October 7, 1985

Docket No. 50-263

Mr. D. M. Musolf
Nuclear Support Services Department
Northern States Power Company
414 Nicollet Mall - 8th Floor
Minneapolis, Minnesota 55401

Dear Mr. Musolf:

The Commission has issued the enclosed Amendment No. 33 to Facility Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. The amendment consists of changes to the Technical Specifications in partial response to your application dated February 15, 1983.

The amendment revises the Technical Specifications Section 3.13/4-13, "Fire Suppression Water Systems" to change the term "screen wash pump" to "screen wash/fire pump" and reword the bases accordingly.

A copy of the Safety Evaluation is enclosed.

Sincerely,

Original signed by/

Rajender Auluck, Project Manager
Operating Reactors Branch #2
Division of Licensing

Enclosures:
1. Amendment No. 33 to License No. DPR-22
2. Safety Evaluation

cc w/enclosures:
See next page

DISTRIBUTION	JUlie	KRidgway	
Docket File	SNorris	BGrimes	OPA, CMiles
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Mr. D. M. Musolf
Northern States Power Company
Monticello Nuclear Generating Plant

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 33
License No. DPR-22

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Northern States Power Company (the licensee) dated February 15, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

   E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.2 of Facility Operating License No. DPR-22 is hereby amended to read as follows:

2 Technical Specifications

The Technical Specifications contained in Appendix A as revised through Amendment No. 33 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 7, 1985

ATTACHMENT TO LICENSE AMENDMENT NO. 33

FACILITY OPERATING LICENSE NO. DPR-22

DOCKET NO. 50-263

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised areas are indicated by marginal lines.

Pages
224
225
228
229

3.0 LIMITING CONDITIONS FOR OPERATION	4.0 SURVEILLANCE REQUIREMENTS

B. Fire Suppression Water System

1. Except as specified in 3.13.B.2 or 3.13.B.3 below, the system shall be operable at all times with:

   a. The following pumps, including automatic initiation logic, operable and capable of delivering at least 1500 gpm at a discharge pressure of 90 psig:

      1. Diesel-driven fire pump
      2. Motor-driven fire pump
      3. Screen wash/fire pump

   b. An operable flow path capable of taking suction from the river and transferring the water through distribution piping with operable sectionalizing control or isolation valves to the yard hydrant valves and the first valve ahead of each hose station or sprinkler system required to be operable.

B. Fire Suppression Water System

1. The system shall be verified operable as follows:

   a. Operability of the diesel-driven fire pump starting battery shall be demonstrated by:

      1. Once each week verify electrolyte level and voltage is within specifications.

      2. Once every three months verify the specific gravity of each cell is within specifications.

      3. Once every 18 months inspect the batteries, battery racks, and electrical connections for damage or abnormal deterioration.

   b. 1. The motor-driven fire pump shall be started every month and run for at least 15 minutes on recirculation flow.

      2. The screen wash/fire pump shall be run for at least 15 minutes per month.

   c. The diesel-driven fire pump shall be started every month from ambient conditions and run for at least 20 minutes on recirculation flow.

   d. The level in the diesel-driven fire pump day tank shall be checked every month and verified to contain at least 65 gallons of fuel.

3.0 LIMITING CONDITIONS FOR OPERATION	4.0 SURVEILLANCE REQUIREMENTS
2. With one of the pumps required by Specification 3.13.B.1.a inoperable, perform the Surveillance required by Specification 4.13.B.2 and restore the inoperable pump to operable status within seven days or provide a 30-day written report outlining the plans and procedures to be used to provide for the loss of redundancy in the Fire Suppression Water system.	e. Every three months verify that a sample of fuel from the diesel oil storage tank, obtained in accordance with ASTH-D270-65, is within the acceptable limits specified in Table 1 of ASTH D975-74 when checked for viscosity, water, and sediment.
3. With the fire suppression water system otherwise inoperable: a. Establish a backup fire Suppression Water System within 24 hours. b. Provide prompt notification with a written followup report within 14 days outlining the actions taken and the plans and schedule for restoring the system to operable status.	f. Every 18 months subject the diesel-driven fire pump engine to an inspection in accordance with procedures prepared in conjunction with the manufacturer's recommendations for this class of standby service. g. A simulated automatic actuation of each fire pump and the screen wash/fire pump, including verification of pump capability, shall be conducted every 18 months. h. The yard main and the reactor building and turbine building headers shall be flushed every 12 months. i. System flow tests shall be performed every three years. j. Valves in flow paths supplying fire suppression water to safety related structures, systems, and component shall be cycled every 12 months.

3.13 BASES:

Elements of the fire detection and protection system are required to be operable to protect safety related structures, systems, and components whenever those structures, systems, or components are required to be operable. Fire detection and protection systems will normally be maintained operable at all times except for periods of maintenance and testing.

Fire detection instrumentation is installed throughout the plant to protect safety related structures, systems, and components. The detectors in each area initiate a local alarm and an alarm in the control room. All circuits are supervised and the installation meets the requirements of NFPA-72D. The Specifications require all detectors to be operable in those zones having only one detector (battery rooms). In other plant areas, Table 3.13.1 permits one detector in each zone to be inoperable. If more detectors are inoperable, a patrolling fire watch is established in the affected area until the required number of detectors are restored to operable status. The loss of one detector does not significantly degrade the ability to detect fires in areas of the plant having multiple detectors.

The fire suppression water system is supplied by three identical vertical centrifugal pumps rated at 1500 gpm at 100 psig each. Two of these pumps are motor driven and one is diesel driven . One of the motor driven pumps normally supplies the needs of the screen wash system and is designated the screen wash/fire pump. Transfer from screen wash duty to fire duty occurs automatically. All pumps are started automatically by instrumentation sensing header pressure. Any two pumps are capable of supplying all fire fighting water requirements in safety related areas of the plant. If a pump is inoperable, it must be repaired within seven days or a report is submitted to the Commission. If two pumps are inoperable, or if other circumstances interrupt the supply of water to any safety related area, a backup source of water must be provided within 24 hours and the Commission notified.

Automatic sprinkler systems are installed in both diesel-generator rooms and both day tank rooms. Other sprinkler and deluge systems are installed in turbine lube oil piping and storage areas and other non-safety related portions of the plant. An automatic Halon suppression system is installed in the cable spreading room. Inoperability of any of the automatic suppression systems in safety related areas of the plant requires the stationing of a continuous fire watch in the area equipped with backup manual fire suppression equipment. Hose stations and yard hydrant hose houses are provided in all safety related areas of the plant and surrounding all principal plant buildings. These stations are supplied from the fire suppression water system. If the water supply to these areas is interrupted, a hose supplied from an operable source is made available to protect the area having the inoperable station.

Piping and electrical penetrations are provided with seals where required by the fire severity. If a seal is made or found to be inoperable for any reason, the penetration area is continuously attended until an effective fire seal is restored. Seals have been qualified for the maximum fire severity present on either side of the barrier.

4.13 BASES:

Fire detectors are tested in accordance with the manufacturer's recommendations. All tests and inspections are performed by the plant staff. Every six months each detector is functionally tested. Combustion generated smoke is not used in these tests. Alarm circuits are functionally checked every six months. In addition, all circuitry is automatically supervised for open wiring and ground faults.

Fire pumps are tested each month to verify operability. Test starting of the screen wash/fire pump is not required since it is normally in service. Each fire pump is manually started and operated for at least 15 minutes with pump flow directed through the recirculation test line. Every 18 months the operability of the automatic actuation logic for the fire pumps and the screen wash/fire pump is verified and the performance of each pump is verified to meet system requirements. The specified flush and valve checks provide assurance that the piping system is capable of supplying fire suppression water to all safety related areas. When one of the fire pumps is inoperable, the operable pumps are run daily to verify operability until all pumps are once again available.

A system flow test is specified every three years. This test verifies the hydraulic performance of the fire suppression fire water header system. The testing will be performed using Section 11, Chapter 5 of the Fire Protection Handbook, 14th Edition, as a procedural guide. This test is generally performed in conjunction with a visit from insurance company inspectors.

Hose stations and yard hydrant hose houses are inspected monthly to verify that all required equipment is in place. Gaskets in hose couplings are inspected periodically and the hose is pressure tested. Pressure testing of outdoor hose is conducted more frequently than indoor hose because of the less favorable storage conditions. Operability of hose station isolation valves is verified every three years by partially opening each valve to verify flow. All of these tests provide a high degree of assurance that each hose station and yard hydrant hose house will perform satisfactorily after periods of standby service.

Simulated automatic actuation tests are conducted each 18 months to confirm the operability of the sprinkler and Halon systems. These tests consist of verification that all valves, dampers (Halon system only), alarms, and flow paths are functional.

Plant fire barrier walls are provided with seals for pipes and cables where necessary. Where such seals are installed, they must be maintained intact to perform their function. Visual inspection of each installed seal is required every 18 months and after seal repair. A visual inspection following repair of a seal is sufficient to assure that seal integrity will be within acceptable limits.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 33 TO FACILITY OPERATING LICENSE NO. DPR-22

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

1.0 INTRODUCTION

By letter dated February 15, 1983 Northern States Power Company (NSP/the licensee) proposed revised Technical Specifications (TSs) to Section 3.13/4.13, "Fire Suppression Water System" to change the term "screen wash pump" to "screen wash/fire pump" and to reword the bases section accordingly. This proposed amendment would incorporate clarification of the screen wash pump's use as a fire pump.

By letter dated February 6, 1981, the licensee provided an analysis of the maximum fire suppression system plus hose streams demand based on a fire condition. This analysis showed that the maximum demand could be provided by any two of three 1500 gpm pumps. This condition required the licensee's screen wash pump to be available for fire protection duties if one of the fire pumps became inoperable.

2.0 EVALUATION

The specific requirements for the water supplies for suppression systems are stated in Section III.A of 10 CFR Part 50, Appendix R. For a back-up pump to be acceptable as a fire pump, the staff concludes that the back-up is required to meet the maximum fire suppression system plus hose streams demand.

Therefore, on the basis of the licensee's analysis, the staff concludes that the screen wash pump is an acceptable backup pump. Thus, the proposed amendment is consistent with existing NRC Standard Technical Specification criteria and is found acceptable.

3.0 ENVIRONMENTAL CONSIDERATIONS

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes in surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or

cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: J. Ulie and K. Ridgway

Dated: October 7, 1985