

Docket No. 50-263

FEB 03 1975

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| BJones (4)                                      | TBAbernathy |
| RVollmer  |             |
| JSaltzman, OAI                                  |             |
| RMDiggs   |             |
| BBuckley  |             |
| DLZiemann                                       |             |
| SKari   |             |
| WOMiller  |             |
| BScharf (15)                                    |             |
| TJCarter  |             |

Northern States Power Company  
 ATTN: Mr. L. O. Mayer  
 Director of Nuclear  
 Support Services  
 414 Nicollet Mall  
 Minneapolis, Minnesota 55401

Gentlemen:

The Commission has issued the enclosed Amendment No. 7 to Provisional Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. This amendment includes Change No. 16 to the Technical Specifications and is in response to Item 16 of your request dated November 15, 1974.

This amendment authorizes a revision in the reactor vessel material surveillance program.

Copies of the related Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

Original signed by  
 Dennis L. Ziemann

Dennis L. Ziemann, Chief  
 Operating Reactors Branch #2  
 Division of Reactor Licensing

Enclosures:

1. Amendment No. 7  
w/Change No. 16
2. Safety Evaluation
3. Federal Register Notice

cc: see next page

*(Handwritten notes and signatures)*  
 (Ziemann S. Gray)  
 complete with change on  
 1/31/75

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|-----------|-------------------|-------------------|-------------------|-------------------|------------------|---------------|
| OFFICE >  | DRL:ORB #2<br>BUB | DRL:ORB #2<br>RMD | DRL:ORB #2<br>DLZ | OELD<br>S H Lewis | DRL:AD/OR<br>KRG | Call #<br>(7) |
| SURNAME > | BBuckley:aw       | RMDiggs           | DLZiemann         | S H Lewis         | KRGoller         |               |
| DATE >    | 1/24/75           | 1/29/75           | 1/25/75           | 1/31/75           | 2/3/75           |               |

FEB 05 1975

cc w/enclosures:

Arthur Renquist, Esquire  
Vice President - Law  
Northern States Power Company  
414 Nicollet Mall  
Minneapolis, Minnesota 55401

Gerald Charnoff  
Shaw, Pittman, Potts, Trowbridge  
and Madden  
910 - 17th Street, N. W.  
Washington, D. C. 20036

Howard J. Vogel, Esquire  
Legal Counsel  
2750 Dean Parkway  
Minneapolis, Minnesota 55416

Steve Gadler, P. E.  
2120 Carter Avenue  
St. Paul, Minnesota 55108

Mr. Daniel L. Ficker  
Assistant City Attorney  
638 City Hall  
St. Paul, Minnesota 55102

Ken Dzugan, Director  
City of St. Paul Pollution  
Control Services  
100 East 10th Street  
St. Paul, Minnesota 55108

Sandra S. Gardebring  
Special Assistant Attorney General  
Counsel for Minnesota Pollution  
Control Agency  
1935 W. County Road B2  
Roseville, Minnesota 55113

Anthony Z. Roisman, Esquire  
Berlin, Roisman and Kessler  
1712 N Street, N. W.  
Washington, D. C. 20036

The Environmental Conservation  
Library  
Minneapolis Public Library  
300 Nicollet Mall  
Minneapolis, Minnesota 55401

Mr. D. S. Douglas, Auditor  
Wright County Board of Commissioners  
Buffalo, Minnesota 55313

cc w/enclosures and copy of NSP  
application dtd. 11/15/74:

Warren R. Lawson, M. D.  
Secretary and Executive Officer  
State Department of Health  
University Campus  
Minneapolis, Minnesota 55440

Mr. Gary Williams  
Federal Activities Branch  
Environmental Protection Agency  
1 N. Wacker Drive, Room 822  
Chicago, Illinois 60606

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-263

MONTICELLO NUCLEAR GENERATING PLANT

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 7  
License No. DPR-22

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Northern States Power Company (the licensee) dated November 15, 1974, 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. Prior public notice of this amendment is not required since the amendment does not involve a significant hazards consideration.
2. Accordingly, the license is amended by a change 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:

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"B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. 16"

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

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by:  
Karl R. Goller

Karl R. Goller, Assistant Director  
for Operating Reactors  
Division of Reactor Licensing

Attachment:  
Change No. 16 to the  
Technical Specifications

Date of Issuance: **FEB 03 1975**

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ATTACHMENT TO LICENSE AMENDMENT NO. 7

CHANGE NO. 16 TO THE TECHNICAL SPECIFICATIONS

PROVISIONAL OPERATING LICENSE NO. DPR-22

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

The Technical Specifications contained in Appendix A, attached to Provisional Operating License No. DPR-22, are hereby changed by replacing page 116 with the attached revised page. Changed areas on the revised page are reflected by marginal lines.

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### 3.0 LIMITING CONDITIONS FOR OPERATION

#### B. Pressurization Temperature

1. The reactor vessel shall be vented and power operation shall not be conducted unless the reactor vessel temperature is equal to or greater than that shown in Figure 4.6.1.
2. The reactor vessel head bolting studs shall not be under tension unless the temperature of the vessel head flange and the head are  $\geq 70^{\circ}\text{F}$ .

#### C. Coolant Chemistry

1. The reactor coolant system radioactivity

### 4.0 SURVEILLANCE REQUIREMENTS

#### B. Pressurization Temperature

1. Reactor vessel shell temperature and reactor coolant pressure shall be permanently recorded whenever the shell temperature is below  $220^{\circ}\text{F}$  and the reactor vessel is not vented.
2. When the reactor vessel head bolting studs are tightened or loosened, the reactor vessel head flange and head temperature shall be permanently recorded.
3. A neutron flux dosimeter and material samples shall be installed in the reactor vessel adjacent to the vessel wall at the core midplane level. The material sample program shall conform to ASTM E-85-66. The neutron flux dosimeter shall be removed during the first refueling outage and tested to verify or adjust the calculated values of neutron fluence used to determine the vessel NDT (Nil Ductility Transition Temperature) from Fig. 4.6.1. A material surveillance specimen sample shall be removed when the estimated change in NDT temperature is  $50^{\circ}\text{F}$ , but prior to the time when the estimated fluence is  $10^{18}$  n/cm<sup>2</sup>, or at the 15 years operational interval whichever first occurs.

#### C. Coolant Chemistry

1. (a) A reactor coolant sample shall be taken at least every 96 hours and

SAFETY EVALUATION BY THE DIVISION OF REACTOR LICENSING

SUPPORTING AMENDMENT NO. 7 TO FACILITY PROVISIONAL OPERATING LICENSE NO. DPR-22

(CHANGE NO. 16 TO THE TECHNICAL SPECIFICATIONS)

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

INTRODUCTION

By letter dated November 15, 1974, Northern States Power Company (NSP) submitted proposed changes to the Technical Specifications of Provisional Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. We have elected to evaluate only item 16 of the licensee's proposed changes to avoid delays in permitting the licensee to return to power operation. This proposed change is to delete a requirement to remove one basket of material surveillance samples during the third refueling outage scheduled for January 1975. Our evaluation of the licensee's other proposed changes to the Technical Specifications will be issued at a later date.

EVALUATION

We have evaluated the licensee's proposal to defer the removal of certain reactor vessel material specimens. We have concluded that more meaningful test results will be obtained by delaying the removal of test specimens until such time that the estimated change in the Nil Ductility Transition Temperature (NDTT) is approximately 50°F, but prior to the time when the estimated fluence is  $10^{18}$  n/cm<sup>2</sup> or at the 15 years operational interval, whichever first occurs. Premature withdrawal of material specimens whose neutron exposure is significantly less than  $10^{18}$  n/cm<sup>2</sup> (Monticello is currently approximately  $1.0 \times 10^{17}$  n/cm<sup>2</sup>) will yield very limited data due to minimal change in NDTT from radiation damage. Since the proposed material surveillance will still comply with 10 CFR 50, Appendix H, "Reactor Vessel Material Surveillance Program Requirements," and will provide more useful data, we have concluded that the proposed withdrawal schedule is acceptable.

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CONCLUSION

We have concluded, based on the reasons discussed above, that because the change does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the change does not involve a significant hazards consideration. We also conclude that 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 and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: FEB 03 1975

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-263

NORTHERN STATES POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO PROVISIONAL  
OPERATING LICENSE

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 7 to Provisional Operating License No. DPR-22 issued to the Northern States Power Company (the licensee) which revised Technical Specifications for operation of the Monticello Nuclear Generating Plant, located in Wright County, Minnesota. The amendment is effective as of its date of issuance.

The amendment authorizes a revision in the reactor vessel material surveillance program to delete a requirement that a specimen basket be removed during the third refueling outage and replace it with a requirement to remove at a later date when more meaningful results can be obtained.

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.

For further details with respect to this action, see (1) the application for amendment dated November 15, 1974, (2) Amendment No. 7 to License No. DPR-22, with Change No. 16, and (3) the Commission's concurrently

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issued Safety Evaluation. 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 55401. A single copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Reactor Licensing.

Dated at Bethesda, Maryland, this *3rd day of February, 1975.*

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by  
Dennis L. Ziemann

Dennis L. Ziemann, Chief  
Operating Reactors Branch #2  
Division of Reactor Licensing

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SAFETY EVALUATION BY THE DIVISION OF REACTOR LICENSING

SUPPORTING AMENDMENT NO. 7 TO FACILITY PROVISIONAL OPERATING LICENSE NO. DPR-22

(CHANGE NO. 16 TO THE TECHNICAL SPECIFICATIONS)

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

DOCKET NO. 50-263

INTRODUCTION

By letter dated November 15, 1974, Northern States Power Company (NSP) submitted proposed changes to the Technical Specifications of Provisional Operating License No. DPR-22 for the Monticello Nuclear Generating Plant. We have elected to evaluate only item 16 of the licensee's proposed changes in order to avoid unnecessary delays in permitting the licensee to return to power operation. The proposed change discussed in this evaluation is in regard to <sup>the</sup> reactor vessel material specimen surveillance program which is described below. Our evaluation of the licensee's other proposed changes to the Technical Specifications will be issued at a later date.

EVALUATION

*the* The licensee requests permission to remove *the requirement set forth* of the Technical Specifications *10 ns*  
On page 116 *the requirement to remove one basket of material surveillance samples during the third refueling outage (scheduled for January 1975) for destructive testing has been eliminated.* We have previously considered the withdrawal of material surveillance specimens on a generic basis and have concluded that more meaningful test results will be obtained by delaying the removal of test specimens until such time that the estimated change in NDT temperature is 50°F, but prior to the time when the estimated fluence is  $10^{18}$  n/cm<sup>2</sup> or at the 15 years operational interval, whichever first occurs. We, therefore, concur that the Technical Specification requirement to remove the first basket of NDT samples from the reactor vessel during the third refueling outage should be deleted and replaced with the above mentioned material specimen withdrawal program. We conclude that this material specimen withdrawal program fully complies with 10 CFR 50, Appendix H, "Reactor Vessel Material Surveillance Program Requirements".

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UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-263

NORTHERN STATES POWER COMPANY

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The amendment authorizes a revision in the reactor vessel material surveillance program, *to delete a requirement that a specimen basket be removed during the third refueling*  
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.

For further details with respect to this action, see (1) the application for amendment dated November 15, 1974, (2) Amendment No. 7 to License No. DPR-22, with Change No. 16, and (3) the Commission's concurrently

*outage. The new target and replace it with a requirement that would require removal at a later date when more meaningful results can be obtained.*

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SAFETY EVALUATION BY THE DIVISION OF REACTOR LICENSING

SUPPORTING AMENDMENT NO. 7 TO FACILITY PROVISIONAL OPERATING LICENSE NO. DPR-22

(CHANGE NO. 16 TO THE TECHNICAL SPECIFICATIONS)

NORTHERN STATES POWER COMPANY

MONTICELLO NUCLEAR GENERATING PLANT

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INTRODUCTION

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EVALUATION

*Retain by licensee*  
*11/21/74*  
The licensee requests permission to remove the requirement set forth on page 116 of the Technical Specifications that he remove one basket of material surveillance samples during the third refueling outage (scheduled for January 1975) for destructive testing has been eliminated. We have previously considered the withdrawal of material surveillance specimens on a generic basis and have concluded that more meaningful test results will be obtained by delaying the removal of test specimens until such time that the estimated change in NDT temperature is 50°F, but prior to the time when the estimated fluence is  $10^{18}$  n/cm<sup>2</sup> or at the 15 years operational interval, whichever first occurs. We, therefore, concur that the Technical Specifications requirement to remove the first basket of NDT samples from the reactor vessel during the third refueling outage should be deleted and replaced with the above mentioned material specimen withdrawal program. We conclude that this material specimen withdrawal program fully complies with 10 CFR 50, Appendix H, "Reactor Vessel Material Surveillance Program Requirements."  
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