

UNITED STATES NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Emergency Planning Inspection

IE Inspection Report No. 050-263/76-06

Licensee: Northern States Power Company
414 Nicollet Mall
Minneapolis, Minnesota 55401

Monticello Nuclear Generating Plant
Monticello, Minnesota

License No. DPR-22
Category: C

Type of Licensee: BWR (GE) 1670 Mwt

Type of Inspection: Routine, Unannounced

Dates of Inspection: April 20-23, 1976

Principal Inspector: M. J. Oestmann

M. J. Oestmann

5/10/76
(Date)

Accompanying Inspectors: None

Other Accompanying Personnel: None

Reviewed By: *J. A. Pagliaro*
J. A. Pagliaro, Chief
Environmental and Special Projects Section

5/11/76
(Date)

SUMMARY OF FINDINGS

Inspection Summary

Routine, unannounced emergency planning inspection conducted on April 20-23, (76-06): Reviewed requirements, documentation and procedures of the Monticello Nuclear Generating Plant Emergency Plan (MPEP); reviewed reports on drills; examined equipment, instrumentation, and supplies as specified in the MPEP; conducted discussions on emergency plans with offsite support agencies and with plant personnel; and followed up items from the previous emergency planning inspection.^{1/}

Enforcement Items

None.

Licensee Action on Previously Identified Enforcement Items

No previously identified enforcement items within the scope of this inspection.

Other Significant Items

A. Systems and Components

To improve radio communications between the plant and the Village Hall of Monticello, the licensee will install an antenna on the roof of the Village Hall building by Monday, April 26, 1976. (Paragraph 4, Report Details)

B. Facility Items (Plans and Procedures)

A licensee representative stated that he plans to update letters of agreement with offsite agencies within the next few weeks. At present letters of agreement have been received from the Monticello - Big Lake Community Hospital and the Big Lake - Monticello Ambulance Service during 1975. (Paragraph 3, Report Details)

Documentation of emergency preparedness training and retraining for onsite personnel and offsite personnel from primary emergency support agencies was found to need improvement. (Paragraph 7.a, Report Details)

^{1/} IE Inspection Rpts No. 050-263/75-07 and No. 050-263/75-09.

C. Managerial Items

Starting June 1, 1976 Mr. C. Larson, Plant Manager, will be on training leave for one year. No acting manager has yet to be named during C. Larson's absence.

D. Noncompliance Items Identified and Corrected by Licensee

None.

E. Deviations

None.

Management Interview

The following items were discussed in a management interview on April 23, 1976, with Mr. M. Clarity, Superintendent, Plant Engineering and Radiation Protection and Mr. L. Eliason, Radiation Protection Engineer.

- A. The NRC inspector discussed the scope and intent of this inspection. (Paragraph 2, Report Details)
- B. The inspector noted that there is a continuing problem in the management of keeping the letters of agreement with offsite support agencies up-to-date. Letters from the Monticello - Big Lake Community Hospital and Big Lake - Monticello Ambulance Service were obtained during the past year. A licensee representative stated that letters requesting agreement will be sent to other supporting agencies within the next few weeks. (Paragraph 3, Report Details)
- C. The licensee has been conducting tests and drills semiannually as required in the emergency plan and Technical Specifications. Certain changes in communications are being implemented as a result of recommendations from the drill critique. (Paragraphs 4 and 9, Report Details)
- D. The inspector discussed results of examination of facilities and equipment, including monitoring instrumentation for measuring releases of radioactivity. (Paragraphs 4 and 5, Report Details)

- E. The inspector noted that first aid supplies were provided in specific locations in the plant but no medical area has been provided in the plant. Decontamination facilities, however, are available in the plant. Contingent upon the severity of the injury, the licensee intends to provide medical treatment of a contaminated injured person, with first aid supplies at the site of the accident, followed by decontamination. The ambulance service and hospital also have the capabilities of handling contaminated injured personnel. (Paragraph 6, Report Details)
- F. Documentation pertaining to training and retraining of plant personnel and personnel from offsite supporting agencies needs improvement. (Paragraph 7.a, Report Details)
- G. Licensee representatives and the inspector discussed the feasibility of locating remote recording equipment from the existing 330-foot meteorological tower in the control room as discussed in a previous inspection report.^{2/} The licensee has clarified his position regarding this matter in a letter of April 27, 1976. (Paragraph 5.b, Report Details)
- H. Samples were collected for the confirmatory measurements program. A spiked liquid sample has been sent to the plant for analysis confirmation. (Paragraph 11, Report Details)

^{2/} IE Inspection Report No. 050-263/75-05.

REPORT DETAILS

1. Persons Contacted

In addition to the licensee personnel mentioned in the Management Interview section, the following licensee personnel were contacted:

Licensee Personnel

P. Yurczyk, Radiation Protection Specialist
R. Jacobsen, Plant Chemist
W. Fredricks, Administrator-Regulatory Liaison
J. Brooks, Machinist

Offsite Support Personnel

J. Albaugh, Hospital Administrator, Monticello - Big Lake
Community Hospital
D. Cook, Big Lake - Monticello Ambulance Service
D. Pitt, Monticello Civil Defense
V. Michaelis, Chief, Monticello Fire Department
R. Skoog, Chief, Big Lake Fire Department
L. Lund, Director, Minnesota Division of Emergency Services
D. Wolf, Deputy Sheriff, Wright County
W. Goenner, Deputy Sheriff, Sherburne County
L. Lenz, Captain, Minnesota State Highway Patrol

2. General

This inspection included examination of the Monticello Nuclear Generating Plant Emergency Plan (MPEP), with approved changes through November 10, 1975. Documentation pertaining to various aspects of the emergency preparedness program, including medical arrangements, training, tests and drills, and agreements and coordination with offsite agencies was reviewed. A number of the offsite support agencies listed in MPEP were either contacted by phone or visited by the inspector. Selected facilities, equipment, and supplies planned for use in the event of an emergency were examined. Program management functions including review and audit and update of the plan were reviewed and discussed.

3. Agreements and Coordination with Offsite Support Agencies

Representatives of the offsite support agencies listed in Paragraph 1, above, were contacted by phone or visited by the inspector. Based on discussions with these personnel, it was determined that the licensee has maintained contact and continued coordination of emergency planning activities. The licensee plans to have a coordination meeting with offsite personnel within the next several months. Many of these personnel have participated in drills and tests of the emergency plan during the past year.

The inspector noted that the licensee had two letters of agreement, one from the Monticello - Big Lake Community Hospital and the second, from the Big Lake - Monticello Ambulance Service, which were dated during 1975. The licensee stated that he was in the process of updating all letters of agreement with primary offsite support agencies within the next few weeks. The licensee was informed that in Regulatory Guide 1.101, "Emergency Planning for Nuclear Power Plants," guidance is provided that copies of the letters of agreement be included as an appendix of the emergency plan. It was noted in the previous inspection report^{3/} that provisions for acquiring and maintaining up-to-date letters of agreement for all primary offsite support agencies required further action. This item will be examined during a subsequent inspection.

The inspector noted that the licensee had made timely distribution of approved changes to the emergency plan to appropriate offsite response groups. However, the inspector found in discussions with certain emergency response groups, changes in available manpower and equipment had been made from those reported in the existing emergency plan. The inspector discussed with the licensee representative the necessity of updating the information provided in Section IV of the MPEP, for each support agency during the next revision of the emergency plan. The licensee representatives acknowledged these comments.

4. Facilities and Equipment

The inspector examined selected emergency facilities, equipment and supplies at two assembly areas, control room, security gate, hospital and ambulance kits for their maintenance in a

3/ IE Inspection Rpt No. 050-263/75-07.

ready operable condition. Items examined also included first aid kits, decontamination area and emergency communications systems. The emergency supplies were found to be located as specified in the MPEP. The licensee stated that a monthly check for inventory of each emergency kit and a quarterly calibration of portable survey instrumentation have been carried out in accordance with plant operating procedures. The inspector checked the calibration of selective instrumentation and found them to be in good order.

Based on the critique of emergency drills, improvements in emergency communications systems have been made. The licensee will install an antenna on the roof of the Monticello Village Hall by April 26, 1976, to improve radio communications between the plant and the police and fire departments located in the Village Hall. The Minnesota State Highway Patrol also reported that it is in the process of resolving communication problems identified during an extensive drill conducted in June, 1975 between the licensee, local, county, State and Federal officials. The licensee has noted from a drill conducted in December, 1975 that improvements in personnel hearing the public address system within the plant area are needed. This item will be re-examined during a subsequent inspection.

5. Instruments for Monitoring Release of Radioactivity

a. Radioactivity Monitors

Means for monitoring and determining the significance of potential releases of radioactivity to the environment were discussed with a licensee representative. Selected instrumentation including stack and ventilation monitors, discharge canal monitors, survey team portable instrumentation and other decisional aids were examined. The process monitors and portable survey meters and ion chambers were found to be calibrated and operable. Decisional aids including building diagrams, equipment inventory and various maps were available at the emergency assembly points and in the control room. The licensee stated that the State was to send him one map to be used for evacuation to avoid the confusion experienced during the June, 1975 drill where two different maps were used for evacuation routes. This item will be examined during a subsequent inspection.

b. Meteorological Monitors

The inspector observed the existing 30-foot meteorological tower on the roof of the containment building. Wind speed and wind direction from this tower are displayed on a dual strip chart recorder in the control room. As discussed in a previous inspection report,^{4/} the licensee has available a separate 330-foot meteorological tower including remote recording equipment located in this tower building. This includes a digitizing transmitter which provides transmission to a centralized computer oriented data collection system. In this inspection the licensee representatives and the inspector discussed the feasibility of connecting certain remote recording equipment from the 330-foot meteorological tower to the plant control room as described in a previous inspection report.^{5/} In a letter of April 27, 1976, the licensee representative clarified his position regarding this matter.

6. Medical Arrangements

a. Onsite Arrangements

This inspection included examination of the first aid supplies at four or five plant locations. The licensee has no onsite medical treatment area of personnel but depends on trained employees to apply first aid at the scene of the accident. A decontamination area is available in the plant access control area. Depending on the severity of injury of the personnel, the licensee intends to treat the contaminated injured person first, and then wrap him with plastic covering prior to being transferred into the decontamination area. Arrangements have been made with the ambulance service and hospital to handle a contaminated injured person.

b. Offsite Arrangements

The inspector also discussed the agreement the owner of the private ambulance service has with the licensee to handle contaminated injured personnel. The licensee has provided the ambulance service with protective clothing, respirators, dosimeters and contamination control materials

^{4/} IE Inspection Rpt No. 050-263/76-05.

^{5/} Ibid.

for the ambulance. All emergency supplies in the radiation protection kit for the ambulance service appear to be available and in good order.

The inspector visited the medical emergency area in the Monticello - Big Lake Community Hospital. The hospital has a room available to handle contaminated personnel. Emergency supplies in the radiation closet at the hospital are maintained by the licensee and found to be in good order. The hospital is in the process of preparing an updated hospital assistance plan including a procedure for contamination control and radiation protection for the hospital personnel to follow. A listing of hospital personnel and physicians available to provide medical treatment is also included. The hospital administrator also stated that in the unlikely event of multiple injuries from an accident at the plant, the Monticello Hospital would rely on the University of Minnesota hospital facilities for backup assistance.

7. Training and Retraining

a. Onsite

The status of training and retraining on various aspects of the Emergency Plan was discussed with a licensee representative. The inspector noted that an operating procedure exists in which a new employee must receive a training course on emergency procedures within 30-days of new employment. The inspector did not find documentation available which indicated a separate emergency plan course, as such, was offered to new employees. Instead, the licensee provides an indoctrination course in radiation protection to new employees which includes limited aspects of the emergency plan. Films, tapes and lectures are available for new and experienced employees.

The licensee keeps a training history record for each employee which lists "emergency procedures" as a separate item. However, the training program scheduled for 1976 includes "Industrial Security and First Aid". The licensee representative stated that emergency plan and procedures will be included during the 1976 training program.

Only limited records for employee training and retraining on emergency plans and procedures during 1975 were available to the inspector for review. The emergency plan course for the maintenance crew was cancelled in 1975 and will be rescheduled during 1976. A fire fighting course has been offered to the emergency team personnel during 1975. Documentation of each employee's training record on emergency plans and procedures will be examined during a subsequent inspection.

b. Offsite

The licensee stated that he has provided an Emergency Medical Technician training course to hospital personnel. The licensee also has discussed emergency arrangements with the owners of the private ambulance service in accordance with Section IX of the Emergency Plan. The inspector noted that a number of offsite support personnel have taken tours through the plant. However, documentation listing attendees with dates was not available. The necessity of keeping records of attendees and subjects taught which demonstrate compliance with training requirements listed in the Emergency Plan was discussed. Documentation of training offsite personnel including course content and attendees will be examined in a subsequent inspection.

8. Implementing Procedures

Implementing procedures which include E.2 Emergency Procedures, E.3 Casualty Care, E.3.1 Radiation Casualty Detection, E.3.2 Hospital Assistance Plan and E.3.3 Medical Treatment of Radiation Casualties were updated and approved on December 8, 1975, by the licensee and were reviewed by the inspector. These implementing procedures have been put into effect during onsite and offsite drills and tests as required by the Technical Specifications, Section 6.5.A.6.

9. Tests and Drills

The inspector's examination of documentation pertaining to the conduct and evaluation of the emergency plan tests and drills established that these drills had been completed semi-annually as required by the plan and Technical Specifications,

Section 6.5.A.6. Drills are used as part of retraining exercise for experienced employees. An extensive drill involving offsite local, county, State and Federal agencies was conducted on June 4, 1975. Generally, the drill went well except for delay of communication from the State Division of Emergency Services to the local supporting agencies. Certain recommendations from the critique of the June 1975 drill have been put into effect by the local agencies with the cooperation of the licensee. State officials are presently in the process of improving the radio communications with other local and county offsite support agencies. The State is requested by the licensee to provide a single map showing evacuation routes to all offsite support agencies to avoid confusion brought about by the use of different maps by different agencies during the June 1975 drill.

10. Program Management and Review

The inspector examined documentation pertaining to program review and audit by the Safety Audit Committee in the area of emergency plans and implementing procedures. Reviews and approvals of emergency plan changes and reviews of results of emergency plan drills have been conducted by this Committee as required by the Technical Specifications, Section 6.2.A. The Committee has also had a task force to investigate various aspects of fire protection procedures applicable to the Monticello Plant based on experience from the Browns Ferry Fire.

11. Confirmatory Measurements

Samples of off-gas, charcoal cartridges and particulate filters have been obtained from the Monticello Plant. Since no liquid radioactive effluent is discharged from the plant, a standard liquid sample from the NRC reference laboratory has been sent to the plant to determine the analytical capability of the licensee in this area.