



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

CENTRAL FILES

AUG 4 1978

Docket No. 50-263/78-9

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

Gentlemen:

This refers to the inspection conducted by Mr. D. E. Miller of this office on July 12-14 and 19-21, 1978, of activities at Monticello Nuclear Generating Plant authorized by NRC Operating License No. DPR-22 and to the discussion of our findings with Mr. Eliason and others at the conclusion of the inspection.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

No items of noncompliance with NRC requirements were identified during the course 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, except as follows. If this report contains information that you or your contractors believe to be proprietary, you must apply in writing to this office, within twenty days of your receipt of this letter, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application is contained in an enclosure to the application.

WR

Northern States Power
Company

- 2 -

AUG 4 1978

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

A. B. Davis, Chief
Fuel Facility and Materials
Safety Branch

Enclosure: IE Inspection Rpt
No. 50-263/78-09

cc w/encl:

July 12-14; 19-21 '78

Mr. L. R. Eliason, Plant
Manager

John W. Ferman, Ph.D. Nuclear
Engineer, MPCA

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DATE	8/3/78		8/3/78			

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

REGION III

Report No. 50-263/78-09

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: July 12-14 and 19-21, 1978

Inspector: D. E. Miller *D. E. Miller* 8-2-78

Approved by: *W. L. Fisher*
W. L. Fisher, Chief 8-3-78
Fuel Facility Projects and
Radiation Support Section

Inspection Summary

Inspection on July 12-14 and 19-21, 1978 (Report No. 50-263/78-09)

Areas Inspected: Routine, unannounced inspection of radiation protection program, including: qualifications; audits; training; radiation protection procedures; instruments and equipment; exposure control; posting, labeling, and control; surveys; notifications and reports; and commitments. The inspection involved 38 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

- *L. Eliason, Plant Manager
- *M. Clarity, Plant Engineering and Radiation Protection Superintendent
- *F. Fey, Radiation Protection Superintendent
- L. Nolan, Engineer
- R. Jacobson, Chemist
- *J. Windschill, Health Physicist
- P. Yurczyk, Radiation Protection Coordinator
- J. Peterson, Chemistry Coordinator
- G. Mathiasen, Radiation Protection Specialist
- H. Seibel, Shift Supervisor
- R. Scheinost, Senior Quality Engineer

The inspector also contacted other radiation protection specialists during the course of the inspection.

*Denotes those present at the exit interview.

2. General

This inspection, which began with visual observation of effluent monitoring instrumentation in the control room, and posting, labeling, and access controls in the reactor building at 6:15 p.m. on July 12, 1978, was conducted to examine the radiation protection aspects of routine plant operations and previous commitments made by the licensee.

No significant abnormalities were noted during the visual observations.

3. Organization

The radiation protection complement remains as previously reported (50-263/77-17).

4. Licensee Action on Previous Inspection Findings

(Closed) Commitment (50-263/78-02): Concerning the need to establish a formalized procedure for determining Type A and B quantities in accordance with 10 CFR 71.4(q). An apparently satisfactory procedure has been established and implemented.

(Closed) Commitment (50-263/77-05): Concerning the needed revision of Calibration Procedure 0163 "Stack Gas Monitor Calibration." The procedure has been revised to cross reference the various aspects which constitute adequate calibration.

5. Training

The licensee described to the inspector the training given to radiation protection and chemistry technicians. The licensee, in conjunction with his Prairie Island plant, is conducting a wage progression program which includes on-the-job, classroom, and self-study training in health physics and chemistry. Written materials are being developed and formalized, with about three fourths being completed. The training period for each technician spans several years before the maximum pay grade is reached.

This program is overseen by an advisory committee consisting of three Prairie Island and two Monticello plant persons and two consultants.

6. Radiation Protection Procedures

The inspector reviewed changes made to the following procedures since the previous radiation protection inspection:

E.1.3 Radiation Area Control

E.1.6 Records and Reports

4.ACD-11.2 Access Control

The changes examined did not alter the compatibility of the procedures with regulatory requirements. Procedural changes were noted to have been made in accordance with the licensee's technical specifications and Administrative Control Directives.

The following new procedures were reviewed:

E.1.5.III.C Body Burden Analysis

E.1.5.V.D. Use of Protective Equipment

No problems were identified.

7. Licensee Internal Audits

The inspector reviewed the results of audits conducted by a station Quality Engineer during the last six months of 1977. Three audits concerned chemistry and radiation protection procedures and included adherence to procedures. No significant items requiring corrective action were found.

The inspector reviewed the minutes of Safety Audit Committee meetings conducted during the period July 1977 through May 1978. The inspector noted that radiation protection matters are included. Also, one audit concerning training and qualifications of facility staff was conducted. No significant problems were identified.

No problems concerning the frequency or extent of licensee audits were identified by the inspector.

8. Respiratory Protection Program

The licensee has not taken credit for protection factors during 1978 to the dates of this inspection. During this inspection, the licensee was performing screening physicals and quantitative fit testing of respiratory protection devices for plant persons.

The following aspects of the licensee's newly developed respiratory protection program were selectively reviewed:

- a. Written radiation protection procedures concerning respiratory protection.
- b. Onsite orientation training.
- c. Medical physical requirements.
- d. Use of approved equipment.
- e. Program and facilities for equipment maintenance and cleaning.
- f. Program and facilities for quantitative fit testing.
- g. Airborne radioactivity monitoring program, including maintenance of records.
- h. Use of Radiation Work Permits, access control logs, and access controls to implement required respiratory protection equipment use.

- i. Use of engineering controls.
- j. Bioassays to verify program effectiveness.

No items of noncompliance with 10 CFR 20.103 were identified.

9. Radiation Surveys

Records of direct radiation, surface contamination, and airborne activity surveys conducted during the first calendar quarter 1978 were selectively reviewed. Frequency, methods of collection, and recording remain as previously described (50-263/77-10). No problems were identified.

10. In Vivo Counting

The licensee has purchased a commercially available chair type whole body counter and associated software, electronics, and printer. This equipment was made operational during the fourth calendar quarter 1977. The licensee is currently developing formal procedures for followup and evaluation of suspected radionuclide uptakes.

The inspector reviewed the results of whole body counts conducted during the period January through May 1978. No airborne exposures in excess of regulatory limits were indicated.

11. Personal Dosimetry

The inspector reviewed the licensee's personal dosimetry records for July 1977 through March 1978. No quarterly whole body, skin, or extremity exposures in excess of three rems were noted. The highest yearly whole body exposure to plant persons for 1977 was noted to be less than six rems. Forms NRC-4 were selectively reviewed.

No abnormalities were identified.

12. Instrument Calibration

a. Portable Survey Instruments

All portable survey instruments except "Cutie Pie" meters are calibrated annually by offsite vendors. "Cutie Pie" meters are calibrated onsite semiannually.

A review of licensee records indicated that calibrations are being done at the required frequency. No problems were identified.

b. Area Radiation Monitors

The inspector reviewed records of quarterly calibrations and monthly functional tests performed during 1978 to date. No problems were identified.

13. Radiation Work Permits

Radiation Work Permits (RWP's) are required for posted area entries. The inspector reviewed RWP's issued in 1978. No discrepancies from procedural requirements were noted. Both extended and special RWP's are utilized. As of July 21, 1978, 205 RWP's had been written during 1978.

Attached to each terminated RWP is a computer printout on which is listed each individual's name who worked under the RWP, his dosimeter dose, and type of employee.

No problems were identified.

14. Neutron Monitoring Practices

During discussions with the licensee and review of records, the inspector found that:

- a. The licensee's methods of personal neutron dosimetry are consistent with recommendations of Regulatory Guide 8.14.
- b. Neutron dose to individuals is based on stay time in a dose rate determined by an Eberline PNR-4 survey instrument.
- c. About twelve persons received neutron exposure, the maximum received being 10 mrem in a quarter and the total dose for 1977 being 200 mrem.

15. Records, Reports, and Postings

The inspector reviewed the following matters and found no items of noncompliance:

- a. Posting of notices to workers as required by 10 CFR 19.11.
- b. Reports required by 10 CFR 20.407 and 20.408.
- c. Report required by Technical Specification 6.7.A.2.c concerning personal exposure by type of worker and work performed.
- d. Sealed source leak testing required by Technical Specification 4.12.

16. Exit Interview

The inspector met with licensee representatives (denoted in Paragraph 1) at the conclusion of the inspection on July 21, 1978.

The following matters were discussed:

- a. The purpose and scope of the inspection.
- b. Previous commitments (Paragraph 4).. The inspector stated that these matters are considered closed.
- c. The inspector stated that the radiation protection program is apparently being conducted in a better than adequate manner. The licensee acknowledged the comment.