U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-263/85024(DRP)

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

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

Facility Name: Monticello Nuclear Generating Station

Inspection At: Monticello Site, Monticello, MN

Inspection Conducted: November 26, 1985 - January 20, 1986

Inspector: P. L. Hartmann

Approved By: D. C. Boyd, Chief
Reactor Projects Section 2D

2-4-86
Date

Inspection Summary

Inspection on November 26, 1985 through January 20, 1986 (Report No. 50-263/85024(DRP))
Areas Inspected: A routine, unannounced inspection by the resident inspector of previous inspection findings; operational safety verification; maintenance; surveillance; cold weather preparation; TMI items; Licensee Event Reports; and I.E. Bulletins. The inspection involved a total of 152 inspector-hours onsite by one NRC inspector including 29 inspector-hours onsite during off-shifts.
Results: No violations or safety concerns were identified in the eight areas inspected.

DETAILS

1. Persons Contacted

*W. A. Shamla, Plant Manager
M. H. Clarity, Assistant to the Plant Manager
D. E. Nevinski, Plant Superintendent, Engineering & Radiation Protection
H. M. Kendall, Plant Office Manager
D. D. Antony, Superintendent of Operations
W. E. Anderson, Plant Superintendent, Operations and Maintenance
R. L. Scheinost, Superintendent, Quality Engineering
J. R. Pasch, Superintendent, Security and Services
L. H. Waldinger, Superintendent, Radiation Protection
W. J. Hill, Superintendent, Technical Engineering
W. W. Albold, Superintendent of Maintenance
B. D. Day, Superintendent, Operations Engineering
L. L. Nolan, Superintendent, Nuclear Technical Services

The inspectors also contacted other licensee employees including members of the technical and engineering staffs and reactor and auxiliary operators.

*Denotes the licensee representative attending the management exit interviews.

2. Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item (263/83-23-02(DRS)): Failure to treat analytical assumptions as operational constraints and failure to apply the requirements of 50.59 to operations outside those assumptions. This matter was reviewed by the NRC staff, and it was concluded that analytical assumptions are not required to be treated as operational constraints unless they have been specifically identified by the licensee to the NRC as operating limits or unless the NRC has specifically identified them to the licensee as operating limits. Furthermore, the NRC staff concluded that any aspect of the facility, procedure, parameter, etc. for which 50.59 reviews are required must be described in the written portions of the safety analysis report itself or in the drawings contained therein.

(Closed) CAL Related to Actuation of Degraded Voltage Protection Relays. On August 15, 1983, a Confirmatory Action Letter (CAL) was issued to the licensee regarding licensee actions resulting from the August 1, 1983, actuation of the degraded voltage protection relays. A supplementary CAL was issued to the licensee regarding this matter on August 31, 1983. This event was the subject of Inspection Report No. 50-263/83-23. The licensee has complied with all provisions of the CALs as reflected in the inspection report, in licensee letters to NRR dated August 24, September 9, October 14 and 28, and December 30, 1983, and July 27, September 25, and October 25, 1984, and in NRR letters to the licensee dated November 27, 1984, and March 20, 1985.

(Open) Open Item (263/85012-01(DRP)): Inservice Inspection Requirement of New Hold Down Beams. The licensee is working with General Electric to resolve this issue. The inspector is following the progress of resolution.

(Closed) Open Item (263/85021-02(DRS)): Implementation of Procedures. The inspector verified the required procedures were implemented as required.

3. Operational Safety Verification

The unit operated at near full power during the majority of the inspection period. January 1, 1986, a plant coastdown to refueling was commenced.

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the inspection period. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of the reactor building and turbine building were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, and excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance, plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls. The inspector walked down the standby gas treatment system to verify operability.

In response to concerns identified by Information Notice 85-82, Diesel Generator Differential Protection Relay Not Seismically Qualified, the licensee declared the emergency diesel generator (EDG) phase differential protection relays not seismically qualified on January 6, 1986. At 3:40 PM a plant shutdown was commenced contemporaneous with work to bypass the relays. The bypassing of the affected relays was to be accomplished by opening a test switch which effectively removed these relays from service without affecting the operability of the EDGs. The bypasses were installed and plant shutdown terminated at 4:10 PM January 6, 1986. The inspector reviewed the Work Request (WR 86-3019), and verified the proper installation of the bypasses in the emergency diesel generator source breaker cabinets.

4. Monthly Maintenance Observation

Station maintenance activities on safety-related systems and components listed below were observed/reviewed to ascertain that they were conducted in accordance with approved procedures, regulatory guides and industry codes or standards and in conformance with technical specifications.

The following items were considered during this review: the limiting conditions for operation were met while components or systems were removed from service, approvals were obtained prior to initiating the work, activities were accomplished using approved procedures and were inspected as applicable, functional testing and/or calibrations were performed prior to returning components or systems to service, quality control records were maintained, and activities were accomplished by

qualified personnel. Portions of the following maintenance activity were observed/reviewed during the inspection period:

- Repairs to HPCI Flow Controller
- Repairs to APRM 5 Count Circuit

5. Monthly Surveillance Observation

The inspector observed surveillance testing and verified that testing was performed in accordance with adequate procedures, that limiting conditions for operation were met, that removal and restoration of the affected components were accomplished, that test results conformed with technical specifications and procedure requirements and were reviewed by personnel other than the individual directing the test, and that any deficiencies identified during the testing were properly reviewed and resolved by appropriate management personnel.

The inspector observed/reviewed the following test activities:

- Scram Discharge Volume High Level Scram Test and Calibration Procedure
- APRM Downscale and Flow Variable Rod Block Calibration
- HPCI Monthly Pump Test

6. Cold Weather Preparations

The inspector verified the licensee had inspected systems susceptible to freezing to ensure the presence of heat tracing, space heaters, and/or insulation; the proper setting of thermostats; and that the heat tracing and space heating circuits had been energized.

7. Status of TMI NUREG-0737 Items

a. (Closed) II.F.1.4: Accident Monitor Containment Pressure. NRR approved this design by letter dated July 28, 1982. The inspector verified the equipment operable.

b. (Open) II.F.2.3.B: Instrumentation for Detecting of Inadequate Core Cooling. NRR has granted an extension for date of completion to the refueling outage for Cycle 13 (mid 1987) by letter dated May 28, 1985.

c. (Open) II.K.3.18.C: ADS Actuation Logic Modification. The modification design was approved by NRR by letter dated January 29, 1985. The modification is scheduled during the refueling outage for Cycle 12 (mid 1986).

d. (Open) II.K.3.28: Qualification of Accumulators on ADS Valves. NRR approved the qualification of the ADS accumulators. The modification is scheduled during the refueling outage for Cycle 13.

e. (Open) III.A.1.2.3. through III.A.1.2.8: These items remain as stated in Inspection Report No. 50-263/84003(DRP) with the exception of III.A.1.2.4. This item, Implementation of EOPs, has been granted an extension by NRR to six months after startup of Cycle 12.

8. Licensee Event Reports

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.

To update the long term corrective action provided in Inspection Report No. 263/85012(DRP) concerning activations of the Emergency Filtration Train (EFT) by various toxic gas monitors, the following information is provided:

a. The licensing group continues to work with NRR regarding the request to remove the hydrogen sulphite, ammonia and hydrochloric acid toxic gas monitors. It is appropriate to note this was accomplished March 4, 1985. at NSP's Prairie Island plant.

The licensee continues to work towards: installing four new, more reliable chlorine detectors; change the actuation logic from one of one, to one out of two taken twice. This logic change will allow for one detector to spuriously trip without actuating the EFT. The licensee has scheduled this work during the refueling outage for Cycle 12. This modification is not an NRC requirement.

The following LERs have been reviewed and are typical of the LERs closed in Inspection Report Nos. 263/85012 and 263/85020(DRP). Thus, as the immediate corrective actions have been adequate, and the reporting requirements have been met, they are closed. The inspector is closely monitoring the progress of the modification to provide a long term corrective action.

(Closed) LER 84005: E Mode of EFT Actuated by HCI Monitor

(Closed) LER 84012: (same as above)

(Closed) LER 84017: E Mode of EFT Actuated by Ammonia Monitor

(Closed) LER 84019: E Mode of EFT Actuated by Chlorine Monitor Tape Jam

(Closed) LER 84030: E Mode of EFT Actuated by Toxic Gas Detectors

(Closed) LER 84031: E Mode of EFT Actuated by Chlorine Monitor Spurious Trip

(Closed) LER 85003: E Mode of EFT Actuated by Hydrogen Chlorine Monitor

(Closed) LER 85005: E Mode of EFT Actuated by Chlorine Monitor Tape Smudge

(Closed) LER 85006: E Mode of EFT Actuated by Hydrogen Chloride Monitor Broken Tape

(Closed) LER 85020: E Mode of EFT Actuated by Ammonia Monitor Spike

(Closed) LER 85021: E Mode of EFT Actuation Due to Ammonia Detector Spike

b. (Closed) LER 84013 (Rev. 1): Emergency Diesel Generator Auto Start Due to Fault on No. 1 AR Transformer Cable Primary. The licensee has completed work that restructured the primary side termination to No. 1 AR reserve transformer, thus improving reliability.

c. (Closed) LER 84021: Loss of Offsite Power. The licensee has completed the permanent procedure changes required to prevent recurrence.

d. (Closed) LER 85008: Reactor Scram From Offsite Transformer Grounding. A ground on an offsite substation transformer resulted in swings of power on the distribution system. The fault caused a turbine acceleration relay trip, resulting in a load rejection scram. Corrective action consists of the load dispatcher logging and controlling all grounds installed.

9. I.E. Bulletin

(Closed) I.E. Bulletin 263/80025-BB: Operating Problems with Target Rock Safety-Relief Valves at BWRs. The inspector reviewed the licensee response to this item and verified: there are no two-stage SRVs at Monticello; procedures were revised as stated; and a redundant pressure regulator was installed as required.

10. Meeting With Local Officials

On November 26, 1985, the inspector met with the following Minnesota Department of Health Section of Radiation Control personnel to discuss matters of mutual interest, and tour the associated emergency response facilities:

- A. Dolezal-Hennigan: Chief, Section of Radiation Control
- B. Denney: Health Physicist I

11. Exit Interview

The inspector met with licensee representative denoted in Paragraph 1 at the conclusion of the inspection on January 23, 1986. The inspector discussed the purpose and scope of the inspection and the findings.

The inspector also discussed the likely informational content of the inspection report with regard to documents or processes reviewed by the inspector during the inspection. The licensee did not identify any documents/processes as proprietary.