December 27, 2000

Mr. M. Hammer
Site General Manager
Monticello Nuclear Generating Plant
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT - NRC INSPECTION REPORT 50-263/00-19(DRS)

Dear Mr. Hammer:

On December 15, 2000, the NRC completed the baseline biennial inspection of Radioactive Material Processing and Transportation at your Monticello Nuclear Generating Plant and the review of the performance indicator for the Public Radiation Safety Cornerstone. The enclosed report presents the results of that inspection which were discussed on December 15, 2000, with Mr. B. Day and other members of your staff.

This 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 selected examination of design documents, procedures, and representative records and interviews with personnel. Specifically, this inspection focused on public radiation safety.

No findings of significance 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 by Steven Orth Acting For/***

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

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

Enclosure: Inspection Report 50-263/00-19(DRS)

cc w/encl: Plant Manager, Monticello
M. Wadley, Chief Nuclear Officer
S. Northard, Nuclear Asset Manager
M. Roth, Site Licensing Manager
J. Malcolm, Commissioner, Minnesota
Department of Health
J. Silberg, Esquire
Shaw, Pittman, Potts, and Trowbridge
R. Nelson, President
Minnesota Pollution Control Agency
Commissioner, Minnesota Pollution Control Agency
D. Gruber, Auditor/Treasurer
Wright County Government Center
Commissioner, Minnesota Department of Commerce
A. Neblett, Assistant Attorney General

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

| | |
|---|---|
| Docket No: | 50-263 |
| License No: | DPR-22 |
| Report No: | 50-263/00-19(DRS) |
| Licensee: | Northern States Generating Company |
| Facility: | Monticello Nuclear Power Plant |
| Location: | 2807 West Highway 75<br>Monticello, MN 55362 |
| Dates: | December 12 - 15, 2000 |
| Inspector: | M. Mitchell, Radiation Specialist |
| Approved by: | Gary L. Shear, Chief<br>Plant Support Branch<br>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

IR 05000263-00-19(DRS), on 12/12-15/2000, Nuclear Management Company, LLC, Monticello Nuclear Generating Plant. Radiation Safety Specialist report.

The inspection was conducted by a regional radiation specialist. No findings of significance were identified.

Report Details

Summary of Plant Status

The plant was operating at or near 100 percent power throughout the inspection period.

## 2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2PS2 Radioactive Material Processing and Transportation

.1 Walkdown of Radioactive Waste Systems

a. Inspection Scope

The inspector reviewed the liquid and solid radioactive waste systems to assess the material condition and operability of the systems. The inspector also compared the operation of the systems to the descriptions in the Updated Safety Analysis Report (USAR) and the process control program (PCP). The inspector also performed walkdowns of the liquid and solid radioactive waste processing systems located in the Radioactive Waste Building. During this inspection, the licensee was not conducting waste processing.

The inspector also reviewed the licensee's efforts to identify and correct inconsistencies between waste processing system descriptions in the USAR and as-found configurations and processes to ensure that the USAR accurately reflected routine plant operations.

b. Findings

No findings of significance were identified.

.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 to verify that the shipments were properly classified and characterized in accordance with the requirements contained in 10 CFR Part 61.

b. Findings

No findings of significance were identified.

.3 Shipping Preparation

a. Inspection Scope

The inspector did not observe licensee staff prepare materials for shipment. The inspector did observe the radiation worker practices of those individuals responsible for shipments and interviewed an authorized shipper to verify knowledge of the shipping regulations and plant procedures.

b. Findings

No findings of significance were identified.

.4 Shipping Records

a. Inspection Scope

The inspector reviewed a log of shipping records and verified that only a small number (four) of non-excepted package shipments was completed since July 2000. The inspector verified compliance with NRC and Department of Transportation (DOT) requirements (i.e., 10 CFR Parts 20 and 71 and 49 CFR Parts 172 and 173) for these shipments.

b. Findings

No findings of significance were identified.

.5 Identification and Resolution of Problems

a. Inspection Scope

The inspector reviewed the licensee's self-assessments, audits, and condition report forms concerning the radioactive material processing and transportation programs to verify that problems were entered into the corrective action program and properly prioritized.

b. Findings

No findings of significance were identified.

## 4. OTHER ACTIVITIES (OA)

### 4OA1 Performance Indicator Verification

a. Inspection Scope

The inspector reviewed the licensee's corrective action program records for liquid and gaseous effluent releases that were reported to the NRC for the last four quarters to ensure that all Performance Indicator (PI) data was properly counted. The inspector also reviewed plant incidents to assess if there were any that involved radioactive liquids and gases that were not bounded by plant collection and monitoring systems and to assess the potential for unmonitored release paths.

b. Findings

No findings of significance were identified.

### 4OA5 Management Meetings

Exit Meeting Summary

The inspector presented the inspection results to Mr. B. Day, Station Manager, and other members of licensee management and staff at the conclusion of the inspection on December 15, 2000. The licensee acknowledged the findings presented. No proprietary information was identified.

## PARTIAL LIST OF PERSONS CONTACTED

Licensee

B. Day, Plant Manager
J. Gitzen, System Engineer
K. Jepson, Radiation Protection Supervisor
S. Kibler, System Engineer
R. Lathum, Health Physics Supervisor
G. Mathiasen, Principle Health Physicist
M. Olson, Radiation Protection Technician
D. Schmidt, Radiation Protection Technician
W. Shinnick, ALARA Coordinator
J. Windschill, Radiation Protection Manager
P. Yurczyk, Special Projects Coordinator

NRC

S. Burton, Senior Resident Inspector

## ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

## LIST OF ACRONYMS USED

| | |
|---|---|
| ADAMS | Agency Wide Documents Access and Management System |
| CR | Condition Report |
| DOT | Department of Transportation |
| DRS | Division of Reactor Safety |
| NRC | Nuclear Regulatory Commission |
| PARS | Publicly Available Records |
| PCP | Process Control Program |
| PI | Performance Indicator |
| USAR | Updated Safety Analysis Report |

## LIST OF DOCUMENTS REVIEWED

The following is a list of licensee documents reviewed during the inspection, including documents prepared by others for the licensee. Inclusion on this list does not imply that NRC inspectors reviewed the documents in their entirety, but rather that selected sections or portions of the documents were evaluated as part of the overall inspection effort.

Documents

Monticello Updated Safety Analysis Report (USAR) (Revision 17), Section 9

Condition Reports (CR) Nos.

20000659, 20002268, 20002392, 20002668, 20003007, 20004545, 20004616, 20004942

Procedures

MNGP R.11.03 (Revision 4), Radioactive Waste Segregation
MNGP R.11.08 (Revision 4), Selection and Entry of 10 CFR Part 61 Correlation Factors
MNGP 3236 (Revision 27), Request for OC Review/Review Item Procedure No. 20002668

Radiation Work Permits

RWP 308 (Revision 1), 935 Reactor-CRD Rebuild, Revised

Internal Reports and Audits

November 2000 Radioactive Waste Report
Monthly RP Performance Summary - September and October 2000