

February 2, 1984

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:

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The Commission has issued the enclosed Amendment No. 22 to Facility Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. The amendment consists of changes to the Technical Specifications in response to your September 24, 1982 application, as revised on September 29, 1983.

The revisions to the Technical Specifications add new Limiting Conditions for Operation and Surveillance Requirements for the Residual Heat Removal (RHR) System in the Shutdown Cooling Mode.

Other changes requested in your September 24, 1982 submittal are still under staff review and will be addressed by separate Safety Evaluation and license amendment.

A copy of the related Safety Evaluation is also enclosed.

Sincerely,

Original signed by/

Helen Nicolaras, Project Manager  
Operating Reactors Branch #2  
Division of Licensing

Enclosures:

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

cc w/enclosures:  
See next page

ORB#2:DL  
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Mr. D. M. Musolf  
Northern States Power Company  
Monticello Nuclear Generating Plant

cc:

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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. 22  
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 September 24, 1982, as revised September 29, 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. 22 are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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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: February 2, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 22

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 pages are identified by Amendment number and contain vertical lines indicating the area of change.

Remove

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Insert

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TABLE 3.2.1 - Continued

<u>Function</u>	<u>Trip Settings</u>	<u>Total No. of Instru- ment Channels Per Trip System</u>	<u>Min. No. of Operable or Operating Instru- ment Channels Per Trip System (1,2)</u>	<u>Required Conditions</u>
3. <u>Reactor Cleanup System (Group 3)</u>				
b. High Drywell Pressure (5)	$\leq 2$ psig	2	2	D
a. Low Reactor Water Level	$> 10'6''$ above the top of the active fuel	2	2	E
b. High Drywell Pressure	$\leq 2$ psig	2	2	E
4. <u>HPCI Steam Lines</u>				
a. HPCI High Steam Flow	$\leq 150,000$ lb/hr with $\leq 60$ second time delay	2(4)	2	F
b. HPCI High Steam Flow	$\leq 300,000$ lb/hr	2(4)	2	F
c. HPCI Steam Line Area High Temp.	$\leq 200^{\circ}\text{F}$	16(4)	16	F
5. <u>RCIC Steam Lines</u>				
a. RCIC High Steam Flow	$\leq 45,000$ lb/hr	2(4)	2	G
b. RCIC Steam Line Area	$\leq 200^{\circ}\text{F}$	16(4)	16	G
6. <u>Shutdown Cooling Supply Isolation</u>				
a. Reactor Pressure Interlock	$\leq 75$ psig at pump suction	2(4)	2	G

Amendment No. 21, 22

**Table 4.2.1 - Continued**  
**Minimum Test and Calibration Frequency For Core Cooling**  
**Rod Block and Isolation Instrumentation**

Instrument Channel	Test (3)	Calibration (3)	Sensor Check (3)
3. Steam Line Low Pressure 4. Steam Line High Radiation	Note 1 Once/week (5)	Once/3 months Note 6	None Once/shift
<u>HPCI ISOLATION</u>			
1. Steam Line High Flow 2. Steam Line High Temperature	Once/month Once/month	Once/3 months Once/3 months	None None
<u>RCIC ISOLATION</u>			
1. Steam Line High Flow 2. Steam Line High Temperature	Once/month Note 1	Once/3 months Once/3 months	None None
<u>REACTOR BUILDING VENTILATION</u>			
1. Radiation Monitors (Plenum) 2. Radiation Monitors (Refueling Floor)	- Note 1	See Table 4.8.2 Once/3 months	- (4)
<u>RECIRCULATION PUMP TRIP</u>			
1. Reactor High Pressure	Note 1	Once/Operating Cycle- Transmitter Once/3 Months-Trip Unit	Once/Day
2. Reactor Low Water Level (Note 7)	Once/month	Once/Operating Cycle- Transmitter Once/3 Months-Trip Unit	Once/shift
<u>SHUTDOWN COOLING SUPPLY ISOLATION</u>			
1. Reactor Pressure Interlock	Note 1	Once/3 Months	None

3.2/4.2

Amendment No.

Amendment No. 15, 22

**Table 3.2.7  
Trip Functions And Deviations**

	Trip Function	Deviation
<b>Reactor Building Ventilation Isolation and Standby Gas Treatment System Initiation Specification 3.2.E.3 and Table 3.2.4</b>	<b>Ventilation Plenum Radiation Monitors</b>	<b>+0.2 Mr/Hr</b>
	<b>Refueling Floor Radiation Monitors</b>	<b>+5 Mr/Hr</b>
	<b>Low Reactor Water Level High Drywell Pressure</b>	<b>-6 inches + 1 psi</b>
<b>Primary Containment Isolation Functions Table 3.2.1</b>	<b>Low Low Water Level</b>	<b>-3 inches</b>
	<b>High Flow in Main Steam Line</b>	<b>+2 %</b>
	<b>High Temp. in Main Steam Line Tunnel</b>	<b>+10°F</b>
	<b>Low Pressure in Main Steam Line</b>	<b>-10 psi</b>
	<b>High Drywell Pressure</b>	<b>+1 psi</b>
	<b>Low Reactor Water Level</b>	<b>-6 inches</b>
	<b>HPCI High Steam Flow</b>	<b>+7,500 lb/hr</b>
	<b>HPCI Steam Line Area High Temp.</b>	<b>+2°F</b>
	<b>RCIC High Steam Flow</b>	<b>+2250 lb/hr</b>
	<b>RCIC Steam Line Area High Temp Shutdown Cooling Supply Iso</b>	<b>+2°F +7 psi</b>



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 22 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 September 24, 1982, as revised on September 29, 1983, Northern States Power Company (the licensee) proposed changes to the Technical Specifications (TS) of Facility Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. The revisions to the Technical Specifications would add new Limiting Conditions for Operation and Surveillance Requirements for the Residual Heat Removal System (RHR) in the Shutdown Cooling Mode.

The proposed changes would specify isolation setpoints to protect the low pressure piping which supplies water to cool the reactor when it is cooling down or shutting down. These setpoints will permit injection of cooling water only when reactor vessel pressure is less than the RHR cut-in permissive setpoint.

Other changes requested in the September 24, 1982 submittal are still under staff review and will be addressed by separate Safety Evaluation and license amendment.

2.0 Background and Discussion

RHR shutdown cooling supply isolation valves (M02029 and M02030) logic circuitry has been tested by the licensee for many years.

The testing has been performed as a non-technical specification required surveillance. This requested change formalizes operability and surveillance testing under Technical Specification requirements.

3.0 Evaluation

Pressure switches PSs 2-128 A and B sense the reactor pressure in the "B" reactor recirculation loop and provide an interlock to prevent the shutdown cooling supply isolation valves (M02029 and M02030) from opening unless the reactor pressure is below the design pressure of the

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RHR shutdown cooling supply line. The licensee proposed a set pressure of 75 psig for the pressure switches described above. The original design pressure of the piping was 82 psig. Later the licensee reviewed the system for internal pressure, thermal loading and seismic loading conditions in response to IE Bulletin 79-14. Subsequently, during a conference call, the licensee verified that the maximum allowable pressure of the piping is 215 psig. The maximum permissible isolation setpoint of 82 psig (including 7 psig deviation) is well below the maximum allowable pressure of 215 psig of the shutdown cooling system supply piping.

Moreover, there is a relief valve, RV 2031, on the RHR pump suction piping for protection of the pump and the piping. This relief valve is set at 150 psig, which is lower than the maximum allowable pressure of 215 psig.

Since there is sufficient margin in the proposed set pressure (75 psig) and the maximum allowable pressure (215 psig), the change is acceptable.

#### 4.0 Environmental Considerations

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR 51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of the amendment.

#### 5.0 Conclusions

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 Contributor: G. Thomas

Dated: February 2, 1984