknowledgement can be made on a timely basis. The documented audit findings are kept on file for five years as stated in Surveillance Procedure A1-1, per 10 CFR 50.54(t) requirements. Distribution of this independent review of the EP program including recommendations for improvement has been made to corporate level management and plant management.

The inspector reviewed the mechanism for tracking audit recommendations in EP-6, Revision 3, August 21, 1985, titled "Emergency Plan Action Item List Computer File." This formalized computerized system is an improvement over the informal system for tracking emergency preparedness items which was used in previous years by the Site Emergency Preparedness Coordinators. The Administrator EP, who is directly responsible for the system, demonstrated in detail to the inspectors how the current system operates and what mechanisms are built in to prevent a time lapse which could prevent a correction from being made on time. If all responsible, including management, cooperate in utilizing this system, it should improve the EP program and its responsiveness to key issues. The inspector made a spot check of three audit recommendations to determine if they were listed on the action item computer list file. All three recommendations had been entered into the tracking system and one of them was already completed. The other two had later completion dates.

Based on the above findings, this portion of the licensee's program is acceptable.

7. Maintaining Emergency Preparedness

The inspector reviewed records of communication drills, Health Physics Drills, radiological monitoring drills, medical drills and shift augmentation drills. All were in order and indicated that the drills were conducted within the required time increments. The most recent shift augmentation drill on February 27, 1985 involved activation of the Radio Alert System plus a followup phone call asking for an estimate of the time it would take for the emergency response person to report to the Prairie Island Plant site. Those required to report within 30 minutes and those within 60 minutes, each estimated they could get to site within those time restraints. The inspector recommended that, if possible, the

next shift augmentation drill should request the emergency response personnel to actually drive to the plant. To our knowledge Prairie Island has not had an actual "report in person" shift augmentation drill. The only exception was the 1985 annual exercise which started about 5:00 a.m.

The tone-alert radio system, which has had some operating problems, is scheduled to be supplanted by the Automatic Dialing Alerting System (ADAS). Funds have been approved for the new ADAS, orders should be placed by February 1, 1986, and from information received by licensee representative the system should be in place and operating within six months after receipt. This new system will automatically make the phone calls, produce "hard" copy of which phone numbers were called, and at what time and whether or not the individual's phone was answered.

Based on the above findings, this portion of the licensee's program is acceptable.

8. Exit Meeting

The inspectors met with the licensee representative (denoted in Section 1) at the conclusion of the inspection on January 10, 1986. The scope and findings of the inspection were discussed by the inspectors. The inspector discussed the content of the report to determine if the licensee was aware that any of the information was proprietary. The licensee responded that none of the information should be proprietary.