October 6, 1995

Mr. Roger O. Anderson, Director
Licensing and Management Issues
Northern States Power Company
414 Nicollet Mall
Minneapolis, Minnesota 55401

Dear Mr. Anderson:

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NOS. 1 AND 2 - ISSUANCE OF AMENDMENTS RE: FIRE PROTECTION AND DETECTION SYSTEMS - LIMITING CONDITIONS FOR OPERATION (TAC NOS. M89962 AND M89963)

The Commission has issued the enclosed Amendment No. 120 to Facility Operating License No. DPR-42 and Amendment No. 113 to the Facility Operating License No. DPR-60 for the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2, respectively. The amendments consist of changes to the Technical Specifications (TS) in response to your application dated July 11, 1994, as supplemented April 18, 1995. This application superseded your February 10, 1993, license amendment request.

The amendments revise TS Section 3.14 (Fire Protection and Detection Systems - Limiting Conditions for Operation), TS Section 4.16 (Fire Detection and Protection Systems - Surveillances), TS Sections 6.1 (Administrative Controls, Organization), and TS Section 6.2 (Administrative Controls, Review and Audit) to relocate the fire protection program elements from the TS and incorporate, by reference, the NRC-approved Fire Protection Program and major commitments, including the fire hazards analysis, into the Updated Safety Analysis Report. In addition, the amendments revise the Operating Licenses to include the NRC's standard fire protection license condition. These changes are made in accordance with the guidance provided in Generic Letter (GL) 86-10, "Implementation of Fire Protection Requirements," and GL 88-12, "Removal of Fire Protection Requirements from Technical Specifications."

A copy of our related Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

Beth A. Wetzel, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

Enclosures:
1. Amendment No. 120 to DPR-42
2. Amendment No. 113 to DPR-60
3. Safety Evaluation

cc w/encl.: See next page

with changes noted

DOCUMENT NAME: G:\WPDOCS\PRAIRIE\PI89962.AMD
To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	LA:PD31	E	(A)PM:PD31	TSB	E	BC:SPLB	E	OGC		D:PD31	E
NAME	CJamerson		CThomas:jkd	CGrimes		CMcCracken		STurk		JHannon BEH for	
DATE	10/3/95		9/29/95	9/29/95		9/19/95		10/2/95		10/6/95	

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reflect current Project Manager. 95-161

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Mr. Roger O. Anderson, Director
Northern States Power Company

Prairie Island Nuclear Generating
Plant

cc:

J. E. Silberg, Esquire
Shaw, Pittman, Potts and Trowbridge
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Washington DC 20037

Site General Manager
Prairie Island Nuclear Generating
Plant
Northern States Power Company
1717 Wakonade Drive East
Welch, Minnesota 55089

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Assistant Attorney General
Office of the Attorney General
455 Minnesota Street
Suite 900
St. Paul, Minnesota 55101-2127

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Resident Inspector's Office
1719 Wakonade Drive East
Welch, Minnesota 55089-9642

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U.S. Nuclear Regulatory Commission
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Lisle, Illinois 60532-4351

Mr. Jeff Cole, Auditor/Treasurer
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Red Wing, Minnesota 55066-0408

Kris Sanda, Commissioner
Department of Public Service
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Suite 200
St. Paul, Minnesota 55101-2145

Site Licensing
Prairie Island Nuclear Generating
Plant
Northern States Power Company
1717 Wakonade Drive East
Welch, Minnesota 55089

DATED: October 6, 1995

AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-42-PRAIRIE ISLAND UNIT 1
AMENDMENT NO. 113 TO FACILITY OPERATING LICENSE NO. DPR-60-PRAIRIE ISLAND UNIT 2

Docket File
PUBLIC
PDIII-1 Reading
J. Roe
C. Jamerson
B. Wetzel
C. Thomas
OGC-WF
G. Hill (4)
C. Grimes, O-11F23
C. McCracken
ACRS
M. Jordan, RIII
SEDB

cc: Plant Service list

100200

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NORTHERN STATES POWER COMPANY

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 120
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 July 11, 1994, as supplemented April 18, 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 following sections under paragraph 2.C of Facility Operating License No. DPR-42 are hereby amended to read as follows:

2.C.(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 120 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

2.C.(4) Fire Protection

Northern States Power Company shall implement and maintain in effect all provisions of the approved fire protection program as described and referenced in the Updated Safety Analysis Report for the Prairie Island Nuclear Generating Plant, Units 1 and 2, and as approved in Safety Evaluation Reports dated February 14, 1978, September 6, 1979, April 4, 1980, December 29, 1980, July 28, 1981, September 12, 1984, June 25, 1985, October 27, 1989, and October 6 , 1995, subject to the following provision:

> The licensee may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

3. This license amendment is effective as of the date of issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Beth A. Wetzel

Beth A. Wetzel, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachments:
Pages 3 and 4 of License No. DPR-42*
Changes to the Technical
Specifications

Date of Issuance: October 6, 1995

*Pages 3 and 4 are attached, for convenience, for the composite license to reflect these changes.

ATTACHMENT TO LICENSE AMENDMENT NO. 120

FACILITY OPERATING LICENSE NO. DPR-42

DOCKET NO. 50-282

UNIT 1 LICENSE

REMOVE	INSERT
Pages 3	Pages 3
4	4
5	-

TECHNICAL SPECIFICATIONS

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 area of change.

REMOVE	INSERT
TS-iv	TS-iv
TS-v	TS-v*
TS-vi	TS-vi
TS-x	TS-x
TS-xi	TS-xi
TS-xii	TS-xii
TS.1-3	TS.1-3
TS.3.14-1	--
TS.3.14-2	--
TS.3.14-3	--
TS.3.14-4	--
TABLE TS.3.14-1, page 1	--
TABLE TS.3.14-1, page 2	--
TABLE TS.3.14-1, page 3	--
TS.4.16-1	--
TS.4.16-2	--
TS.4.16-3	--
TS.4.16-4	--
TS.4.16-5	--
TS.4.16-6	--
TS.6.1-2	TS.6.1-2
TS.6.1-3	TS.6.1-3
TS.6.2-6	TS.6.2-6
B.3.14-1	--
B.3.14-2	--
B.4.16-1	--
B.4.16-2	--

*Corrected page

(2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended as of May 11, 1976. Amdt. No. 12 5-11-7

(3) Pursuant to the Act and 10 CFR Parts 30, 40 and 70, to receive, possess, and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

(4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components;

(5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility;

(6) Pursuant to the Act and 10 CFR Parts 30 and 70, to transfer byproduct materials from other NSP job sites for the purposes of volume reduction and decontamination. Amdt. No. 88 7-25-8

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 1650 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 120, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Prairie Island Nuclear Generating Plant Physical Security Plan," with revisions submitted through November 30, 1987; "Prairie Island Nuclear Generating Plant Guard Training and Qualification Plan," with revisions submitted through February 26, 1986; and "Prairie Island Nuclear Generating Plant Safeguards Contingency Plan," with revisions submitted through August 20, 1980. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

Amdt. No. 85 1-5-89

(4) Fire Protection

Northern States Power Company shall implement and maintain in effect all provisions of the approved fire protection program as described and referenced in the Updated Safety Analysis Report for the Prairie Island Nuclear Generating Plant, Units 1 and 2, and as approved in Safety Evaluation Reports dated February 14, 1978, September 6, 1979, April 4, 1980, December 29, 1980, July 28, 1981, September 12, 1984, June 25, 1985, October 27, 1989, and October 6 , 1995, subject to the following provision:

> The licensee may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

Amdt. No. 12(10-6-9(

2\. D. This license is effective as of the date of issuance and shall expire at midnight August 9, 2013.

Amdt. No. 79 9-23-8

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by
Roger S. Boyd

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachment:
Change No. 3 to
Appendices A and B

Date of Issuance: APR 5 1974

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued)

TECHNICAL SPECIFICATIONS

LIST OF TABLES

DOSE EQUIVALENT I-131

DOSE EQUIVALENT I-131 is that concentration of I-131 (uCi/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites".

$\bar{E}$-AVERAGE DISINTEGRATION ENERGY

$\bar{E}$ shall be the average (weighted in proportion to the concentration of each radionuclide in the sample) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

GASEOUS RADWASTE TREATMENT SYSTEM

The GASEOUS RADWASTE TREATMENT SYSTEM shall be any system designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system offgases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment.

3. At least two licensed operators shall he present in the control room during a reactor startup, a scheduled reactor shutdown, and during recovery from a reactor trip. These operators are in addition to those required for the other reactor.

4. An individual qualified in radiation protection procedures shall be on site when fuel is in a reactor.

5. All refueling operations shall be directly supervised by a licensed Senior Reactor Operator or a Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

6. The General Superintendent Plant Operations shall be formerly licensed or hold a current license on a similar type plant.

7. At least one member of plant management holding a current Senior Reactor Operator license shall be assigned to the plant operations group on a long term basis (approximately two years). This individual shall not be assigned to a rotating shift.

D. Each member of the plant staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the General Superintendent Radiation Protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and (2) the Shift Manager who shall have a bachelors degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents, and (3) the General Superintendent Plant Operations who shall meet the requirements of ANSI N18.1-1971, except that NRC license requirements are as specified in Specification 6.1.C.7. The training program shall be under the direction of a designated member of Northern States Power management.

E. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel. Procedures shall include the following provisions:

1. Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

   a. An individual should not be permitted to work more than 16 hours straight excluding shift turnover time.

   b. Overtime should be limited for all nuclear plant staff personnel so that total work time does not exceed 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 84 hours in any seven day period, all excluding shift turnover time. Individuals should not be required to work more than 15 consecutive days without two consecutive days off.

   c. A break of at least eight hours including shift turnover time should be allowed between work periods.

   d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

   e. Shift Emergency Coordinator (SEC) on-site rest time periods shall not be considered as hours worked when determining the total work time for which the above limitations apply.

f. Investigations of all Reportable Events and events requiring Special Reports to the Commission.

g. Drills on emergency procedures (including plant evacuation) and adequacy of communication with offsite support groups.

h. All procedures required by these Technical Specifications, including implementing procedures of the Emergency Plan, and the Security Plan (except as exempted in Section 6.5.F), shall be reviewed initially and periodically with a frequency commensurate with their safety significance but at an interval of not more than two years. Maintenance work requests and their associated procedures shall be reviewed per the requirements of Section 6.2.C.

i. Special reviews and investigations, as requested by the Safety Audit Committee.

j. Review of investigative reports of unplanned releases of radioactive material to the environs.

k. All changes to the Process Control Program (PCP) and the Offsite Dose Calculation Manual (ODCM).

l. The review of safety evaluations, when safety evaluations are required by 10 CFR Part 50, Section 50.59, for procedures or procedure changes to verify that such actions do not constitute an unreviewed safety question.

m. Fire Protection Program and implementing procedures and the submittal of recommended changes to the Safety Audit Commmittee.

5. Authority

The OC shall be advisory to the Plant Manager. In the event of a disagreement between the recommendations of the OC and the Plant Manager, the course determined by the Plant Manager to be the more conservative will be followed. A written summary of the disagreement will be sent to the Vice President Nuclear Generation and the Chairman of the SAC for review.

6. Records

Minutes shall be recorded for all meetings of the OC and shall identify all documentary material reviewed. The minutes shall be distributed to each member of the OC, the Chairman and each member of the Safety Audit Committee, the Vice President Nuclear Generation and others designated by the OC Chairman.

7. Procedures

A written charter for the OC shall be prepared that contains:

a. Responsibility and authority of the group

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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 113
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 July 11, 1994, as supplemented April 18, 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 following sections under paragraph 2.C of Facility Operating License No. DPR-60 are hereby amended to read as follows:

2.C.(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 113 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

2.C.(4) Fire Protection

Northern States Power Company shall implement and maintain in effect all provisions of the approved fire protection program as described and referenced in the Updated Safety Analysis Report for the Prairie Island Nuclear Generating Plant, Units 1 and 2, and as approved in Safety Evaluation Reports dated February 14, 1978, September 6, 1979, April 4, 1980, December 29, 1980, July 28, 1981, September 12, 1984, June 25, 1985, October 27, 1989, and October 6, 1995, subject to the following provision:

> The licensee may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

3. This license amendment is effective as of the date of issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Beth A. Wetzel

Beth A. Wetzel, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachments:
Pages 3 and 4 of License No. DPR-60*
Changes to the Technical Specifications

Date of Issuance: October 6, 1995

*Pages 3 and 4 are attached, for convenience, for the composite license to reflect these changes.

ATTACHMENT TO LICENSE AMENDMENT NO. 113

FACILITY OPERATING LICENSE NO. DPR-60

DOCKET NO. 50-306

UNIT 2 LICENSE

REMOVE	INSERT
Pages 3	Pages 3
4	4

TECHNICAL SPECIFICATIONS

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 area of change.

REMOVE	INSERT
TS-iv	TS-iv
TS-v	TS-v*
TS-vi	TS-vi
TS-x	TS-x
TS-xi	TS-xi
TS-xii	TS-xii
TS.1-3	TS.1-3
TS.3.14-1	--
TS.3.14-2	--
TS.3.14-3	--
TS.3.14-4	--
TABLE TS.3.14-1, page 1	--
TABLE TS.3.14-1, page 2	--
TABLE TS.3.14-1, page 3	--
TS.4.16-1	--
TS.4.16-2	--
TS.4.16-3	--
TS.4.16-4	--
TS.4.16-5	--
TS.4.16-6	--
TS.6.1-2	TS.6.1-2
TS.6.1-3	TS.6.1-3
TS.6.2-6	TS.6.2-6
B.3.14-1	--
B.3.14-2	--
B.4.16-1	--
B.4.16-2	--

*Corrected page

(4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components; Amdt. No. 6 5-11-76

(5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility;

(6) Pursuant to the Act and 10 CFR Parts 30 and 70, to transfer byproduct materials from other NSP job sites for the purposes of volume reduction and decontamination. Amdt. No. 81 7-25-89

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady state reactor core power levels not in excess of 1650 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 113, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

The licensee shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The plans, which contain Safeguards Information protected under 10 CFR 73.21, are entitled: "Prairie Island Nuclear Generating Plant Physical Security Plan," with revisions submitted through November 30, Amdt. No. 78 1-5-89

(3) <u>Physical Protection</u>--continued

1987; "Prairie Island Nuclear Generating Plant Guard Training and Qualification Plan," with revisions submitted through February 26, 1986; and "Prairie Island Nuclear Generating Plant Safeguards Contingency Plan," with revisions submitted through August 20, 1980. Changes made in accordance with 10 CFR 73.55 shall be implemented in accordance with the schedule set forth therein.

Amdt. No. 78 1-5-89

(4) <u>Fire Protection</u>

Northern States Power Company shall implement and maintain in effect all provisions of the approved fire protection program as described and referenced in the Updated Safety Analysis Report for the Prairie Island Nuclear Generating Plant, Units 1 and 2, and as approved in Safety Evaluation Reports dated February 14, 1978, September 6, 1979, April 4, 1980, December 29, 1980, July 28, 1981, September 12, 1984, June 25, 1985, October 27, 1989, and October 6, 1995, subject to the following provision:

> The licensee may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

Amdt. No. 11 10-6-9

2. D. This license is effective as of the date of issuance and shall expire at midnight October 29, 2014.

Amdt. No. 72 9-23-8

FOR THE ATOMIC ENERGY COMMISSION

Original Signed by
A. Giambusso

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Date of Issuance: OCT 29 1974

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (continued)

TABLE OF CONTENTS (continued)

TECHNICAL SPECIFICATIONS

LIST OF TABLES

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DOSE EQUIVALENT I-131 is that concentration of I-131 (uCi/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites".

$\bar{E}$-AVERAGE DISINTEGRATION ENERGY

$\bar{E}$ shall be the average (weighted in proportion to the concentration of each radionuclide in the sample) of the sum of the average beta and gamma energies per disintegration (in MeV) for isotopes, other than iodines, with half lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

GASEOUS RADWASTE TREATMENT SYSTEM

The GASEOUS RADWASTE TREATMENT SYSTEM shall be any system designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system offgases from the primary system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment.

3. At least two licensed operators shall he present in the control room during a reactor startup, a scheduled reactor shutdown, and during recovery from a reactor trip. These operators are in addition to those required for the other reactor.

4. An individual qualified in radiation protection procedures shall be on site when fuel is in a reactor.

5. All refueling operations shall be directly supervised by a licensed Senior Reactor Operator or a Senior Reactor Operator Limited to Fuel Handling who has no other concurrent respons-ibilities during this operation.

6. The General Superintendent Plant Operations shall be formerly licensed or hold a current license on a similar type plant.

7. At least one member of plant management holding a current Senior Reactor Operator license shall be assigned to the plant operations group on a long term basis (approximately two years). This individual shall not be assigned to a rotating shift.

D. Each member of the plant staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the General Superintendent Radiation Protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and (2) the Shift Manager who shall have a bachelors degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents, and (3) the General Superintendent Plant Operations who shall meet the requirements of ANSI N18.1-1971, except that NRC license requirements are as specified in Specification 6.1.C.7. The training program shall be under the direction of a designated member of Northern States Power management.

E. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel. Procedures shall include the following provisions:

1. Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:

   a. An individual should not be permitted to work more than 16 hours straight excluding shift turnover time.

   b. Overtime should be limited for all nuclear plant staff personnel so that total work time does not exceed 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 84 hours in any seven day period, all excluding shift turnover time. Individuals should not be required to work more than 15 consecutive days without two consecutive days off.

   c. A break of at least eight hours including shift turnover time should be allowed between work periods.

   d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

   e. Shift Emergency Coordinator (SEC) on-site rest time periods shall not be considered as hours worked when determining the total work time for which the above limitations apply.

f. Investigations of all Reportable Events and events requiring Special Reports to the Commission.

g. Drills on emergency procedures (including plant evacuation) and adequacy of communication with offsite support groups.

h. All procedures required by these Technical Specifications, including implementing procedures of the Emergency Plan, and the Security Plan (except as exempted in Section 6.5.F), shall be reviewed initially and periodically with a frequency commensurate with their safety significance but at an interval of not more than two years. Maintenance work requests and their associated procedures shall be reviewed per the requirements of Section 6.2.C.

i. Special reviews and investigations, as requested by the Safety Audit Committee.

j. Review of investigative reports of unplanned releases of radioactive material to the environs.

k. All changes to the Process Control Program (PCP) and the Offsite Dose Calculation Manual (ODCM).

l. The review of safety evaluations, when safety evaluations are required by 10 CFR Part 50, Section 50.59, for procedures or procedure changes to verify that such actions do not constitute an unreviewed safety question.

m. Fire Protection Program and implementing procedures and the submittal of recommended changes to the Safety Audit Commmittee.

5. Authority

The OC shall be advisory to the Plant Manager. In the event of a disagreement between the recommendations of the OC and the Plant Manager, the course determined by the Plant Manager to be the more conservative will be followed. A written summary of the disagreement will be sent to the Vice President Nuclear Generation and the Chairman of the SAC for review.

6. Records

Minutes shall be recorded for all meetings of the OC and shall identify all documentary material reviewed. The minutes shall be distributed to each member of the OC, the Chairman and each member of the Safety Audit Committee, the Vice President Nuclear Generation and others designated by the OC Chairman.

7. Procedures

A written charter for the OC shall be prepared that contains:

a. Responsibility and authority of the group

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 120 AND 113 TO

FACILITY OPERATING LICENSE NOS. DPR-42 AND DPR-60

NORTHERN STATES POWER COMPANY

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

DOCKET NOS. 50-282 AND 50-306

1.0 INTRODUCTION

Section 50.48, "Fire protection," of Part 50 of Title 10 of the Code of Federal Regulations (10 CFR Part 50) requires that each operating nuclear power plant have a fire protection plan that satisfies Criterion 3 (GDC 3), "Fire protection," of Appendix A to 10 CFR Part 50. The fire protection plan must describe the overall fire protection program for the facility, outline the plans for fire protection, fire detection, and fire suppression capability, and limitations of fire damage. The program must also describe specific features necessary to implement the program, such as administrative controls and personnel requirements for fire prevention and manual fire suppression activities, automatic and manually operated fire detection and suppression systems, and the means to limit fire damage to structures, systems, or components important to safety so that the capability to safely shut down the plant is ensured. The U.S. Nuclear Regulatory Commission (NRC) staff approved the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2, (Prairie Island) fire protection program in Safety Evaluation Reports dated February 14, 1978, September 6, 1979, April 4, 1980, December 29, 1980, July 28, 1981, September 12, 1984, June 25, 1985, and October 27, 1989.

By letter dated July 11, 1994, as supplemented by letter dated April 18, 1995, the Northern States Power Company (the licensee) submitted a request for changes to the Prairie Island fire protection program in accordance with the guidance provided in Generic Letter (GL) 86-10, "Implementation of Fire Protection Requirements," and GL 88-12, "Removal of Fire Protection Requirements from Technical Specifications." Specifically, the licensee proposed to incorporate the NRC-approved fire protection program and major commitments, including the fire hazard analysis, into the Updated Safety Analysis Report (USAR), and to revise the Operating Licenses to include the NRC's standard fire protection license condition. In addition, the licensee proposed to relocate the requirements of Technical Specifications (TS) Section 3.14 (Fire Protection and Detection Systems - Limiting Conditions for Operation), TS Section 4.16 (Fire Detection and Protection Systems - Surveillances), TS Section 6.1 (Administrative Controls, Organization), and TS Section 6.2 (Administrative Controls, Review and Audit) from the TS to the revised fire protection program.

GL 86-10 and GL 88-12 referred to removing fire protection requirements from TS. License amendments that relocate the fire protection requirements to the FSAR in accordance with GL 86-10 and GL 88-12 do not revise the requirements for fire protection operability, testing, or inspections. Such amendments simply replace the fire protection TS sections with the standard fire protection license condition. The license condition implements and maintains the NRC-approved fire protection program, including the fire protection requirements previously specified in the TS, in accordance with 10 CFR 50.48. Therefore, such amendments, including the one proposed by the licensee, are administrative in nature and have no effect on the public health and safety.

The letter of April 18, 1995, provided clarifying information within the scope of the original submittal and did not change the staff's initial proposed no significant hazards consideration determination.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to state TS to be included as part of the license. The Commission's regulatory requirements related to the content of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TS.

The Commission has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents, consistent with the standard enunciated in *Portland General Electric Co.* (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety." The criteria set forth in the policy statement have been incorporated into 10 CFR 50.36 (60 FR 36953).

Following the fire at the Browns Ferry Nuclear Power Plant on March 22, 1975, the Commission undertook a number of actions to ensure that improvements were implemented in the fire protection programs for all power reactor facilities. Because of the extensive modification of fire protection programs and the number of open issues resulting from staff evaluations, a number of revisions and alterations occurred in these programs over the years. Consequently, licensees were requested by GL 86-10 to incorporate the final NRC-approved fire protection program in their Final Safety Analysis Reports (FSARs). In this manner, the fire protection program, including the systems, certain administrative and technical controls, the organization, and other plant features associated with fire protection, would have a status consistent with that of other plant features described in the FSAR. In addition, the Commission concluded that a standard license condition, requiring compliance with the provisions of the fire protection program as described in the FSAR, should be used to ensure uniform enforcement of the fire protection requirements. Finally, the Commission stated that with the required actions, licensees may request an amendment to delete the fire protection TS that would now be unnecessary. Subsequently, the NRC issued GL 88-12 to give guidance for the preparation of the license amendment request to implement GL 86-10.

3.0 PROPOSED CHANGES

The specific TS changes proposed by the licensee are as follows:

1. Revise License Condition 2.C.(4) for both units as follows:

   Northern States Power Company shall implement and maintain in effect all provisions of the approved fire protection program as described and referenced in the Updated Safety Analysis Report for the Prairie Island Nuclear Generating Plant, Unit 1 and 2, and as approved in Safety Evaluation Reports dated February 14, 1978, September 6, 1979, April 4, 1980, December 29, 1980, July 28, 1981, September 12, 1984, June 25, 1985, October 27, 1989, April 21, 1995, and October XX, 1995 subject to the following provision:

   > The licensee may make changes to the approved Fire Protection Program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.

2. Delete TS 3.14.A (Fire Detection Instrumentation), TS 3.14.B (Fire Suppression Water System), TS 3.14.C (Spray and Sprinkler Systems), TS 3.14.D.(Carbon Dioxide System), TS 3.14.E (Fire Hose Stations), TS 3.14.F (Yard Fire Hydrant Hose Houses), TS 3.14.G (Penetration Fire Barriers) and their associated bases and Table, and incorporate them, by reference, into the Prairie Island USAR.

3. Delete TS 4.16.A (Fire Detection and Protection Systems), 4.16.B (Fire Detection Instrumentation), 4.16.C (Spray and Sprinkler Systems), 4.16.D (Carbon Dioxide System), 4.16.E (Fire Hose Stations), 4.16.F (Fire Hydrant Hose House), 4.16.G 9 (Penetration Fire Barriers), and their associated bases and Table, and incorporate them, by reference, into the Prairie Island USAR.

4. Delete definition of "Fire Suppression Water System" from the TS.

5. Delete TS 6.1.C.6, Fire Brigade staffing, and its associated footnote and TS 6.1.E and incorporate them, by reference, into the Prairie Island USAR.

6. Add new TS 6.2.B.4.m under Operations Committee responsibilities.

7. Revise the Table of Contents and List of Tables to reflect the TS changes.

4.0 EVALUATION

The NRC staff reviewed the license amendment requests for Prairie Island against the guidance provided in GLs 86-10 and 88-12. GL 86-10 requested that the licensee incorporate the NRC-approved fire protection program in its USAR for the facility and specified a standard fire protection license condition. GL 88-12 addressed the elements a licensee should include in a license amendment request to remove the fire protection requirements from the plant TS. These elements are (1) the NRC-approved fire protection program must be incorporated into the USAR; (2) the Limiting Conditions for Operation (LCOs) and Surveillance Requirements associated with fire detection systems, fire suppression systems, fire barriers, and the administrative controls that address fire brigade staffing would be relocated from the TS (the existing administrative controls associated with fire protection audits and specifications related to the capability for safe shutdown following a fire would be retained); (3) all operational conditions, remedial actions, and test requirements presently included in the TS for these systems, as well as the fire brigade staffing requirements, shall be incorporated into the fire protection program; (4) the standard fire protection license condition specified in GL 86-10 must be included in the facility operating license; (5) the Unit Review Group (Onsite Review Group) shall be given responsibility for the review of the fire protection program and implementing procedures and for the submittal of recommended changes to the Company Nuclear Review and Audit group (Offsite or Corporate Review Group); and (6) fire protection program implementation shall be added to the list of elements for which written procedures shall be established, implemented, and maintained. The licensee incorporated the NRC-approved fire protection program by reference into the Prairie Island USAR in December 1981. The licensee has, therefore, satisfied Element 1 of GL 88-12.

The licensee stated in its submittal of July 11, 1994, that it will incorporate the current TS LCOs and surveillance requirements for the fire detection systems, fire suppression systems, and the TS requirements related to fire brigade staffing into the Prairie Island Fire Protection Program. Therefore, the licensee will have satisfied Elements 2 and 3 of GL 88-12, with the exception of technical specifications for alternate safe shutdown equipment. The staff will pursue implementation of alternative safe shutdown equipment TS, consistent with GL 81-12, independent of this license amendment.

The licensee proposed incorporating the standard fire protection license condition specified in GL 86-10 for Prairie Island. The licensee has, therefore, satisfied Element 4 of GL 88-12.

To satisfy Element 5 of GL 88-12, the licensee addressed changes to the administrative controls sections of the TS. The licensee will require the Operations Committee to review the fire protection program and implementing procedures as well as recommended changes as an additional responsibility. The licensee has, therefore, satisfied Element 5 of GL 88-12.

Element 6 of GL 88-12 specified that the licensee add fire protection program implementation to the administrative controls Section of the TS. This change is made to the list of elements for which written procedures shall be established, implemented, and maintained. Since TS 6.5 currently addresses the fire protection program, and this TS will remain in place following this amendment, no changes are required and the licensee has, therefore, satisfied Element 6 of GL 88-12.

The licensee's proposed TS amendments for Prairie Island are in accordance with NRC staff guidance provided in GLs 86-10 and 88-12.

In summary, the licensee has proposed to incorporate the existing TS fire protection requirements as stated above into the fire protection program which is, by reference, incorporated in the USAR. This conforms to staff guidance in GL 86-10, "Implementation of Fire Protection Requirements," and GL 88-12, "Removal of Fire Protection Requirements from Technical Specifications," for removing unnecessary fire protection TS in four major areas: fire detection systems, fire suppression systems, fire barriers and fire brigade staffing requirements. In addition, incorporating these requirements in the USAR is consistent with NUREG-1434 and 10 CFR 50.36, as amended, because these TS do not impact reactor operations, do not identify a parameter which is an initial condition assumption for a design-basis accident or transient, do not identify a significant abnormal degradation of the reactor coolant pressure boundary and do not provide any mitigation of a design-basis event.

The fire protection plan required by 10 CFR 50.48, as implemented and maintained by the fire protection license condition, provides reasonable assurance that fires will not give rise to an immediate threat to public health and safety. Although there are aspects of the fire detection and mitigation functions that have been determined to be risk significant, such that Criterion 4 of 10 CFR 50.36 would otherwise seem to apply, the minimum requirements for those functions were established in GDC 3 and 10 CFR 50.48, and further controls are not necessary since the licensee must comply with these minimum requirements regardless of whether they are restated in the TS or not.

The licensee's fire protection program is required by 10 CFR 50.48, and any changes to that program are governed by 10 CFR 50.48 and license condition 2.C.(4), set forth above. Therefore, the requirements relocated to the USAR may be controlled in accordance with 10 CFR 50.59.

These relocated requirements relating to fire protection features are not required to be in the TS under 10 CFR 50.36 or other regulations, or by Section 182a of the Atomic Energy Act, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. In addition, the staff finds that sufficient regulatory controls exist under 10 CFR 50.48 and 10 CFR 50.59 to address future changes to these requirements. Accordingly, the staff has concluded that these requirements may be relocated from the TS to the licensee's USAR.

During our review of the TS pages a page number error was detected on Table of Contents page TS-v in that page number changes made in Amendments 101/94 were not carried through with Amendments 103/96. This typographical error introduced by the staff with Amendments 103/96 is hereby corrected by changing the page number for "4.0 Surveillance Requirements," to read "TS.4.0-1." The corrected pages are included with these amendments.

5.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Minnesota State official was notified of the proposed issuance of the amendments. The State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The amendments also change administrative procedures and requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding (59 FR 65818). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

7.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: October 6, 1995