

DCS-MS-016

MAR 5 1982

Docket Nos. 50-282  
and 50-306

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

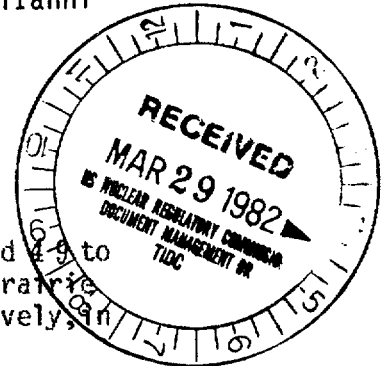
Dear Mr. Mayer:

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The Commission has issued the enclosed Amendments Nos. 55 and 49 to Facility Operating Licenses Nos. DPR-42 and DPR-60 for the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2, respectively, in response to your application dated February 1, 1982.

The amendments revise the common Technical Specifications for the Prairie Island Nuclear Generating Plant Unit Nos. 1 and 2 permitting an increase in the allowable leakage rate for the overall airlock door tests. Technical Specification 4.4.A.5.c is affected by these amendments.

Also included with these amendments is a corrected page to Table TS 4.1-1 which was issued with Amendments 53 and 47 (December 30, 1981). The page was mistakenly numbered "3 of 5" and should have read "4 of 5".

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

Sincerely,

Original signed by:

Dominic C. DiIanni, Project Manager  
Operating Reactors Branch #3  
Division of Licensing

Enclosures:

1. Amendment No. 55 to DPR-42
2. Amendment No. 49 to DPR-60
3. Safety Evaluation
4. Notice of Issuance

cc w/enclosures:  
See next page

*No objection to form of amendment if changes noted and made MB*

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|---------|------------|------------|-----------|----------|----------|--------|--|
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|         | 2/24/82    | 2/24/82    | 2/24/82   | 2/24/82  | 2/24/82  | 3/1/82 |  |

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WASHINGTON, D.C. 20555

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PMKreutzer

Docket No. 50-282/306

Docketing and Service Section  
Office of the Secretary of the Commission

SUBJECT: NORHTERN STATES POWER COMPANY, Prairie Island Nuclear Generating  
Plant, Unit Nos. 1 and 2

Two signed originals of the Federal Register Notice identified below are enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12 ) of the Notice are enclosed for your use.

- ☐ Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- ☐ Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- ☐ Notice of Availability of Applicant's Environmental Report.
- ☐ Notice of Proposed Issuance of Amendment to Facility Operating License.
- ☐ Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- ☐ Notice of Availability of NRC Draft/Final Environmental Statement.
- ☐ Notice of Limited Work Authorization.
- ☐ Notice of Availability of Safety Evaluation Report.
- ☐ Notice of Issuance of Construction Permit(s).
- ☐ Notice of Issuance of Facility Operating License(s) or Amendment(s).

☒ Other: Amendment Nos. 55 and 49

Referenced documents have been provided PDR.

Division of Licensing  
Office of Nuclear Reactor Regulation

Enclosure:  
As Stated

|         |               |  |  |  |  |  |
|---------|---------------|--|--|--|--|--|
| OFFICE  | ORB#3:DP      |  |  |  |  |  |
| SURNAME | PMKreutzer/pr |  |  |  |  |  |
| DATE    | 3/8/82        |  |  |  |  |  |

Northern States Power Company

cc:

Gerald Charnoff, Esquire  
Shaw, Pittman, Potts and Trowbridge  
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Washington, D. C. 20036

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Executive Director  
Minnesota Pollution Control Agency  
1935 W. County Road B2  
Roseville, Minnesota 55113

The Environmental Conservation Library  
Minneapolis Public Library  
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Minneapolis, Minnesota 55401

Mr. F. P. Tierney, Plant Manager  
Prairie Island Nuclear Generating Plant  
Northern States Power Company  
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Jocelyn F. Olson, Esquire  
Special Assistant Attorney General  
Minnesota Pollution Control Agency  
1935 W. County Road B2  
Roseville, Minnesota 55113

U.S. Nuclear Regulatory Commission  
Resident Inspectors Office  
Route #2, Box 500A  
Welch, Minnesota 55089

Regional Administrator  
Nuclear Regulatory Commission, Region III  
Office of Inspection and Enforcement  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Bernard M. Cranum  
Bureau of Indian Affairs, DOI  
15 South 5th Street  
Minneapolis, Minnesota 55402

Mr. R. L. Tannner  
County Auditor  
Red Wing, Minnesota 55066

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



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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55  
License No. DPR-42

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Northern States Power Company (the licensee) dated February 1, 1982, 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.

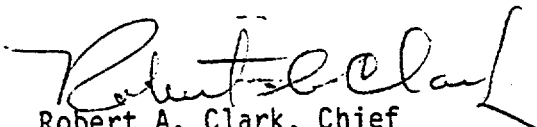
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-42 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 55, 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

  
Robert A. Clark, Chief  
Operating Reactors Branch #3  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: MAR 5 1982



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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 49  
License No. DPR-60

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Northern States Power Company (the licensee) dated February 1, 1982, 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.

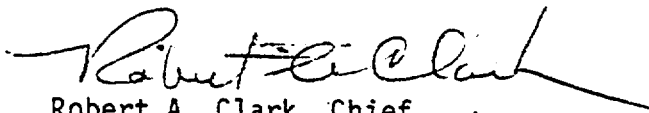
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-60 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 49, 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



Robert A. Clark, Chief  
Operating Reactors Branch #3  
Division of Licensing

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: MAR 5 1982

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. DPR-42

AMENDMENT NO. 49 TO FACILITY OPERATING LICENSE NO. DPR-60

DOCKET NOS. 50-282 AND 50-306

Revise Appendix A as follows:

Remove Pages

Table TS.4.1-1 (4 of 5)  
TS.4.4-3

Insert Pages

Table TS.4.1-1 (4 of 5)  
TS.4.4-3



TABLE TS.4.1-1  
(Page 4 of 5)

Unit 1 - Amendment No. 39, 43, 55  
Unit 2 - Amendment No. 38, 47, 49

| Channel Description                             | Check | Calibrate | Functional Response |      | Remarks   |
|---|-------|-----------|---------------------|------|---|
|   |       |           | Test                | Test |   |
| *19. Radiation Monitoring                       | *D    | R         | M                   | NA   | Includes all channels used for leak detection per Spec. 3.1.D. and effluent release monitoring per Spec. 3.9 and 5.5. |
| 20. Boric Acid Make-up Flow Channel             | NA    | R         | NA                  | NA   |   |
| 21. Containment Sump Level                      | NA    | R         | R                   | NA   | Includes Sumps A, B, and C  |
| 22. Accumulator Level and Pressure              | S     | R         | R                   | NA   |   |
| 23. Steam Generator Pressure                    | S     | R         | M                   | NA   |   |
| 24. Turbine First Stage Pressure                | S     | R         | M                   | NA   |   |
| 25. Emergency Plan Radiation Instruments        | *M    | R         | M                   | NA   | Includes those named in the emergency procedure (referenced in Spec. 6.5 A.6)   |
| 26. Protection Systems Logic Channel Testing    | NA    | NA        | M                   | NA   | Includes auto load sequencers   |
| 27. Turbine Overspeed Protection Trip Channel   | NA    | R         | M                   | NA   |   |
| 28. Deleted                                     |       |           |                     |      |   |
| 29. Deleted                                     |       |           |                     |      |   |
| 30. Environmental Monitors                      | M     | NA        | NA                  | NA   | Includes those used per Spec. 4.10  |
| 31. Seismic Monitors                            | R     | R         | NA                  | NA   | Includes those reported in Item 4 of Table TS.6.7-1   |
| 32. Coolant Flow-RTD Bypass Flowmeter           | S     | R         | M                   | NA   |   |
| 33. CRDM Cooling Shroud Exhaust Air Temperature | S     | NA        | R                   | NA   | FSAR page 3.2-56  |
| 34. Reactor Gap Exhaust Air Temperature         | S     | NA        | R                   | NA   | FSAR page 5.4-2   |

4. Type A tests will be considered to be satisfactory if the acceptance criteria delineated in Appendix J, Section III.A are met.
5. Type B and C tests will be considered to be satisfactory if the combined leakage rate of all components subjected to Type B and C tests does not exceed 60% of the  $L_a$  and if the following conditions are met.
  - a. For pipes connected to systems that are in the ABSVZ (Designated ABSVZ in Table TS.4.4-1) the total leakage past isolation valves shall be less than 0.1 weight percent per 24 hours at pressure  $P_a$ .
  - b. For pipes connected to systems that are exterior to both the shield building and the ABSVZ (designated EXTERIOR in Table TS.4.4-1) the total leakage past isolation valves shall be less than 0.01 weight percent per 24 hours at pressure  $P_a$ .
  - c. For airlocks, the leakage shall be less than 256 scc/m at 10 psig for door intergasket tests and 1500 scc/m at 46 psig for overall airlock tests.
6. The retest schedules for Type A, B, and C tests will be in accordance with Section III-D of Appendix J. Each shield building shall be retested in accordance with the Type A test schedule for its containment. The auxiliary building special ventilation zone shall be retested in accordance with the Type A test schedule for Unit 1 containment.
7. Type A, B and C tests will be in accordance with Section V of Appendix J. Inspection and reporting requirements of each shield building test shall be the same as for Type A tests. The auxiliary building special ventilation zone shall have the same inspection and reporting requirements as for the Type A tests of Unit 1.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. DPR-42  
AND AMENDMENT NO. 49 TO FACILITY OPERATING LICENSE NO. DPR-60

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-282 AND 50-306

INTRODUCTION

By letter dated February 1, 1982 Northern States Power Company (the licensee) requested a change to the Technical Specifications (TS) of Appendix A of operating license Nos. DPR-42 and DPR-60. The proposed change revises the allowable leakage rate for the airlock doors of the containment building at the Prairie Island Nuclear Generating Plant Units 1 and 2. Specifically, the proposed TS permits an increase in the allowable leakage rate for the overall airlock door tests of the containment building for Units 1 and 2 from 409 scc/min to 1500 scc/min at 46 psig.

Table TS 4.1-1 of Amendments 53 and 47, issued on December 30, 1981, was misnumbered "page 3 of 5". It should have read "page 4 of 5".

DISCUSSION AND EVALUATION

The existing TS 4.4.A.5.c states that for airlocks, the leakage shall be less than the design leakage reported in "Supplement No. 1 to Unit 1 Reactor Containment Building Integrated Leak Rate Test June 1973 dated June 6, 1974." The design leakage in this report is 256 scc/min at 10 psig for airlock door intergasket tests and 409 scc/min at 46 psig for the overall airlock test. The licensee proposes to change TS 4.4.A.5.c to read "For airlocks, the leakage shall be less than 256 scc/min at 10 psig for door intergasket tests and 1500 scc/min at 46 psig for overall airlock tests." The difference between the proposed and the existing TS is an increase in the leakage rate from 409 to 1500 scc/min at 46 psig for the overall airlock test. Originally, the allowable leakage limit of 409 scc/min was based on the sealing capability of the original seal material which consisted of silicon rubber. This silicon rubber has been replaced in Unit 1 with a Grafoil seal which is qualified for the potential radiation dose of the design basis accident conditions recommended in NUREGs 0578 and 0737. The Unit 2 airlock will also be modified during the 1982 refueling outage. Although Grafoil seals can withstand a higher radiation dose for accident conditions, they do not have a low leakage sealing capability equivalent to the silicon rubber seals. This difference in sealing capability resulted in this request by the licensee for a license amendment.

We agree with the licensee that a comfortable margin still exists if the allowable leak rate is increased to 1500 scc/min for the overall airlock tests, since this is still well below the allowable total leakage for Type B and C tests of 10 CFR Part 50 Appendix J. Appendix J of 10 CFR Part 50 allows total leakage at a rate not to exceed 154,800 scc/min for the total Type B and C leakage tests which includes the leakage of the airlock doors. This proposed TS does not in any way change this total leakage rate requirement which the licensee must meet. In addition by permitting this change the licensee will be required to reduce the leakage rate at other containment building leak paths that are subjected to the Type B and C tests so that the total leakage rate from the containment building does not exceed the allowable value (i.e. 154,800 scc/min at 46 psig) of 10 CFR Part 50 Appendix J.

Based on the above evaluation we find that the proposed TS which changes the allowable leak rate for the overall airlock tests will not alter the existing level of protection to the public. On this basis we find the licensee's proposed TS acceptable.

#### Environmental Consideration

We have determined that the amendments do 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 amendments involve an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §1.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

#### Conclusion

We have concluded, based on the considerations discussed above, that: ((1) because the amendments do not involve a significant increase in the probability or consequences of accidents previously considered and do not involve a significant decrease in a safety margin, the amendments do not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Date: MAR 5 1982

Principal Contributor:  
D. C. DiIanni

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-282 AND 50-306NORTHERN STATES POWER COMPANYNOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY  
OPERATING LICENSES

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 55 to Facility Operating License No. DPR-42, and Amendment No. 49 to Facility Operating License No. DPR-60 issued to Northern States Power Company (the licensee), which revised Technical Specifications for operation of Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2 (the facilities) located in Goodhue County, Minnesota. The amendments are effective as of the date of issuance.

The amendments revised the common Technical Specifications for the Prairie Island Nuclear Generating Plant Unit Nos. 1 and 2 by permitting an increase in the allowable leakage rate for the overall airlock door tests. Technical Specification 4.4.A.5.c is affected by these amendments. The amendments also renumbers a page contained in Amendments 53 and 47, issued on December 30, 1981.

The application for the amendments 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 amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

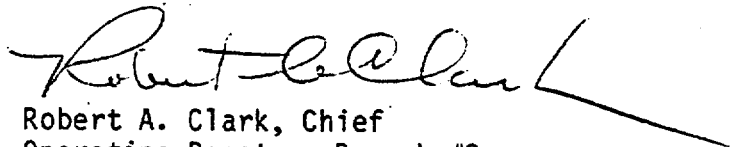
- 2 -

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of these amendments.

For further details with respect to this action, see (1) the application for amendments dated February 1, 1982, (2) Amendment Nos. 55 and 49 to License Nos. DPR-42 and DPR-60, and (3) the Commission's related 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, 300 Nicollet Mall, Minneapolis, Minnesota 55401. A 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 Licensing.

Dated at Bethesda, Maryland, this 5th day of March, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Robert A. Clark, Chief  
Operating Reactors Branch #3  
Division of Licensing