



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 95  
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 August 15, 1995, as supplemented November 14, and December 20, 1995, 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:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 95, 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 issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Tae Kim, Project Manager  
Project Directorate III-1  
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Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: April 3, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 95

FACILITY OPERATING LICENSE NO. DPR-22

DOCKET NO. 50-263

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

REMOVE

104  
158  
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INSERT

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3.0 LIMITING CONDITION FOR OPERATION

C. Containment Spray/Cooling System

1. Except as specified in 3.5.C.2, 3 and 4 below, both Containment Spray/Cooling Subsystems shall be operable whenever irradiated fuel is in the reactor vessel and reactor water temperature is greater than 212°F. A containment/spray cooling subsystem consists of the following equipment powered from one division:

2 RHR Service Water Pumps

1 Heat Exchanger

2 RHR Pumps\*

Valves and piping necessary for:

Torus Cooling

Drywell Spray

2. One RHR Service Water Pump may be inoperable for 30 days.
3. One RHR Service Water Pump in each subsystem may be inoperable for 7 days.
4. One Containment Spray/Cooling Subsystem may be inoperable for 7 days.
5. If the requirements of 3.5.C.1, 2, 3 and 4 cannot be met, an orderly shutdown of the reactor will be initiated and the reactor water temperature shall be reduced to less than 212°F within 24 hours.

\* For allowed out of service times for the RHR pumps see Section 3.5.A.

3.5/4.5

4.0 SURVEILLANCE REQUIREMENTS

C. Containment Spray/Cooling System

1. Demonstrate the RHR Service Water pumps develop 3,500 gpm flow rate against a 500 ft head when tested pursuant to Specification 4.15.B.
2. Test the valves in accordance with Specification 4.15.B.
3. Demonstrate the operability of the drywell spray headers and nozzles with an air test during each 10 year period.

3.0 LIMITING CONDITIONS FOR OPERATION

2. Primary Containment Integrity

- a. Primary Containment Integrity, as defined in Section 1, shall be maintained at all times when the reactor is critical or when the reactor water temperature is above 212°F and fuel is in the reactor vessel, except when performing low power physics test at atmospheric pressure during or after refueling at power levels not to exceed 5 MW(t). Without Primary Containment Integrity, restore Primary Containment Integrity within one hour or be in at least Hot Shutdown within the next 12 hours and Cold Shutdown within the following 24 hours.

4.0 SURVEILLANCE REQUIREMENTS

2. Primary Containment Integrity

- a. Primary Containment Integrity shall be demonstrated after each closing of each penetration subject to Type B testing, If opened following a Type A or Type B test, by leak rate testing the seal with gas at  $\geq$  Pa, 42 psig, and verifying that when the measured leakage rate for these seals is added to the leakage rates determined pursuant to Surveillance Requirements 4.7.A.2.b for all other Type B and C penetrations, the combined leakage rate is less than or equal to 0.6La.

3.0 LIMITING CONDITIONS FOR OPERATION

b. When Primary Containment Integrity is required, leakage rates shall be limited to:

1. An overall integrated leakage rate of less than or equal to  $L_a$ , 1.2 percent by weight of the containment air per 24 hours at Pa, 42 psig.
2. A combined maximum flow path leakage rate of less than or equal to  $0.6L_a$  for all penetrations and valves, subject to Type B and C tests when pressurized to Pa, 42 psig.
3. Less than or equal to 46 scf per hour combined maximum flow path leakage for all main steam isolation valves when tested at 25 psig.

With the measured overall integrated primary containment leakage rate exceeding  $0.75L_a$ , or the measured combined leakage rate for all penetrations and valves subject to Type B and C testing exceeding  $0.6L_a$ , or the measured combined maximum flow path leakage rate exceeding 46 scf per hour for all main steam isolation valves, restore leakage rates to less than or equal to these values prior to increasing reactor coolant system temperature above 212°F or, alternatively, restore measured leakage rates to within these limits within one hour or be in at least Hot Shutdown within the next 12 hours and in Cold Shutdown within the following 24 hours.

4.0 SURVEILLANCE REQUIREMENTS

b. Perform required visual examinations and leakage rate testing for Type A containment integrated leakage rate tests in accordance with 10 CFR 50, Appendix J, Option B, as modified by approved exemptions, and Regulatory Guide 1.163 dated September 1995. Perform Type B and C tests in accordance with 10 CFR 50, Appendix J, Option A, as modified by approved exemptions.

1. Deleted
2. Deleted
3. Deleted
4. Deleted
5. Deleted

### 3.0 LIMITING CONDITIONS FOR OPERATION

c. When Primary Containment Integrity is required, the primary containment airlock shall be operable with:

1. Both doors closed except when the airlock is being used, then at least one airlock door shall be closed, and
2. An overall airlock leakage rate of less than or equal to 0.05La at Pa or 0.007La at 10 psig.

With the primary containment airlock inoperable, maintain at least one airlock door closed and restore the airlock to Operable status within 24 hours or be in at least Hot Shutdown within the next 12 hours and in Cold Shutdown within the following 24 hours.

### 4.0 SURVEILLANCE REQUIREMENTS

c. The primary containment airlock shall be demonstrated operable:

1. By performing overall airlock leakage rate testing in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions.
2. Deleted
3. At six month intervals by verifying that only one door can be opened at a time. If the airlock has not been used since the last door interlock test, this test is not required.

d. The interior surfaces of the drywell shall be visually inspected each operating cycle for evidence of deterioration.

Bases Continued:

While the design of the Monticello plant predates 10 CFR Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," testing substantially conforms to the requirements of Appendix J. The design of the plant was thoroughly reviewed to determine where compliance with Appendix J was impossible or impractical. In each case where a departure from the requirements of Appendix J was identified, a request for exemption from the requirements of Appendix J or a plant modification was proposed and submitted for NRC Staff review. Exemptions were proposed in those cases where compliance with Appendix J would have provided no meaningful improvement in plant safety.

In their review of Appendix J compliance<sup>(1)</sup>, the NRC Staff approved a number of exemption requests, denied others, and provided necessary interpretation and clarification of the requirements of Appendix J. The Technical Specification surveillance requirements reflect the results of this review.

Exemption from the requirements of Appendix J was provided in the following areas:

- a. Testing of valves sealed by water
- b. Low pressure testing of main steam line isolation valves
- c. Low pressure testing of the primary containment airlock
- d. Reduced airlock testing frequency when the airlock is in frequent use

The Monticello airlock is tested by pressurizing the space between the inner and outer doors. Individual door seal leakage tests cannot be performed. Since the inner door is designed to seat with containment pressure forcing the door closed, special bracing must be installed for each leakage test. The outer door must be opened to install and remove this bracing. Because of the complexity of this operation, up to 24 hours may be necessary to perform a leakage test.

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(1) Letter from D G Eisenhut, Director, Division of Licensing, USNRC, dated June 3, 1984, "Safety Evaluation by the Office of NRR, Appendix J Review".



Bases Continued:

On September 26, 1995, Regulatory Guide 1.163 became effective providing guidance on performance based testing to the requirements of 10 CFR 50, Appendix J, Option B. Monticello has adopted Option B, Section III.A of 10 CFR Part 50, Appendix J, for Type A primary reactor containment integrated leakage rate testing. Monticello will continue to perform Type B and C testing in accordance with 10 CFR Part 50, Appendix J, Option A.