

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report Nos: 50-282/81-09; 50-306/81-10

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

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

Facility Name: Prairie Island Nuclear Generating Plant

Inspection At: Prairie Island Site, Red Wing, MN. 55066

Inspection Conducted: April 10-30, 1981

Inspectors:

C. D. Feierabend
C. D. Feierabend

5/5/81

B. L. Burgess
B. L. Burgess

5/5/81

Approved By:

W. S. Little
W. S. Little, Chief
Reactor Projects Section 2C

5/8/81

Inspection Summary

Inspection On April 10-30, 1981 (Report No. 50-282/81-09; 50-306/81-10)

Areas Inspected: Routine resident inspection of plant operation, maintenance, surveillance, security, radiation protection, organization, training and followup on Licensee Event Reports. The inspection involved a total of 99 inspector hours onsite by 2 NRC inspectors including 9 inspector hours onsite during off-shifts.

Results: No items of noncompliance were identified.

8105280 288

DETAILS

1. Personnel Contacted

F. Tierney, Plant Manager
J. Brokaw, Plant Superintendent, Operations and Maintenance
E. Watzl, Plant Superintendent, Plant Engineering and Radiation Protection
A. Hunstad, Staff Engineer
R. Lindsey, Superintendent, Operations
J. Nelson, Superintendent, Maintenance
J. Hoffman, Superintendent, Technical Engineering
M. Klee, Superintendent, Nuclear Engineering
D. Haugland, Engineer
G. Lenertz, Engineer
G. Miller, Engineer
D. Hansen, Inservice Inspection Engineer
D. Cragoe, Shift Supervisor
G. Edon, Shift Supervisor
P. Ryan, Shift Supervisor
M. Balk, Shift Supervisor
T. Goetsch, Shift Supervisor
D. Walker, Shift Supervisor
P. Valtakis, Shift Supervisor

2. Operational Safety Verification

a. General

Unit 1 operated routinely throughout the month. Unit 2 operated routinely except for the unit trip on April 18, 1981, caused by a dropped control rod.

b. Control Room Observations

The inspector observed control room operations, reviewed applicable logs, conducted discussions with control room operators and observed shift turnovers. The inspector verified the operability of selected emergency systems, reviewed equipment control records, and verified proper return to service of affected components.

c. Tours

Tours of the auxiliary, turbine and containment buildings, and external areas were conducted to observe plant equipment conditions, including potential fire hazards, and to verify that maintenance work requests had been initiated for equipment in need of maintenance. By observation and direct interview, the inspector verified that security procedures were being implemented in accordance with the plant security plan.

The inspectors observed plant housekeeping/cleanliness conditions, and verified implementation of radiation protection controls.

d. Independent Verification

The inspector performed a walkdown of the accessible portions of the Chemical and Volume Control System (CVCS). Observations included confirmation of selected portions of the licensee's procedures, checklists, and plant drawings, verification of correct valve and power supply breaker positions to insure plant equipment and instrumentation properly aligned, and comparison of posted radiation levels with measured radiation levels taken by the inspector.

3. Maintenance

a. Review of Work Requests (WR's) and Work Request Authorizations (WRA's)

The inspector selected and reviewed several WR's and WRA's to determine the status of safety related systems, to verify that proper priorities were given and to verify that design changes were initiated where appropriate.

Reviewed WRA-E1474-CC-Q Investigate and Repair #11 Component Cooling Pump Seal Leak.

Reviewed WR-E-2468-RC Pressurizer Level Transmitter Calibration.

b. Observations

The inspector observed portions of safety related maintenance activities to determine that the activities did not violate limiting conditions for operations (LCO's), that administrative approvals and equipment control tags were completed prior to initiating the work, that approved procedures were used (or activity was within the "skills of the trade"), and that the procedures used were adequate to control the activity.

The inspector observed maintenance performed on Unit 1 #11 Component Cooling Pump. The cause of the seal leak was found and corrected. No items of concern were identified.

The inspector entered Unit 2 containment to observe calibration of a pressurizer level transmitter. After one adjustment of the span, the instrument calibration was satisfactory. No items of noncompliance were identified.

4. Surveillance

The inspectors witnessed portions of surveillance testing of safety related systems and components. Witnessing included verifying that the tests were scheduled and performed within Technical Specification requirements, observing that procedures were being followed, that LCO's were not violated and that system restoration was completed.

- a. SP-1023 Refueling Water Storage Tank Level Calibration
 Test was satisfactory.
- b. SP-1135 Delta I Target Measurement Unit 2
 Test was satisfactory.

5. Plant Trip

Unit 2 tripped at 0024 on April 18, 1981 while an operator was performing SP-1047 - Control Rod Exercise. Review of plant parameters and alarms by the operators revealed that one control rod had dropped, causing the reactor to trip on negative flux rate. All systems responded as expected, and the plant was stabilized. An investigation of the cause of the trip was conducted identifying a bad logic card in a rod drive cabinet. The logic card was replaced and the plant returned to operation on April 19, 1981.

The inspector ascertained the status of the reactor by observation of control room logs and direct interview with licensee personnel. The inspector verified that the proper log entries were made, reviewed the corrective actions taken by the licensee, and verified that the facility was operated within license limits.

6. TMI-2 Lessons Learned Items

The inspector reviewed status of licensee progress on certain of the post TMI-2 requirements as identified in NUREG-0737.

- a. 1.A.1.1.3 Shift Technical Advisor (STA)

The inspector confirmed that the licensee had submitted information^{1/} for NRC Staff review describing the STA qualification and training program in accordance with previous commitment.^{2/}

- b. I.C.5 Procedures for Feedback of Operating Experience to Plant Staff

The licensee has informed^{3/} NRR that the commitment date of April 1, 1981 for formal implementing procedures will not be met. The new commitment is that the procedures will be complete by July 1, 1981.

- 1/ NSP Letter to NRR, Subject: Information Related to Post TMI Requirements, dated January 30, 1981.
- 2/ NSP Letter to NRR, Subject: Post TMI Requirements - NUREG-0737, dated December 30, 1980.
- 3/ NSP Letter to NRR, Subject: Delay in Implementation of NUREG-0737 Post TMI Requirements, dated March 27, 1981

7. Licensee Event Report Followup

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with Technical Specifications.

- a. P-RO-80-24 Inservice Inspection Item Not Completed on Schedule.
- b. P-RO-81-03 One Steam Exclusion Setpoint Drifted Out of Specification.

8. Exit Interviews

The inspectors attended an exit interview conducted by Region III inspector Max Gildner on April 24, 1981.

The inspector met with Mr. Tierney at the conclusion of the inspection and discussed the scope and results of the inspection.