

*Reactor Facilities  
Branch*

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION III  
799 ROOSEVELT ROAD  
GLEN ELLYN, ILLINOIS 60137

DLC 5 1975

Northern States Power Company  
ATTN: Mr. Leo Wachter, Vice  
President  
Power Production and  
System Operation  
414 Nicollet Mall  
Minneapolis, Minnesota 55401

Docket No. 50-263

Gentlemen:

This refers to the inspection conducted by Mr. Maura of this office on November 18 and 19, 1975, of activities at the Monticello Nuclear Generating Plant authorized by NRC Operating License No. DPR-22 and to the discussion of our findings with Mr. Larson and others of your staff at the conclusion of the inspection.

A copy of our report of this inspection is enclosed and identifies the areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, interviews with plant personnel, and observations by the inspector.

No items of noncompliance with NRC requirements were identified within the scope of this inspection.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you or your contractors believe to be proprietary, it is necessary that you make a written application to this office, within twenty days of your receipt of this letter, to withhold such information from public disclosure. Any such application must include a full



Northern States Power  
Company

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statement of the reasons for which it is claimed that the information is proprietary, and should be prepared so the proprietary information identified in the application is contained in a separate part of the document. Unless we receive an application to withhold information or are otherwise contacted within the specified time period, the written material identified in this paragraph will be placed in the Public Document Room.

No reply to this letter is necessary; however, should you have any questions concerning this inspection, we will be glad to discuss them with you.

Sincerely yours,

Gaston Fiorelli, Chief  
Reactor Operations and  
Nuclear Support Branch

Enclosure:  
IE Inspection Rpt No. G50-263/75-19

cc w/encl:  
C. E. Larson, Plant Manager

bcc w/encl:  
PDR  
Local PDR  
NSIC  
TIC  
Anthony Roisman, Esq., Attorney

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

REGION III

Report of Operations Inspection

IE Inspection Report No. 050-263/75-19

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

Monticello Nuclear Generating Plant  
Monticello, Minnesota

License No. DPR-22  
Category: C

Type of Licensee: GE BWR 545 MWe

Type of Inspection: Special, Announced

Dates of Inspection: November 18-19, 1975

Principal Inspector: *F. A. Maura* F. A. Maura

*12/4/75*  
(Date)

Accompanying Inspectors: None

Other Accompanying Personnel: None

Reviewed By: *W. S. Little* W. S. Little, Section Leader  
Nuclear Support

*12/7/75*  
(Date)

SUMMARY OF FINDINGS

Inspection Summary

An inspection was performed on November 18 and 19, 1975 regarding followup action taken by the licensee with regards to IE Bulletin No. 75-04A and items identified during the last fire stop inspection<sup>1/</sup>. The following additional items were also inspected: the applicability of work control procedures to modification and maintenance activities near vital equipment; the degree of auditing performed by quality assurance personnel of work request authorizations; fire fighting procedures; fire drills; and results of recent fire inspection.

Enforcement Items

None.

Licensee Action on Previously Identified Enforcement Items

None.

Other Significant Items

A. Systems and Components

Not applicable.

B. Facility Items (Plans and Procedures)

The plant emergency procedures do not include fire fighting procedures for specific vital areas. The licensee plans to prepare such procedures.

C. Managerial Items

Not applicable.

D. Noncompliance Identified and Corrected by Licensee

Not applicable.

<sup>1/</sup> IE Inspection Rpt No. 050-263/75-13.

E. Deviations

The corrective actions taken by the licensee concerning the deviations identified in the inspection report enclosed with our letter of August 29, 1975 were reviewed during this inspection and are considered resolved. (Paragraphs 2 and 6.b. Report Details)

F. Status of Previously Reported Unresolved Items

Not applicable.

Management Interview

A management interview was conducted with Messrs. Larson, Clarity and Anthony at the conclusion of the inspection on November 19, 1975.

- A. The inspector noted that he had inspected all the penetrations in the cable spreading room and the control room and had no further questions regarding their seal and fire stop barrier. (Paragraph 2, Report Details)
- B. The inspector stated that during the plant tour he noted that the center deflector in one of the 1½" water hose nozzles was loose (approximately half way out) and that in all the stations checked (5) it could be removed easily by hand. The position of this component affects the spray pattern and defeats the electrical fire rating of the nozzles.

The licensee stated all nozzles throughout the plant will be checked to ensure the proper positioning and tightness of the center deflector. (Paragraph 3.b, Report Details)

- C. The inspector noted that the Plant Quality Engineer audits of Work Request Authorizations (WRA) so far has consisted of a paper review of the WRA's against the controlling ACD, but that on-the-spot auditing of the work in progress to assure compliance with the WRA, which is highly desirable, has not been performed.

The licensee plans to conduct on the spot audits of work in progress as soon as possible. (Paragraph 8, Report Details)

- D. The lack of fire fighting procedures for specific vital areas was discussed. The licensee plans to prepare such procedures with the help of corporate office personnel. The licensee also plans to conduct fire drills twice per year. (Paragraph 10, Report Details)

- E. The inspector inquired into the licensee's plans to carry out the recommendations of the study of fire detector sensor and fire hose station locations.

The licensee noted that an engineering study of what is required to carryout the recommendations is in progress, but that no target date for its completion has been set. (Paragraph 6.d, Report Details)

## REPORT DETAILS

### 1. Persons Contacted

C. Larson, Plant Manager  
M. Clarity, Superintendent Plant Engineering and Radiation Protection  
W. Anderson, Superintendent Operations and Maintenance  
D. Anthony, Plant Engineer, Operations  
O. Iverson, Engineer  
R. Perry, Engineer  
R. Scheinost, Plant Quality Engineer

### 2. Visual Examination of Cable Penetrations

An inspection of both sides of each cable penetration in the control room and cable spreading room was performed. During the last refueling outage the licensee had prepared data sheets which accounted for every penetration in both rooms and systematically proceeded to seal them with flamemastic. According to the licensee all styrofoam was removed. The inspector verified that:

- a. all penetrations were accounted for by the data sheets, and
- b. all penetrations had been adequately sealed with flamemastic.

### 3. Fire Detection and Extinguishing Equipment

During the walk thru the plant the inspector checked the following areas for fire fighting equipment operability and alarms with the following results:

- a. Cable spreading room - As noted previously<sup>2/</sup> this is the only area where ionization detectors are used to monitor for combustible gases. They annunciate in the control room. Since our last inspection the licensee has purchased the required equipment to test the detector; prepared Smoke Detector Surveillance Test No. 116, which was approved on September 19, 1975; and satisfactorily conducted the first semi-annual test on October 28, 1975. Revision 1 to the test procedure is being written to include a test of the temperature detectors which actuate an alarm in the control room whenever the temperature of the cable spreading room ventilation exhaust exceeds 105°F.

<sup>2/</sup> IE Inspection Rpts No. 050-263/75-08 and 13:

Two 30 lb Purple K dry chemical extinguishers are available in the room. Immediately outside there are two 2½ gallon pressurized water extinguishers plus a 1½ inch hose station with electrical fire rated nozzle.

- b. Reactor building - In the vicinity of the cable penetrations into the spreading room there is one dry chemical and one 1½" hose station with electrical fire rated nozzle. The inspector noted that the center deflector on the nozzle could be easily turned and determined that it was approximately half way removed. The component was left fully inserted. All other nozzles checked were found fully inserted, but could be unscrewed with the fingers. This condition was brought to the attention of the licensee, who will perform an inspection to ensure all are in their proper position and determine the best way to secure them in place.
- c. Turbine building - In the vicinity of the cable penetrations into the spreading room there is one dry chemical plus one 1½" hose station with electrical fire rated nozzle.
- d. Diesel generator rooms - Similar to (c) above.
- e. Battery rooms - In the hallway outside the three battery rooms there is one dry chemical and one CO<sub>2</sub> extinguishers, plus one 1½" hose station with electrical fire rated nozzle.

According to the licensee all 1½" hose nozzles in the station are rated for electrical fires.

The licensee conducts monthly checks on all fire fighting equipment. For the above noted stations the inspector verified that they had been conducted up to and including the month of November and that the equipment, with the exception of the nozzle noted earlier, appeared in good operable condition.

#### 4. Emergency Lighting

A quarterly test of the emergency lighting system is performed by the licensee. The tests for 1975 were performed in February, May, August and November. The inspector witnessed a portion of the last test and verified that the emergency lights in the control room, cable spreading room, and stairways and corridors in the vicinity operated properly.



5. Fire Inspections

Fire inspections have been performed by the insurance company inspector (NEL-PIA). The inspector reviewed the last inspection report dated September 26, 1975, and received at the site on November 17, 1975. The report contains several recommendations in the area of fire detection and protection, training, etc., which the licensee is in the process of evaluating. Resolution of these items will be covered in future inspections as part of the licensee's response to IE Bulletin 75-04B.

6. Response to IE Bulletin No. 75-04A

Most of the items in the licensee's response to this bulletin were completed as noted in IE Inspection Report 050-263/75-13. The remaining items were reviewed during this inspection. The following findings were made:

- a. Indoctrination of offsite personnel performing work at the plant is accomplished thru the use of taped lectures and a handout. The lecture covers the administrative procedures which control work request authorizations.
- b. All directives applicable to work control were approved and issued on August 19, 1975.
- c. All group safety chairmen have reviewed fire prevention policies and practices at their group safety meeting.
- d. The review of fire detection sensor and fire hose station location was completed on August 29, 1975. The report recommends the installation of smoke detectors in three locations (4.16 KV switchgear area, intake structure, and standby gas treatment system area). The licensee is beginning an engineering evaluation to determine best ways of accomplishing all recommendations.
- e. Emergency team personnel received fire fighting re-training which in addition to lectures included putting out a fire with dry chemical extinguishers and 1½" fog nozzles by each participant.
- f. The procedure for plant shutdown from outside the control room (abnormal procedures, pages 76 thru 80) was issued August 29, 1975. The procedure requires that the cable spreading room be accessible for actuation of the reactor coolant relief valves. The licensee is evaluating what changes are required to shutdown the plant from outside the control room if the cable spreading room is not accessible.

7. Work Control Procedure

Administrative Control Directive 4ACD 3.6 Revision 3 dated August 19, 1975, establishes the requirements for identifying, controlling, documenting and authorizing all work performed within the plant. Work on any critical system or component as defined in 4AWI 3.6.1, requires a second level of review prior to the start of the work. This review requires consideration of work deferral if significant hazards or reliability concerns are involved, and consideration of the training and qualifications of the personnel to do the work.

Potential industrial hazards, such as combustible materials, ignition sources, etc; the need for safety monitoring personnel; additional communications equipment with the control room; provisions for adequate fire detection and suppression equipment; and inspection of the area are covered in the directive.

8. Quality Assurance Surveillance

Periodic audit of work request authorizations are required on at least an annual basis. They are conducted in accordance with ACD 3.7 Revision 2, dated May 27, 1975 to verify that operating personnel are controlling and authorizing all plant work. The Plant Quality Engineer conducted his last audit during the recent refueling outage. The previous audit was done in March 1975. So far the audits have consisted of ensuring the WRA forms have been properly filled and approved, but no audit of the work in progress has been performed. The Plant Quality Engineer stated he plans to perform "on the job" audits beginning in 1976.

Verification that cable penetration seal material is nonflammable consists of quality assurance review of purchase orders and receiving inspections prior to material being stored. The licensee does not test the material to ensure it meets the designated standard, but depends on test performed by independent laboratories.

9. Design Change Controls

The inspector reviewed Design Change M 75-71 which covered the installation of additional cable thru penetration P149. All work was conducted in accordance with administrative controls imposed since August 6, 1975 to assure proper cable penetration seals.

10. Emergency Procedures

As noted previously<sup>3/</sup> the licensee has no specific fire fighting procedures and depends entirely on the corporate "Operating Safety Practices, Part 3, 1957" Manual. Existing emergency procedures do list the emergency team members and the fire fighting equipment available and where located. The licensee has agreed to prepare fire fighting procedures to cover specific areas such as the control room, cable spreading room, etc.

The licensee plans to conduct fire drills as part of the semi-annual evacuation drill beginning in 1976.

3/ IE Inspection Report 050-263/75-13.