

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

REGION III

Report No. 50-263/77-16

Docket No. 50-263 License No. DPR-22

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

Facility Name: Monticello Nuclear Generating Plant

Inspection at: Monticello Site, Monticello, MN

Inspection Conducted: September 12-16, 1977

Inspector: *J. L. Barker*
J. L. Barker

9/27/77

Approved by: *W. S. Little*
W. S. Little, Chief
Nuclear Support Section

9/27/77

Inspection Summary

Inspection on September 12-16, 1977 (Report No. 50-263/77-16)

Areas Inspected: Routine, unannounced inspection of main steam line isolation valve local leakrate testing, preparation for a refueling outage, pre-fuel handling activities, fuel handling activities, maintenance during a refueling outage, and preparation for startup following a refueling outage. The inspection involved 30 inspector-hours onsite by one NRC inspector and included inspection effort conducted during offshift hours.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

- *L. Eliason, Plant Manager
- *W. Anderson, Superintendent, Operations and Maintenance
- *M. Clarity, Superintendent, Plant Engineering and Radiation Protection
 - D. Antony, Plant Engineer, Operations
 - W. Shamlu, Plant Engineer, Technical
- *R. Scheinost, Quality Engineer
 - S. Pearson, Operations Supervisor
 - D. Nevinski, Engineer Nuclear
 - R. Van Dell, Engineer
 - D. Wegener, Engineer

The inspector also contacted eleven other licensee employees. They included three shift supervisors, two lead plant equipment operators, and six plant equipment operators.

*Denotes those present at the exit interview.

2. Main Steam Line Isolation Valve (MSIV) Local Leak Rate Testing

The inspector reviewed licensee procedure OCD 0137-7A, "Reactor Steam Supply Valve Leak Rate Testing by Pressurizing the Reactor with Air" and Test No. 0137, "Local Leak Rate Test." He reviewed the results of MSIV local leak rate test and verified adherence to approved procedures and proper acceptance criteria. All MSIV's except AO-2-86A and AO-2-80A, which will be retested after proper repairs during the refueling outage, received satisfactory results.

No items of noncompliance or deviations were identified.

3. Preparation for a Refueling Outage

The inspector verified that approved procedures are available for new fuel receipt and inspection, fuel transfer and core verification, recycled fuel inspections, and fuel sipping operations; and that new fuel was received and inspected in accordance with the licensee's procedures.

The inspector reviewed licensee procedures No. 9001, "Reactor Well and Dryer-Separator Storage Pool Filling Procedure," No. 9006, "Reactor Well and Dryer-Separator Storage Pool Draining Procedure," No. 9007B, "Shift Supervisor's Refueling Checklist," No. 9008,

"In-Core Sipping Procedure," No. 9008A, "Out-of-Core Sipping Procedure," No. 9012, "Fuel Receiving Procedure," No. 9015, "Inspection of New Fuel and Channels Followed by Placement Into the Vault, Placement Into the Pool, or Transfer from the Vault to the Pool," No. 9023, "Refueling Bridge Load Cell Calibration," No. 9024, "Core Reload Verification Procedure," No. 9026 "Refueling Bridge Functional Test," and Operations Manual Sections C.3, "Shutdown Procedures," D.1., "Accountability" and D.4., "Refueling Outage Procedures." The inspector noted that a great deal of beneficial preplanning had been accomplished by the licensee which tended to make the refueling outage follow in a continuous manner.

No items of noncompliance or deviations were identified.

4. Pre-Fuel Handling Activities

The inspector verified that surveillance testing had been completed on Technical Specification requirements, refueling machine operation and indexing, ventilation requirement in fuel storage areas, refueling interlocks, crane testing, refueling deck radiation monitors, and communication systems.

The inspector reviewed the Shift Supervisor's Log and the Control Room Operator's Daily Log for the dates September 9-11, 1977. He also reviewed licensee surveillance tests No. 0201/0202, "Refueling Interlocks Weekly Tests," No. 2164, "Plant Pre-Shutdown Checklist," No. 9007B, "Shift Supervisor's Refueling Checklist," and No. 9026, "Refueling Bridge Functional Test."

No items of noncompliance or deviations were identified.

5. Fuel Handling Activities

The inspector verified by direct observations that core monitoring during refueling operations was in accordance with Technical Specifications, that fuel bundle insertion and removal were in accordance with established procedures, that core internals were stored to protect against damage, that housekeeping was proper, that vessel level was in accordance with Technical Specifications, that the mode switch was as required by Technical Specifications, that control blade checks were in accordance with approved procedures, that the individual directing fuel handling activities held a senior operator license and was present directly supervising activities, and that a licensed reactor operator was present in the control room and in constant direct communications with a member of the fuel handling crew when work was being performed that could affect the reactivity of the reactor.

The inspector noted that all activities conducted by operations personnel both in the control room and on the refueling bridge were conducted in a professional manner with core safety as the primary objective.

No items of noncompliance or deviations were identified.

6. Maintenance During a Refueling Outage

The inspector verified that maintenance activities conducted during the refueling outage were being conducted by qualified personnel in accordance with approved procedures. He verified the procedures written to control work activities contained administrative approvals for removing a system from service and returning it to service, hold points for inspection and signoff by quality assurance personnel, provisions for testing following maintenance, provisions for jumper removals, and responsibility for reporting to licensee management details concerning design or construction related deficiencies identified during maintenance.

The inspector reviewed licensee procedure 4-ACD-3.6, "Work Request Authorization." He also witnessed the maintenance and calibration activities conducted on the Target Rock Safety/Relief Valves.

No items of noncompliance or deviations were identified.

7. Preparations for Startup Following a Refueling Outage

The inspector verified that systems that were disturbed or tested during the refueling outage will be returned to an operating status prior to plant startup and that plant startup procedures require adherence to the licensee's Technical Specifications and commitments, as they pertain to startup testing and power operation prerequisites.

The inspector reviewed licensee procedures No. 2100, "Master Systems Checklist," No. 2150, "Pre-Startup Master Checklist," No. 2167, "Startup Checklist," and Operation Manual Section C.1., "Startup Procedures."

No items of noncompliance or deviations were identified.

8. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on September 16, 1977. The inspector summarized the scope and findings of the inspection.