October 11, 2005

Mr. J. Conway Site Vice President Monticello Nuclear Generating Plant Nuclear Management Company, LLC 2807 West County Road 75 Monticello, MN 55362-9637

SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT

NRC EMERGENCY PREPAREDNESS INSPECTION REPORT

NO. 05000263/2005012(DRS)

Dear Mr. Conway:

On September 2, 2005, the NRC completed an inspection at your Monticello Nuclear Generating Plant. The enclosed report documents the inspection findings, which were discussed on September 2, 2005, with you and members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel. Specifically, this inspection focused on emergency preparedness, including your staff's determinations of performance indicators for the Emergency Preparedness Cornerstone.

The inspection also focused on follow-up on an Unresolved Item identified during a January 2005 special inspection of your Alert and Notification System performance indicator data that were submitted to the NRC for the first calendar quarter of 2003.

Based on the results of this inspection, one NRC-identified issue was identified. This issue was reviewed under the NRC traditional enforcement process and determined to be a Severity Level IV violation of NRC requirements. However, because this violation was of very low safety significance and because the issue was entered into the licensee's corrective action program, the NRC is treating this issue, as a Non-Cited Violation in accordance with Section VI.A.1 o the NCV Enforcement Policy.

If you contest the subject or severity of a Non-Cited Violation, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission - Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532-4352; the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; and the Resident Inspector Office at the Monticello Nuclear Generating Plant.

In accordance with 10 CFR Part 2.390 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), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Kenneth Riemer, Chief Plant Support Branch Division of Reactor Safety

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

Enclosure: Inspection Report 05000263/2005012(DRS)

cc w/encl: J. Cowan, Executive Vice President

and Chief Nuclear Officer Manager, Regulatory Affairs

J. Rogoff, Vice President, Counsel, and Secretary

Nuclear Asset Manager, Xcel Energy, Inc. Commissioner, Minnesota Department of Health

R. Nelson. President

Minnesota Environmental Control Citizens

Association (MECCA)

Commissioner, Minnesota Pollution Control Agency

D. Gruber, Auditor/Treasurer,

Wright County Government Center

Commissioner, Minnesota Department of Commerce

Manager - Environmental Protection Division

Minnesota Attorney General's Office

W. King, FEMA, Region V

document system (ADAMS), accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

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U.S. NUCLEAR REGULATORY COMMISSION REGION III

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

Report No: 05000263/2005012(DRS)

Licensee: Nuclear Management Company, LLC

Facility: Monticello Nuclear Generating Plant

Location: 2807 West Highway 75

Monticello, MN 55362

Dates: August 29 through September 2, 2005

Inspectors: T. Ploski, Senior Emergency Preparedness Inspector

R. Jickling, Emergency Preparedness Inspector

J. Adams, Senior Resident Inspector

J. Laughlin, Senior Emergency Preparedness Specialist

Approved by: K. Riemer, Chief

Plant Support Branch Division of Reactor Safety

SUMMARY OF FINDINGS

IR 05000263/2005012(DRS); 08/29/2005 - 09/02/2005; Monticello Nuclear Generating Plant; Emergency Preparedness Specialist Report.

The report covers a one-week baseline inspection by two regional emergency preparedness inspectors, a senior resident inspector, and Headquarters emergency preparedness specialist. The inspection focused on the Emergency Preparedness Cornerstone in the Reactor Safety strategic performance area during the biennial emergency preparedness exercise. This inspection also included a review of records related to the three emergency preparedness performance indicators for the period January 1, 2004, through June 30, 2005. This inspection also included follow-up on an Unresolved Item identified in January 2005 regarding the accuracy of Alert and Notification System (ANS) Performance Indicator (PI) data that had been submitted to NRC for the first calendar quarter of 2005.

The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 3, dated July 2000.

A. Inspector-Identified and Self-Revealed Findings

Cornerstone: Emergency Preparedness

Severity Level IV. The inspectors identified a Severity Level IV Non-Cited Violation of 10 CFR 50.9 because the licensee failed to provide complete and accurate information in a submittal of siren test data for the ANS PI. Specifically, licensee staff inappropriately added the results of weekly siren tests to the results of monthly siren tests when calculating the ANS PI for the first calendar quarter of 2003. On March 31, 2003, licensee staff changed a procedure for computing the ANS PI to include the results of weekly siren tests and inappropriately implemented the procedure revision retroactive to the first day of the quarter (January 1, 2003). By adding the weekly siren test data, the licensee changed the overall character of its quarterly siren performance indicator results. The licensee has subsequently conducted an adequate root cause evaluation and initiated adequate corrective action to correct and re-submit the first quarter 2003 ANS PI data.

B. Licensee-Identified Violations

None.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

a. Inspection Scope

The inspectors reviewed the August 30, 2005, biennial emergency preparedness exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of two emergency preparedness drills, which were conducted between January 2004 and June 2005, to determine whether those drills' scenarios were sufficiently different from the scenario used in the August 30, 2005, exercise.

The inspectors evaluated the licensee's exercise performance, focusing on the risk-significant activities of emergency classification, notification, and protective action decision making, as well as implementation of accident mitigation strategies in the following emergency response facilities:

- Control Room Simulator;
- Technical Support Center (TSC);
- Operations Support Center (OSC); and
- Emergency Operations Facility (EOF).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the TSC, OSC, and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators to obtain the licensee's refined assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to assess the licensee's ability to adequately critique station performance during the exercise.

These activities completed one inspection sample.

b. Findings

No findings of significance were identified.

4. OTHER ACTIVITIES

4OA1 Performance Indicator (PI) Verification (71151)

Cornerstone: Emergency Preparedness

.1 Reactor Safety Strategic Area

a. <u>Inspection Scope</u>

The inspectors reviewed the licensee's records associated with each of the three emergency preparedness Pls to verify that the licensee's program was implemented consistent with the industry guidelines in Nuclear Energy Institute Publication No. 99-02, "Regulatory Assessment Performance Indicator Guideline," Revisions 2 and 3, and related licensee procedures. Specifically, licensee records related to the performance of the Alert and Notification System (ANS), key Emergency Response Organization (ERO) members' drill participation, and Drill and Exercise Performance (DEP) were reviewed to verify the accuracy and completeness of the Pl data submitted to NRC for the period from January 1, 2004 through June 30, 2005. The following three Pls were reviewed:

Common

- ANS;
- ERO Drill Participation; and
- Drill and Exercise Performance.

These activities completed thee PI samples.

b. Findings

No findings of significance were identified.

4OA3 Event Follow-up (71153)

.1 (Closed) URI 05000263/2005007-01: The licensee's first quarter 2003 ANS PI submittal to NRC inaccurately included weekly siren test data in addition to the monthly siren test data for the sirens in the Monticello Plant's Emergency Planning Zone (EPZ). However, the licensee's ANS PI calculation procedure in effect at the beginning of the first calendar quarter of 2003 specified that the monthly siren test data were the only test data to be used in the PI calculation.

b. Findings

b.1 Failure To Report Accurate ANS PI Information

<u>Introduction</u>: A Severity Level IV Non-Cited Violation (NCV) of 10 CFR 50.9 was identified because the licensee failed to provide complete and accurate PI information to the NRC. Specifically, the inspectors identified that ANS PI opportunities were not being properly evaluated by the licensee and that, when the PI was recalculated by the NRC

using only the results of monthly tests, as specified in the relevant procedure revision, the ANS PI crossed the Green-to-White performance band threshold for the first quarter of 2003 before returning to the Green performance band in the second quarter of 2003.

<u>Description</u>: In the first quarter of 2003, monthly test failures of 34 of 81 sirens and 31 of 81 sirens occurred on February 5 and March 5, respectively. Revision 1 of Procedure EPWI-01.06, "Emergency Plan Performance Indicator Program," dated November 10, 2002, which was still in effect on January 1, 2003, specified that only the results of siren tests conducted on the first Wednesday of every month were to be used in the calculation of the ANS PI.

On March 13, 2003, the Federal Emergency Management Agency (FEMA) approved a EPZ siren system upgrade, which included the addition of weekly siren tests. Licensee staff had been tracking the weekly siren test results conducted by county officials since the Fall of 2002. In mid-March of 2003, the licensee made a decision to revise the November 2002 revision of EPWI01.06 in order to add three months of the weekly siren test data to the monthly test data and to retroactively make this procedure revision effective on January 1, 2003. On April 2, 2003, the March 31st revision to procedure EPWI-01.06 was implemented to change to the PI calculation methodology to add weekly test data to the monthly siren test data retroactive to January 1, 2003.

As a result, the licensee's submittal to NRC of ANS PI data for the first quarter 2003 included both the monthly and weekly siren test data, which indicated the ANS PI was in the Green performance band. When inspectors calculated the first quarter 2003 ANS PI data using only the monthly siren test results, as indicated in the November 2002 revision of procedure EPWI-01.06 ANS PI that was in effect during the first quarter of 2003, the resulting siren test data were in the White performance band.

In accordance with the NRC-endorsed, Nuclear Energy Institute Publication 99-02, the licensee acceptably counted the results of the weekly and monthly EPZ siren tests as ANS PI opportunities since the beginning of April 2003. This PI is based on the results of FEMA-approved siren tests performed during the latest four calendar quarters. Thus, the licensee's submittal of inaccurate ANS PI data for the first calendar quarter of 2003 has no impact on the current computed value of this PI.

Analysis: The failure to accurately report the ANS PI data for the first calendar quarter of 2003 was a performance deficiency that was more than minor because it was associated with a cornerstone attribute and affected the Emergency Preparedness (EP) cornerstone objective (to ensure the adequate protection of the public health and safety). The finding involved the failure to accurately report the results of siren tests, which, if accurately calculated and reported, would have caused the NRC to perform an additional inspection in 2003. This issue was not suited for Significance Determination Process analysis and was evaluated in accordance with NRC's Enforcement Policy.

<u>Enforcement</u>: Title 10 CFR 50.9 requires, in part, that information provided to the Commission by a licensee shall be complete and accurate in all material respects. Contrary to this, the licensee failed to report complete and accurate information for the first calendar quarter of 2003 and that the ANS Reliability PI had crossed the threshold from the Green into the White performance band. The

NRC considers errors in PI data reporting that cause a PI to cross the Green-to-White threshold to be more than minor because such errors have the potential for impacting the NRC's ability to perform its regulatory function, which was in this case to perform a supplemental inspection. This Severity Level IV violation is being treated as a NCV, consistent with Section VI.A.1 of the NRC Enforcement Policy (NCV 05000263/2005-012-01). This violation is in the licensee's corrective action program as CAP040010, CA025088, and Root Cause Evaluation 00865. The licensee's corrective actions included correction of the first quarter 2003 ANS PI data and re-submission of the corrected data to the NRC. This URI and the resulting NCV are closed.

4OA6 Meetings

.1 Exit Meeting

An exit meeting was conducted for:

 Emergency Preparedness with Mr. J. Conway and other members of licensee management and staff at the conclusion of the inspection on September 2, 2005.
 The licensee acknowledged the information presented. No proprietary information was identified.

.2 Public and Media Briefing

 On September 2, 2005, an inspector summarized the NRC's preliminary exercise inspection findings at a public and media briefing hosted by FEMA Region V staff in Buffalo, Minnesota.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

- J. Conway, Site Vice President
- B. Brown, Emergency Planning Specialist
- J. Davis, Operations Work Control Manager
- C. Dixon, Emergency Planning Specialist
- J. Fields, Regulatory Affairs Manager
- G. Holthaus, Senior Emergency Planning Coordinator
- K. Jepson, Radiation Protection and Chemistry Manager
- D. Pedersen, Emergency preparedness Manager
- M. Vonk, Corporate Senior Emergency Planning Specialist
- A. Williams, Business Support Manager

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened & Closed

05000263/2005012-01 NCV The Licensee Failed to Report That the ANS Reliability PI

Crossed the Green to White Threshold in the First Quarter

of 2003.

Closed

05000263/2005007-01 URI NRC to Determine Whether Submittal of First Quarter

2003 ANS PI Data Was Consistent With Procedures, Guidance, and Requirements in Effect at the Time

Discussed

None.

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety but rather that selected sections of portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1

<u>1EP1</u> Exercise Evaluation

Monticello Exercise Scenario Manual; dated August 30, 2005

Scenario Narrative Summary and Time Line for an Emergency Plan Drill Conducted on June 8, 2005

Scenario Narrative Summary and Time Line for an Emergency Plan Drill Conducted on July 20, 2005

Draft Licensee Critique Report for Monticello Exercise; dated September 1, 2005

A.2-101; Classification of Emergencies; Revision 34

A.2-103; Alert; Revision 16

A.2-104; Site Area Emergency; Revision 16

A.2-105; General Emergency; Revision 16

A.2-106; Activation and Operation of the TSC; Revision 25

A.2-107; Activation and Operation of the OSC; Revision 24

A.2-201; On-site Protective Action; Revision 12

A.2-204; Off-site Protective Action Recommendations; Revision 17

A.2-208; Core Damage Assessment; Revision 5

A.2-209; Responsibilities of the Radiological Emergency Coordinator; Revision 15

A.2-210; Engineering Support in the TSC; Revision 7

A.2-213; Responsibilities of the Emergency Director; Revision 14

A.2-401; Emergency Exposure Control; Revision 8

A.2-424; EOF Count Room Procedures; Revision 10

A.2-501; Communications During an Emergency; Revision 16

A.2-504; Emergency Communicator Duties in the TSC and OSC; Revision 6

A.2-801; Responsibilities of the Emergency Manager; Revision 8

A.2-802; Activation and Operation of the EOF; Revision 8

A.2-803; Emergency Communications at the EOF; Revision 5

2 Attachment

A.2-805; Technical Support in the EOF; Revision 5

A.2-806; Radiation Protection Support in the EOF; Revision 6

A.2-807; Off-site Dose Assessment and Protective Action Recommendation; Revision 11

CAP040549; EOF Staff Did Not Adequately Address the Effect of a Revised Protective Action Recommendation on the Sherco Plant

CAP040556; An Incorrect Type of Notification Form Used When Communicating the Revised Protective Action Recommendation; Minor Errors in Completing Several Other Notification Forms

CAP040558; Insufficient Procedural Guidance for Adjusting Offsite Dose Projection Model's Integration Period for Low Wind Speed Conditions

CAP040559; Limited Procedural Guidance for Developing Protective Action Recommendations Beyond 10 Miles from the Plant

CAP040563; Two Unsuccessful DEP PI Opportunities During August 30, 2005 Exercise

4OA1 Performance Indicator Verification

Emergency Planning Work Instruction (EPWI) 01.06; Emergency Plan Performance Indicator Program; Revision 7

Sample of Emergency Planning Zone Sirens' Operability Reports from January 2004 through June 2005

Sample of ERO Drill Participation Records from January 2004 through June 2005

Sample of Drill/Exercise Performance Records from January 2004 through June 2005

CAP033226; Notification Form Errors Identified During a May 2004 Training Session

CAP033740; Shift Manager Corrected Errors on a Notification Form Completed by Shift Emergency Communicator in a June 2004 Training Session

CAP035301; Unsuccessful PI Opportunity Due to Notification Uncorrected Form Error in an October 2004 Training Session

CAP037654; Incorrect Emergency Classification Decision Made During a January 2005 Training Session

CAP039436; Unsuccessful PI Opportunity During a June 2005 Drill

4OA3 Event Follow-up (71153)

RCE00865; Potential Violation May Result Due to Implementation Change In Alert and Notification System Performance Indicator Program; dated March 3, 2005

Procedure EPWI-01.06; Emergency Plan Performance Indicator Program; dated March 31, 2003

Procedure EPWI-01.06; Emergency Plan Performance Indicator Program; dated November 10, 2002

Surveillance 1359; Public Alert Notification Systems Weekly Cancel Signal Test; dated September 23, 2003

Surveillance 1359; Public Alert Notification Systems Weekly Cancel Signal Test; dated September 12, 2002

Letter from G. Van Middlesworth; Response to Request for Information 04-A-0086; dated October 21, 2004

Letter from FEMA; Approval for Monticello's Public Alert and Notification System Update and Replacement; dated March 13, 2003

Memorandum from D. Pedersen; Documentation of Changes to the Monticello Alert and Notification System Reliability Performance Indicator; dated March 31, 2003

Monticello Plant EPZ Siren Test Failures On February 5, 2003, Summary; dated March 7, 2003

CA025088; Potential Violation Discussed During NRC EP Exit, Update 1st Quarter 2003 ANS PI Data and Submit to NRC; September 6, 2005

CAP026246(3003450); Changes to the Alert and Notification System Testing Program; dated April 14, 2003

CAP025877(3002467); Wright County Sirens Indicated 31 of 47 Failures During Monthly Test; dated March 5, 2003

CAP013467(3001335); Sherburne County Sirens Activated 15-20 Minutes Later than Regularly Scheduled Test Time; dated February 6, 2003

4

Monthly ANS Test Results January 2003 through March 2003

LIST OF ACRONYMS USED

ANS Alert and Notification System
CAP Corrective Action Program (record)
CFR Code of Federal Regulations
DEP Drill and Exercise Performance
EOF Emergency Operations Facility
EP Emergency Preparedness

EPWI Emergency Planning Work Instruction

EPZ Emergency Planning Zone

ERO Emergency Response Organization
FEMA Federal Emergency Management Agency

NCV Non-Cited Violation

NRC United States Nuclear Regulatory Commission

NUREG Nuclear Regulatory Guide
OSC Operations Support Center
Pl Performance Indicator

SDP Significance Determination Process

TSC Technical Support Center

URI Unresolved Item

5 Attachment