



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
2443 WARRENVILLE ROAD, SUITE 210  
LISLE, IL 60532-4352

October 6, 2011

Mr. Timothy J. O'Connor  
Site Vice President  
Monticello Nuclear Generating Plant  
Northern States Power Company, Minnesota  
2807 West County Road 75  
Monticello, MN 55362-9637

**SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT  
BASELINE EMERGENCY PREPAREDNESS BIENNIAL EXERCISE  
INSPECTION REPORT 05000263/2011502**

Dear Mr. O'Connor:

On August 26, 2011, the U. S. Nuclear Regulatory Commission (NRC) completed a Baseline Emergency Preparedness Biennial Exercise inspection at your Monticello Nuclear Generating Plant. The enclosed inspection report documents the inspection findings which were discussed on August 26, 2011, with Mr. T. O'Connor and other 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.

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

In accordance with 10 CFR 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/**

Hironori Peterson, Chief  
Operations Branch  
Division of Reactor Safety

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

Enclosure: Inspection Report 05000263/2011502(DRS)  
w/Attachment: Supplemental Information

Letter to Timothy J. O'Connor from Hironori Peterson dated October 6, 2011.

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BASELINE EMERGENCY PREPAREDNESS BIENNIAL EXERCISE  
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U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-263

License No: DPR-22

Report No: 05000263/2011502(DRS)

Licensee: Northern States Power Company, Minnesota

Facility: Monticello Nuclear Generating Plant

Location: Monticello, MN

Dates: August 22 through 26, 2011

Inspectors: R. Jickling, Sr. Emergency Preparedness Inspector  
J. Beavers, Emergency Preparedness Inspector  
S. Thomas, Sr. Resident Inspector  
S. Burton, Sr. Resident Inspector

Approved by: Hironori Peterson, Chief  
Operations Branch  
Division of Reactor Safety

Enclosure

## SUMMARY OF FINDINGS

IR 05000263/2011502(DRS); 08/22/2011 – 08/26/2011; Monticello Nuclear Generating Plant; Baseline Emergency Preparedness Biennial Exercise Inspection.

This report covers a one week period of announced baseline inspection by two regional inspectors and two resident inspectors. The significance of most findings is indicated by their color (Green, White, Yellow, Red) using Inspection Manual Chapter (IMC) 0609, "Significance Determination Process" (SDP). Findings for which the SDP does not apply may be Green or be assigned a severity level after NRC management review. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

### **A. NRC-Identified and Self-Revealed Findings**

#### **Cornerstone: Emergency Preparedness**

No findings were identified.

### **B. Licensee-Identified Violations**

No violations were identified.

## REPORT DETAILS

### 1. REACTOR SAFETY

#### Cornerstone: Emergency Preparedness

#### 1EP1 Exercise Evaluation (71114.01)

##### .1 Exercise Evaluation

##### a. Inspection Scope

The inspectors reviewed the August 23, 2011, 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 other drills and exercises conducted in 2009, 2010, and 2011, to verify that those drills' scenarios were sufficiently different from the scenario used in the August 23, 2011, exercise.

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

- Control Room Simulator (CRS);
- 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 CRS, OSC, TSC 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 and managers to obtain the licensee's findings and 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 its exercise performance. Documents reviewed are listed in the Attachment to this report.

This exercise evaluation inspection constituted one sample as defined in Inspection Procedure (IP) 71114.01-05.

##### b. Findings

No findings were identified.

#### 4. OTHER ACTIVITIES

##### Cornerstone: Emergency Preparedness

#### 4OA1 Performance Indicator (PI) Verification (71151)

##### .1 Drill/Exercise Performance

###### a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance PI for the period from the second quarter 2010 through second quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI, assessments of PI opportunities during pre-designated control room simulator training sessions, and performance during other drills. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one drill/exercise performance sample as defined in IP 71151-05.

###### b. Findings

No findings were identified.

##### .2 Emergency Response Organization Drill Participation

###### a. Inspection Scope

The inspectors sampled licensee submittals for the Emergency Response Organization (ERO) Drill Participation PI for the period from the second quarter 2010 through second quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI; performance during the 2010 and 2011 drills; and revisions of the roster of personnel assigned to key emergency response organization positions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO drill participation sample as defined in IP 71151-05.

###### b. Findings

No findings were identified.

.3 Alert and Notification System

a. Inspection Scope

The inspectors sampled licensee submittals for the Alert and Notification System (ANS) PI for the period from the second quarter 2010 through second quarter 2011. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI and results of periodic scheduled ANS operability tests. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one alert and notification system sample as defined in IP 71151-05.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On August 26, 2011, the inspectors presented the biennial exercise inspection results to Mr. T. O'Connor and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

.2 Public and Media Briefing

On August 26, 2011, the inspector summarized the NRC's preliminary exercise inspection conclusions at a public and media briefings hosted by Department of Homeland Security/Federal Emergency Management Agency Region V Field Office staff at the Wright County Government Center in Buffalo, Minnesota.

ATTACHMENT: SUPPLEMENTAL INFORMATION

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### Licensee

T. O'Connor, Site Vice President  
J. Grubb, Plant Manager  
J. Callahan, Corporate Emergency Preparedness Manager  
J. Davis, Tagging Manager  
J. Earl, Emergency Preparedness Manager  
W. Flaga, Maintenance Support Supervisor  
G. Holthaus, Emergency Preparedness Coordinator  
S. O'Connor, Regulatory Affairs Analyst  
A. Ward, Business Support Manager  
T. Witschen, Production Planning Manager

#### Nuclear Regulatory Commission

S. Thomas, Senior Resident Inspector

### **LIST OF ITEMS OPENED, CLOSED AND DISCUSSED**

#### Opened, Closed and 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 or 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.

### 1EP1 Exercise Evaluation

MNGP Emergency Plan; Revision 35

A.2-101; Classification of Emergencies; Revision 44

A.2-102; Notification of Unusual Event; Revision 20

A.2-103; Alert; Revision 18

A.2-104; Site Area Emergency; Revision 19

A.2-105; General Emergency; Revision 18

A.2-106; Activation and Operation of the TSC; Revision 33

A.2-107; Activation and Operation of the OSC; Revision 31

A.2-201; On-Site Protective Action; Revision 17

A.2-204; Off-Site Protective Action Recommendations; Revision 24

A.2-401; Emergency Exposure Control; Revision 9

A.2-406; Off-Site dose Projection; Revision 22

A.2-501; Communications during an Emergency; Revision 21

A.2-802; Activation and Operation of the EOF; Revision 14

A.2-807; Off-Site Dose Assessment and Protective Action Recommendations;  
Revision 20

CAP 01194065; Drill Issue – NRC Security Bridge Line Challenges

CAP 01194078; Exercise Issue – Internal Communications Problems

CAP 01194086; Exercise Issue – Tie Priorities to Field Teams

CAP 01194133; Exercise Issue – Radiation Monitor Discrepancies Identified

CAP 01194148; Exercise Issue – Plant Evacuation Process Improvements

CAP 01194149; Exercise Issue – Inaccurate General Emergency Declaration

CAP 01194193; Exercise Issue – Untimely Protective Action Recommendation

CAP 01194158; Exercise Issue – Dose Assessment with Field Team Data Problems

CAP 01194189; Drill Issue – Shutdown Cooling Must Be in Service to Perform PASS  
Sample

CAP 01194206; Exercise Issue – Untimely General Emergency Notification

CAP 01194220; Exercise Issue – Protective Action Recommendation Problems

CAP 01194246; Exercise Issue – Plant Evacuation Guidance Needed  
CAP 01194249; Exercise Issue – Press Release Problems  
CAP 01194302; Exercise Issue – Scenario and Control Problems  
CAP 01194326/4133/4263; Exercise Issues – Scenario and Simulator Problems  
CAP 01194330; Exercise Issue – Core Damage Assessment Procedure Problems  
CAP 01300546; 2011 Exercise Issue – Plant Alert Announcement Delayed OSC Activation  
CAP 01300638; 2011 Exercise Issue – Incorrect Scenario Information Provided at Shift Briefing  
CAPs 01300686/721/727/735/849; 2011 Exercise Issue – Scenario/Exercise Management Issues  
CAP 01300732; 2011 Exercise Issue – OSC 30 Minute Responders Delayed Due Plant Alert Announcement  
CAP 01300736; 2011 Exercise Issue – OSC Response Team Briefing/Debriefing Documentation  
CAP 01300739; 2011 Exercise Issue – TSC/OSC Timely Response Team Problems  
CAP 01300750; 2011 Exercise Issue – Alert Not Declared by Crew  
CAP 01300771; 2011 Exercise Issue – Alert Notification Not Completed In 15 Minutes  
CAP 01300828; 2011 Exercise Issue – EOF Information to JIC Technical Was Not Always Timely  
CAP 01300980; 2011 Exercise Issue – Emergency Worker Dose Decisions during a Declared Emergency  
CAP 01301089; 2011 Exercise Issue - Core Damage Assessment Not Performed

4OA1 Performance Indicator Verification

EPWI-01.06; Emergency Plan Performance Indicator Program; Revision 12  
Quarterly ANS Reliability Performance Indicator Summaries; April 2010 – June 2011  
Quarterly Drill and Exercise Performance Indicator Opportunities;  
April 2010 – June 2011  
Quarterly ERO Participation Sheets; June 2010 – June 2011  
Form 3695; Weekly EP Performance Records and Documents; April 2010 – June 2011

## LIST OF ACRONYMS USED

ADAMS	Agency-wide Documents Access and Management System
ANS	Alert and Notification System
AR	Action Request
CFR	Code of Federal Regulations
CRS	Control Room Simulator
DRS	Division of Reactor Safety
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Inspection Report
JIC	Joint Information Center
NEI	Nuclear Energy Institute
NRC	U. S. Nuclear Regulatory Commission
OSC	Operations Support Center
PARS	Publicly Available Records
PASS	Post Accident Sampling System
PI	Performance Indicator
SDP	Significance Determination Process
TSC	Technical Support Center

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 Hironori Peterson, Chief  
 Operations Branch  
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