

Docket

# REGULATORY DOCKET FILE COPY

FEBRUARY 29 1980

Docket No. 50-263

Mr. L. O. Mayer, Manager  
Nuclear Support Services  
Northern States Power Company  
414 Nicollet Mall - 8th Floor  
Minneapolis, Minnesota 55401

Dear Mr. Mayer:

The Commission has issued the enclosed Amendment No. 44 to Provisional Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. The amendment consists of changes to the Technical Specifications in response to your application dated September 2, 1977, as supplemented by letter dated March 20, 1978 and revised by letter dated December 6, 1979.

We have reviewed your revised submittal of December 6, 1979 and have determined that it is an amendment which revises the Technical Specifications concerning integrated containment leak testing (ICLT) to be consistent with the current Standard Technical Specifications, NUREG-0123, Revision 2. Consequently, it is acceptable as an administrative change implementing a previously reviewed and approved action of the Commission.

We have evaluated the potential for environmental impact of plant operation in accordance with the enclosed amendment and 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, negative declaration or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Since the amendment applies only to administrative details, it does not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. It does not involve a

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Mr. L. O. Mayer

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significant increase in the probability or consequences of an accident, does not involve a significant decrease in a safety margin, and therefore does not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

A copy of the related Notice of Issuance is also enclosed.

Sincerely,

Original signed by

Thomas A. Ippolito, Chief  
Operating Reactors Branch #3  
Division of Operating Reactors

Enclosures:

- 1. Amendment No. 94
- 2. Notice

cc w/encls:

See next page

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Mr. L. O. Mayer  
Northern States Power Company

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February 29, 1980

cc:

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U. S. Environmental Protection Agency  
Federal Activities Branch  
Region V Office  
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230 South Dearborn Street  
Chicago, Illinois 60604



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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 44  
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 2, 1977, as supplemented by letter dated March 20, 1978, and revised by letter dated December 6, 1979, 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 3.B. of Provisional Operating License No. DPR-22 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 44, 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

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #3  
Division of Operating Reactors

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: February 29, 1980

ATTACHMENT TO LICENSE AMENDMENT NO. 44

PROVISIONAL 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

140

141

142

143

163

Insert

140

141

142

143

163

### 3.0 LIMITING CONDITIONS FOR OPERATION

- d. During reactor isolation conditions the reactor pressure vessel shall be depressurized to <200 psig at normal cooldown rates if the suppression pool temperature exceeds 120°F.
- e. The suppression chamber water volume shall be >68,000 and <77,970 cubic feet.
- f. Two channels of torus water level instrumentation shall be operable. From and after the date that one channel is made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding 30 days unless such channel is sooner made operable. If both channels are made or found to be inoperable for any reason, reactor operation is permissible only during the succeeding six hours unless at least one channel is sooner made operable.

#### 2. Primary Containment Integrity

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 while performing low power physics tests at atmospheric pressure during or after refueling at power levels not to exceed 5 Mw(t).

### 4.0 SURVEILLANCE REQUIREMENTS

- d. Whenever there is indication of relief valve operation with a suppression pool temperature > 160°F and the primary coolant system pressure >200 psig, an extended visual examination of the suppression chamber shall be conducted before resuming power operation.
- e. The suppression chamber water volume shall be checked once per day.
- f. The suppression chamber water volume indicators shall be calibrated semi-annually.

#### 2. Primary Containment Integrity

##### a. Integrated Primary Containment Leak Test (IPCLT)

The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50 using the methods and provisions of ANSI N45.4-1972:

- 1. Three Type A Overall Integrated Containment Leakage Rate tests shall be conducted at 40 + 10 month intervals during shutdown at  $\bar{P}$  (41 psig) during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant inservice inspection.\*

\*The third test of the first 10-year service period shall be conducted during the 1980 refueling shutdown.

### 3.0 LIMITING CONDITIONS FOR OPERATION

### 4.0 SURVEILLANCE REQUIREMENTS

2. If any periodic Type A test fails to meet  $0.75 L_a$ , the test schedule for subsequent Type A tests shall be reviewed and approved by the Commission. If two consecutive Type A tests fail to meet  $0.75 L_a$ , a Type A test shall be performed at least every 18 months until two consecutive Type A tests meet  $0.75 L_a$ , at which time the above schedule may be resumed.
3. The accuracy of each Type A test shall be verified by a supplemental test which:
  - a. Confirms the accuracy of the test by verifying that the difference between the supplemental data and the Type A test data is within  $0.25 L_a$ .
  - b. Has duration sufficient to establish accurately the change in leakage rate between the Type A test and the supplemental test.
  - c. Requires the quantity of gas injected into containment or bled from containment during the supplemental test to be equivalent to at least 25 percent of the total measured leakage at  $P_a$ .

### 3.0 LIMITING CONDITIONS FOR OPERATION

### 4.0 SURVEILLANCE REQUIREMENTS

4. All test leakage rates shall be calculated using observed data converted to absolute values. Error analyses shall be performed to select a balanced integrated leakage measurements system.

b. Acceptance Criteria for IPCLT

- (1) The maximum allowable leak rate at  $P$  shall not exceed  $L_a$  (1.2 weight percent of the contained air per 24 hours).
- (2) The allowable operational leak rate,  $L_{to}$ , which shall be met prior to increasing reactor coolant system temperature above 212°F following a test (either as measured or following repairs and retest), shall not exceed  $0.75 L_a$ .

3.0 LIMITING CONDITIONS FOR OPERATION

4.0 SURVEILLANCE REQUIREMENTS

c. Corrective Action for IPCLT

If leak repairs are necessary to meet the allowable operational leak rate, the integrated leak rate test need not be repeated provided local leak measurements are conducted and the leak rate differences prior to and after repairs, when corrected to P and deducted from the integrated leak rate measurements, yield a leakage rate value not in excess of the allowable operational leak rate  $L_{to}$ .

d. (deleted)

e. Local Leak Rate Tests (LLRT)

- (1) Primary containment testable penetrations and isolation valves shall

3.7/4.7

Amendment No. 44

Bases Continued:

Although the dose calculations suggest that the accident leak rate could be allowed to increase to about 2.4% per day before the guideline thyroid dose value given in 10 CFR 100 would be exceeded, establishing the test limit of 1.2% per day provides an adequate margin of safety to assure the health and safety of the general public. It is further considered that the allowable leak rate should not deviate significantly from the containment design value to take advantage of the design leak-tightness capability of the structure over its service lifetime. Additional margin to maintain the containment in the "as built" condition is achieved by establishing the allowable operational leak rate. The operational limit is derived by multiplying the allowable test leak rate by 0.75, thereby providing a 25% margin to allow for leakage deterioration which may occur during the period between leak rate tests.

The requirements for integrated primary containment leak tests have been revised to conform with 10 CFR Part 50, Appendix J and ANSI N45.4-1972. (The third test of the first 10-year service period shall be conducted during the 1980 refueling shutdown to provide an orderly transition to the Appendix J schedule requirements.)

The penetration and air purge piping leakage test frequency, along with the containment leak rate tests, is adequate to allow detection of leakage trends. Whenever a double-gasketed penetration (primary containment head equipment hatches and the suppression chamber access hatch) is broken and remade, the space between the gaskets is pressurized to determine that the seals are performing properly. The test pressure of 41 psig is consistent with the accident analyses and the maximum preoperational leak rate test pressure. It is expected that the majority of the leakage from the valves, penetrations, and seals would be into the reactor building. However, it is possible that leakage into other parts of the facility could occur. Such leakage paths that may affect significantly the consequences of accidents are to be minimized. The personnel air lock is tested at 10 psig because the inboard door is not designed to shut in the opposite direction.

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-263NORTHERN STATES POWER COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO PROVISIONAL  
OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 44 to Provisional Operating License No. DPR-22, issued to Northern States Power Company, which revised Technical Specifications for operation of the Monticello Nuclear Generating Plant (the facility) located in Wright County, Minnesota. The amendment is effective as of its date of issuance.

The amendment revises the Technical Specifications concerning integrated containment leak testing to be consistent with the current Standard Technical Specifications, NUREG-0123, Revision 2.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §1.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the application for amendment dated September 2, 1977, as supplemented by letter dated March 20, 1978, and revised by letter dated December 6, 1979, and (2) Amendment No. 44 to License No. DPR-22. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C. and at the Environmental Conservation Library, Minneapolis Public Library, 300 Nicollet Mall, Minneapolis, Minnesota. A copy of item (2) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 29th day of February 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Thomas A. Ippolito, Chief  
Operating Reactors Branch #3  
Division of Operating Reactors