

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-263/84-22(DRSS)

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 Plant Site, Monticello, MN

Inspection Conducted: October 1-3, 1984

Inspectors: *William B. Gloersen*  
W. B. Gloersen

10/22/84  
Date

*J. P. Patterson*  
J. P. Patterson

10/22/84  
Date

Approved By: *M. P. Phillips*  
M. P. Phillips, Chief  
Emergency Preparedness Section

10/23/84  
Date

Inspection Summary

Inspection on October 1-3, 1984 (Report No. 50-263/84-22(DRSS))

Areas Inspected: Routine announced inspection of the following areas of the emergency preparedness program: licensee actions on previously identified emergency preparedness items; knowledge and performance of duties (training); changes to the emergency preparedness program; licensee audits; maintenance of emergency preparedness; and implementation of the emergency plan. The inspection involved 85 inspector-hours on site by two NRC inspectors and three consultants.

Results: Of the six areas inspected, one apparent item of noncompliance was identified in one area (failure to train four designated Emergency Directors in emergency preparedness).

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## DETAILS

### 1. Persons Contacted

- \*W. Shamla, Plant Manager
- \*L. Waldinger, Superintendent Radiation Protection
- \*D. Nevinski, Plant Superintendent Engineering and Radiation Protection
- \*G. Mathiason, Emergency Planning Coordinator
- \*G. Earney, Training Supervisor, Production Training Department
- \*B. Schmitt, Technical Instructor, Production Training Department
- \*R. Brevig, Assistant Emergency Planning Coordinator
- B. Dhein, Site Superintendent
- M. Lechner, Site Superintendent
- D. Antony, Operations Superintendent
- L. Nolan, Superintendent Nuclear Technical Services
- M. Miller, Monitoring Section Leader
- R. Roy, Offsite Dose Assessment Operator
- J. Gonyeau, Manager, Production Training Department (Corporate)
- G. Hudson, Administrator, Emergency Preparedness (Corporate)
- M. Clarity, Assistant Plant Manager
- M. Hammer, Instrument and Control Engineer
- F. Fey, General Superintendent, Radiation Protection and Chemistry (Corporate)
- D. Musolf, Manager, Nuclear Support Services (Corporate)

\*Denotes those attending the exit interview.

### 2. Licensee Actions on Previously Identified Items Related to Emergency Preparedness

- a. (Open) Open Item No. 263/82-05-12 (Appraisal Open Item, Appendix C - letter from J. G. Keppler to D. E. Gilberts, May 4, 1982): The inspector reviewed the current status of minimum shift staffing and noted that the licensee has added a second Senior Reactor Operator (SRO) to the minimum shift staff. In addition, the inspector observed the licensee's remodeling of the Site Superintendent's (SS) office so that it will become part of the Control Room. This project is scheduled to be completed by the end of the current outage. The inspector also reviewed a letter dated September 14, 1984 from D. Musolf, Manager, Nuclear Support Services, Northern States Power Company to Mr. H. Denton, Director, Office of Nuclear Reactor Regulation requesting a Technical Specification change that would allow Site Superintendent to spend up to 50% of his time in the Site Superintendent's office. Additional modifications for the SS office include a video monitor, intercom, and the addition of key control room annunciators. This item remains open.
- b. (Open) Open Item No. 263/82-05-19: Meteorological measurements readout is currently installed in the Site Superintendent's office, which is presently not part of the control room. The licensee is currently remodeling the Site Superintendent's office so that it will become part of the control room. In addition, a new meteorological readout device will be installed in the control room.

- c. (Closed) Violation Severity Level 4 No. 263/83-09-01: Licensee failed to report unusual event on April 11, 1983 to State and county agencies until 66 minutes after event declaration. The licensee has instructed Shift Supervisors (SS) on the importance of promptly notifying the Shift Emergency Communicator (SEC). In addition, EPIP 1.2-101, Step 2 has been revised so that the SS will direct the SEC to initiate calls to the State and local governmental agencies from the SEC quarters in situations where there is no time for the SEC to report to the Control Room. Procedures and forms to facilitate notifications from the SEC quarters were positioned accordingly and all SECs were notified of the reason for the change and the proper way to handle the initial notification.

3. Implementation of the Emergency Plan

(Closed) 263/83-XX-01: During the period May 21, 1983 to October 1, 1984, the licensee declared two Notification of Unusual Events (NUEs). The licensee provided complete records for both NUEs. The first NUE occurred on June 13, 1983 which involved a chlorine tank leak. The second NUE occurred on June 4, 1984 which involved loss of offsite power for approximately two minutes while performing breaker maintenance work. In both cases, the licensee notified both the State and local governmental agencies within 15 minutes after declaring the NUEs. The NRC Operations Center was notified 36 minutes and 43 minutes after declaring the 1983 and 1984 NUEs, respectively. The inspector noted that EIPs A.2-102 through 105 have notes stating that notification to the NRC is to be made within one hour of event declaration. Although the NRC was notified within one hour for both NUEs, it is recommended that the wording of these EIPs be revised to reflect the current wording of 10 CFR 50.72(a)(3) which states that the licensee shall notify the NRC immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes.

4. Changes to the Emergency Preparedness Program (82204)

The inspectors determined that emergency plan changes, both Corporate and Monticello, and related EIPs to each plan have been submitted to Region III within 30 days of such changes, as required by 10 CFR 50.54(q) and 10 CFR Appendix E, Section V. Revision 4 of the Monticello Nuclear Generating Plan Emergency Plan and Revision 7 of the Corporate Nuclear Emergency Plan were reviewed by Region III in September 1984. These reviews determined that the submitted changes were consistent with the requirements of 10 CFR 50.54(q) and did not decrease the effectiveness of the plan.

The inspectors discussed with the Emergency Planning Coordinator and other Corporate representatives any significant changes in the licensee's organization and the management of the emergency preparedness program. The most significant change at the Monticello Nuclear Generating Plant was the addition of a second Senior Reactor Operator (SRO) to the minimum shift staff (see Section 2.a). Since the last inspection (May 1983), several corporate organizational changes have occurred. The General Superintendent, Radiation Protection and Chemistry (RP&C) position has been established and

has the responsibility for administration of the overall NSP emergency preparedness program. Also, the Administrator, Emergency Preparedness position was established. This individual reports to the General Superintendent, RP&C and is responsible for program maintenance, preparation of the Corporate Nuclear Emergency Plan and the Corporate EIPs, and serves as liaison with other corporate departments having emergency preparedness input and with the two Site Emergency Planning Coordinators. The General Superintendent, RP&C, the Manager Nuclear Technical Services, and the Assistant General Manager Nuclear Plants are new corporate positions which can act as Emergency Manager alternates.

The inspectors also reviewed EPIP A.2-406, "Offsite Dose Projection." Although Revision 9 is much better than the previous versions, it could be improved in the following areas:

- . The discussion section should be moved to the front of the MIDAS Users Manual and expanded to include a definition of input parameters and their units.
- . The criteria or circumstances for use of each option could be included to explain when the option should be used and what the utilities accomplish.
- . The user-required inputs should all be underlined. Currently, only some of the inputs are underlined.

Based on the above findings, this portion of the licensee's program is acceptable.

5. Knowledge and Performance of Duties (82206)

The inspectors reviewed the licensee's emergency preparedness training program including training program policy, maintenance and development of course outlines, lesson plans, training schedules, drills, written exams, attendance records, and individual training records. The inspectors also interviewed a representative sample of key emergency response personnel.

Individual training records of all personnel designated as potential Emergency Directors, Emergency Managers, and Radiological Emergency Coordinators were examined. A random sampling of individual training records were also reviewed to verify initial training and retraining had been presented to other key emergency response personnel. The licensee's training records indicated that four of nine Emergency Director designees were not provided the specialized retraining as specified in the NSP Corporate EPIP 1.2.1, Section 5.2.2(c) during the 1983 to 1984 training cycle. Qualified personnel in order of succession as Emergency Director are specified in Monticello EPIP 1.2-001, Section I.A.2. Section 8.1 of the Monticello Emergency Plan states that specialized training of plant and support personnel necessary to achieve and maintain an acceptable level of emergency preparedness is covered in the Corporate Nuclear Emergency Plan. Corporate Nuclear Emergency Plan Section 10.3 makes a reference to the Emergency Plan Training Program which is described in Corporate EPIP 5.2. Corporate EPIP 5.2 states in part that all emergency

response personnel shall be trained annually in their respective emergency response duties. 10 CFR 50.54(q) states in part that a licensee authorized to operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards of 10 CFR 50.47(b) and the requirements of Appendix E. Contrary to the requirements of the Monticello Nuclear Generating Plan Emergency Plan, four Emergency Director designees had not received the annual emergency preparedness training during the calendar year 1983 to present. This is an apparent item of noncompliance (263/84-22-01).

In addition, a Monitoring Section Leader's (MSL) training records indicated that no EPIP training was provided, and when interviewed, the MSL stated that he had not finished reading the EIPs, nor had he returned the form requiring him to sign off as having been trained. Although the MSL's training record did indicate that a Corporate Radiation Protection Support Supervisor (RPSS) walkthrough training session was conducted in May 1984, the inspector determined through the interview that training for his emergency position as MSL was inadequate.

The inspectors also conducted walkthroughs with Site Superintendents, an Operations Superintendent, Emergency Director, RPSS, Radiological Emergency Coordinator (REC), offsite dose assessment operator, and an OSC Coordinator. Most of the individuals interviewed appeared to perform satisfactorily the functions of their assigned emergency response positions. One of the Site Superintendents interviewed exhibited some difficulty in demonstrating his knowledge of the EIPs. The Site Superintendent interviews also indicated that a periodic review of the types of alarms/warnings and correlations of the several earthquake detection instruments would be beneficial.

The inspectors determined that the required annual training program for offsite emergency support personnel was conducted and training records were adequate. This program included training sessions for medical treatment facilities, offsite fire fighting, rescue organizations, and police personnel. The licensee also performed an annual review of EALs with State and county authorities.

Based on the above findings, an item of noncompliance was identified and described in the Appendix of the transmittal letter to this report (263/84-22-01). In addition, the following items should be considered for improvement:

- . The licensee should document individual participants involvement in emergency drills, exercises, and table top discussions so that proper training credit is received for these activities. This documentation should include specific reference to the type of training received and references to lesson plans or emergency procedures covered during this informal training.
- . The licensee should develop a more formal process to ensure that emergency response personnel are annually trained and versed on EIPs instead of making these EIPs "required reading."

6. Licensee Audits (82210)

The Nuclear Operations - Quality Assurance Branch conducted the annual independent audit of the licensee's emergency preparedness program on an intermittent basis from March 16 to April 17, 1984. Audited organizations included Nuclear Generation, Production Training, Monticello Plant, and the Communications Department. The inspector confirmed that this audit included an evaluation of licensee interfaces with State and local governments including their participation in recent drills and exercises.

Corrective actions are being taken on recommendations resulting from critiques following exercises and drills. A tracking system has been established for followup on these items, and it is maintained as an Action Item List by the Administrator, Emergency Preparedness. The inspector determined that not all items on the tracking system list had due dates for completion, although the major items did have a date including exercise weaknesses requiring a licensee response to NRC inspection reports. The Administrator, Emergency Preparedness is usually notified by telephone of the completion of corrective actions by the Site Emergency Coordinator. Documentation is provided for the major recommendations from exercise and drill critiques whether licensee or NRC identified. A response form is being considered which would require a written response for all items whether improvement-type items or weaknesses identified as a result of exercise and drill critiques. The inspectors concluded that corrective actions resulting from drills and exercises are being taken, however, a more thorough, formalized form of documentation would improve the program.

The independent audit report stated that exercise critiques did not require the determination of whether or not the exercise had met all of the required objectives. This evaluation would have provided a means to assure that all major elements of the plans and preparedness organizations were exercised every five years. The Production Training Department responded to this finding by revising Program Policy No. 23, Emergency Plan Training, to state which objectives are required for drills and exercises. However, a statement should be added to assure that the exercise program tests all major elements of the plans and preparedness organizations within a five year period as described in Criterion II.N.1.b of NUREG-0654, Revision 1. The inspectors concluded that this independent review was thorough and met the requirements of 10 CFR 50.54(t).

Based on the above findings, this portion of the licensee's program is acceptable.

7. Maintaining Emergency Preparedness

The inspectors reviewed documentation of required drills, exercises, and inventories to ascertain how emergency preparedness is maintained. Documentation related to the semiannual health physics drills, which involved response to and analysis of simulated elevated airborne and liquid releases and direct radiation measurements in the environment, was satisfactory. An annual post-accident sample drill which involved

analysis of inplant liquid samples with actual elevated radiation levels was also documented satisfactorily. The inspector also reviewed the various communication test records and verified that the monthly communication tests, which are required by 10 CFR 50, Appendix E and the licensee's Emergency Plan, were being performed.

In addition, the inspector reviewed the licensee's shift augmentation drills conducted since the last inspection. These drills are more appropriately called emergency organization response time tests. The licensee conducts annual, unannounced response time tests. The inspector reviewed two response time tests conducted on June 15, 1983 and July 11, 1984. The licensee used the commercial telephone to make the notifications and only tested the 30-minute augmentation goals of Table 5-1 in the Monticello Emergency Plan. The 60-minute goals were not tested. Both tests took an hour or more to complete. The licensee's shift augmentation system consists of a combination of radio-activated pagers for Emergency Director designees and various group leaders, and tone-activated radio units located in the homes of other emergency response organization personnel. The inspectors recommended that the pager system and call-back procedure be used when the augmentation drills are performed. The licensee should also note that these 30 and 60-minute response-time goals of Table 5-1 indicate the time it would take to augment the onshift staff after emergency declaration.

The inspectors interviewed a representative of the Corporate Communications Department and determined that the annual, updated version of the Emergency Planning Guide was distributed in March 1984. Some minor changes were made in the wording for county and local governments actions when a Notification of Unusual Event or Alert emergency classification occurs. Also, a wallet-sized calendar was enclosed which instructs the residents on how to respond when the emergency sirens activate.

Based on the above findings, this portion of the licensee's program is acceptable; however, the following item should be considered for improvement:

The licensee should test the radio-activated pager system and call-back procedure when performing augmentation drills so that the capability to achieve the goals of Table 5-1 of the Monticello Emergency Plan can be demonstrated. In addition, the 60-minute response time goals of Table 5-1 should also be tested.

#### 8. Exit Meeting

The inspectors met with licensee representatives (denoted in Section 1) at the conclusion of the inspection on October 3, 1984. The inspectors summarized the scope and findings of the inspection. The inspectors also discussed the apparent item of noncompliance in the emergency preparedness training area. In addition, the licensee agreed to review and consider the improvement items discussed.