June 28, 2000

Mr. M. Wadley
President, Nuclear Generation
Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

SUBJECT: MONTICELLO - NRC INSPECTION REPORT 50-263/2000013(DRS)

Dear Mr. Wadley:

On June 9, 2000, the NRC completed a routine inspection at the Monticello Nuclear Generating Plant. The results were discussed on June 9, 2000, with Mr. Hammer, Mr. Day and other members of your staff. The enclosed report presents the results of that inspection.

The inspection was an examination of activities conducted under your license as they relate to radiation safety and to compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas the inspection consisted of a selective examination of procedures and representative records, observations of activities, and interviews with personnel. Specifically, this inspection focused on occupational radiation safety, the radioactive waste program, the transportation program, and the implementation of your ALARA program during normal reactor operations. In addition, we reviewed your staff's evaluation of the performance indicator for the occupational radiation safety cornerstone.

Based on the results of this inspection, no inspection findings were identified.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

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

Sincerely,

/RA/

Gary L. Shear, Chief
Plant Support Branch
Division of Reactor Safety

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

Enclosure: Inspection Report 50-263/2000013(DRS)

cc w/encl: Site General Manager, Monticello
Plant Manager, Monticello
J. Malcolm, Commissioner, Minnesota
Department of Health

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cc w/encl: Site General Manager, Monticello
Plant Manager, Monticello
J. Malcolm, Commissioner, Minnesota
Department of Health

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No:	50-263
License No:	DPR-22
Report No:	50-263/2000013(DRS)
Licensee:	Northern States Power Company
Facility:	Monticello Nuclear Power Plant
Location:	2807 West Highway 75 Monticello, MN 55362
Dates:	June 5–9, 2000
Inspector:	M. Mitchell, Radiation Specialist
Approved by:	Gary L. Shear, Chief, Plant Support Branch Division of Reactor Safety

NRC's REVISED REACTOR OVERSIGHT PROCESS

The federal Nuclear Regulatory Commission (NRC) recently revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting and assessing safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

Reactor Safety	Radiation Safety	Safeguards
● Initiating Events	● Occupational	● Physical Protection
● Mitigating Systems	● Public	
● Barrier Integrity		
● Emergency Preparedness		

To monitor these seven cornerstones of safety, the NRC uses two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plant, as described in the Action Matrix.

More information can be found at: http://www.nrc.gov/NRR/OVERSIGHT/index.html

SUMMARY OF FINDINGS

Monticello Nuclear Power Station
NRC Inspection Report 50-263/2000013(DRS)

The report covers a one week period of announced inspection by a regional radiation specialist. This inspection focused on occupational radiation safety and included a review of the radiation exposure history and trends, radiation worker practices, the source term reduction program and ALARA (as-low-as-is-reasonably-achievable) planning and controls during normal reactor operations. Further, the inspector reviewed radioactive waste processing, characterization, and classification and transportation of radioactive materials. Finally, the inspector reviewed the licensee's performance indicator (PI) associated with the occupational radiation safety cornerstone.

RADIATION SAFETY

Cornerstone: Occupational Radiation Safety

- There were no findings identified during this inspection.

Report Details

2. RADIATION SAFETY

Cornerstone: Occupational Radiation Safety (OS)

2OS2 As-Low-As-Is-Reasonably-Achievable (ALARA) Planning and Controls

.1 Radiation Dose Controls and Trending

a. Inspection Scope

The inspector reviewed the licensee's calendar year 2000 final outage dose estimates and the associated calendar year 2000 annual dose trending. The inspector reviewed the current exposure trends and planned activities to assess current performance and exposure challenges.

b. Issues and Findings

There were no findings identified during this inspection.

.2 Source Term Reduction

a. Inspection Scope

The inspector reviewed the status of the licensee's source term reduction program, which included hot spot identification, monitoring and reduction.

b. Issues and Findings

There were no findings identified during this inspection.

.3 Declared Pregnant Workers

a. Inspection Scope

The inspector reviewed the controls implemented by the licensee for declared pregnant workers. Specifically, the inspector reviewed the licensee's adherence to the requirements contained in 10 CFR 20.1208. At the time of this inspection, there were no declared pregnant workers being monitored by the licensee, and the licensee indicated that they had not had any declarations within the last year.

b. Issues and Findings

There were no findings identified during this inspection.

.4 Radiation Worker Performance

a. Inspection Scope

The inspector observed radiation workers performing the activities described in Sections 2PS2.1 and 2PS2.3 and evaluated their awareness of radiological conditions and their implementation of applicable radiological controls. The inspector also assessed the individuals' knowledge of shipping regulations, as applicable.

b. Issues and Findings

There were no findings identified during this inspection.

2PS2 Radioactive Material Processing and Transportation

.1 Walkdown of Radioactive Waste Systems

a. Inspection Scope

The inspector reviewed the radioactive waste systems to assess the material condition and operability of the systems. The inspector also compared the operations of the systems to the descriptions in the Safety Analysis Report (SAR) and the process control program (PCP). During this inspection, the licensee was not conducting waste processing. However, the inspector did observe work in a contaminated sump area during walkdowns.

b. Issues and Findings

There were no findings identified during this inspection.

.2 Waste Characterization and Classification

a. Inspection Scope

The inspector reviewed the licensee's method and procedures for determining the classification of radioactive waste shipments, including the licensee's use of scaling factors to quantify difficult-to-measure radionuclides (e.g., pure alpha or beta emitting radionuclides). The inspector also reviewed records of radioactive waste shipments from November 1999 to June 2000 to verify that the shipments were properly classified and characterized in accordance with the requirements contained in 10 CFR Part 61. The inspector reviewed radioactive waste program audits conducted in 1999 and 2000.

b. Issues and Findings

There were no findings identified during this inspection.

.3 Shipping Records

a. Inspection Scope

The inspector reviewed a selection of non-excepted package shipments completed from November 1999 to June 2000 to verify compliance with NRC and Department of Transportation (DOT) requirements (i.e., 10 CFR Parts 20 and 71 and 49 CFR Parts 171 to 177). During the course of the inspection, the inspector observed a dry active waste shipment, and the loading and preparation of a radioactive material shipment. The inspector reviewed shipping program audits conducted in 1999 and 2000.

b. Issues and Findings

There were no findings identified during this inspection.

4. OTHER ACTIVITIES

4OA1 Performance Indicator Verification

a. The inspector verified the licensee's assessment of its performance indicator (PI) for occupational radiation safety. Specifically, the inspector reviewed historical condition reports concerning locked high radiation area controls, radiologically controlled area exit transactions with exposures greater than 100 millirem and the details associated with the only licensee reported PI event in the last four quarters.

b. Issues and Findings

The licensee reported a Green PI in the occupational radiation safety cornerstone. There were no findings identified during this inspection.

4OA5 Temporary Instruction 2515/144, "Performance Indicator Data Collecting and Reporting Process"

a. Inspection Scope

The inspector reviewed the performance indicator data collecting and reporting process for the "Occupational Radiation Safety-Occupational Exposure Control Effectiveness" PI. This temporary instruction was conducted in conjunction with the performance indicator verifications performed per Inspection Procedure 71151, "Performance Indicator Verification." Included was a review of: the collecting and reporting process, indicator definitions, data reporting elements, calculation methods and consistency with industry guidance document NEI (Nuclear Energy Institute) 99-02, "Regulatory Assessment Performance Indicator Guideline (Revision 0)."

b. Issues and Findings

There were no findings identified during this inspection.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

K. Bothun, Radiation Protection Coordinator
B. Day, Plant Manager
M. Hammer, Vice President
B. James, Radiation Protection Technician
K. Jepson, Radiation Protection Supervisor
G. Mathiasen, Principle Health Physicist
D. Selken, Radiation Protection Technician
W. Shinnick, ALARA Coordinator
J. Windschill, Radiation Protection Manager
P. Yurczyk, Special Projects Coordinator

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS USED

ADAMS	Agency's Documents Administration and Management System
ALARA	As-Low-As-Is-Reasonably-Achievable
CR	Condition Report
DRS	Division of Reactor Safety
DOT	Department of Transportation
NEI	Nuclear Energy Institute
OS	Occupational Radiation Safety
PCP	Process Control Program
PARS	Publicly Available Records
PI	Performance Indicator
SAR	Safety Analysis Report

LIST OF DOCUMENTS REVIEWED

Audits and Assessments

QA-2000-112, Radwaste and Shipping Audit
QA-1999-102, Radwaste and Shipping Audit
2000 Refueling Outage ALARA Report

Condition Reports (CR) Nos.

CR-19992748, CR-19993332, CR-20000581, CR-20000659, CR-20001619, CR-20000424, CR-20000886, CR-20001414, CR-20001552, CR-20001874, CR-20001908, CR-20002268, CR-20002402, CR-20002433, and CR-20003494.

Radiation Work Permits (RWPs)

RWP-171, Service Water Piping Replacement Project; and
RWP-241, 935 Radwaste-Shipping Building and Outside Shipping Building.

Procedures

MNGP-8077 (Revision 21), Radioactive LSA/SCO Shipment-Not Exceeding Type A Quantity-In Exclusive Use Vehicles;
MNGP-8110 (Revision 29), Master Radioactive Material Shipping Procedure;
MNGP-8178 (Revision 14), Procedure for Shipping Radioactive Waste Using the 14-210H, 14-215H or 14-215 Cask;
MNGP-R.11.01 (Revision 5), Radioactive Material Shipment Tracking and Filing;
MNGP-R.01.04 (Revision 10), Control of Personnel in High Radiation and Airborne Areas; and
MNGP-R.11.06 (Revision 6), Shipping Dry Active Waste for Disposal and/or Processing.