

January 11, 1995

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

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NOS. 1 AND 2 -  
ISSUANCE OF AMENDMENTS RE: RADIOACTIVE EFFLUENT REPORT SUBMITTAL  
(TAC NOS. M90721 AND M90722)

Dear Mr. Anderson:

The Commission has issued the enclosed Amendment No. 114 to Facility Operating License No. DPR-42 and Amendment No. 107 to the Facility Operating License No. DPR-60 for the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2. The amendments consist of changes to the Technical Specifications in response to your application dated October 17, 1994, as supplemented October 27, 1994.

The amendments change the submittal frequency of the Radioactive Effluent Release Report from semiannual to annual in the Prairie Island 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 CHARLES THOMAS FOR

Sheri R. Peterson, Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III/IV/V  
Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

- Enclosures: 1. Amendment No. 114 to DPR-42
- 2. Amendment No. 107 to DPR-60
- 3. Safety Evaluation

cc w/encl: See next page

DOCUMENT NAME: G:\WPDOCS\PRAIRIE\PI90721.AMD

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

Prairie Island Nuclear Generating  
Plant

cc:

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

November 1994

DATED: January 11, 1995

AMENDMENT NO. 114 TO FACILITY OPERATING LICENSE NO. DPR-42-PRAIRIE ISLAND UNIT 1  
AMENDMENT NO. 107 TO FACILITY OPERATING LICENSE NO. DPR-60-PRAIRIE ISLAND UNIT 2

Docket File

PUBLIC

PD#III-1 Reading

J. Roe

J. Hannon

C. Jamerson

S. Peterson

OGC

C. Miller

G. Hill (4)

C. Grimes, DOPS/OTSB

ACRS (4)

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OC/LFDCB

W. Kropp, RIII

SEBD

cc: Plant Service list



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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 114  
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 October 17, 1994, as supplemented October 27, 1994, 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:

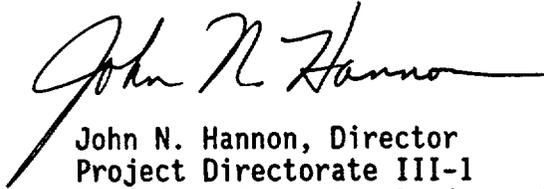
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Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 114 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



John N. Hannon, Director  
Project Directorate III-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: January 11, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 114

FACILITY OPERATING LICENSE NO. DPR-42

DOCKET NO. 50-282

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

TS ix  
TS 4.10-2  
TABLE TS 4.17-3 (Pg 4 of 4)  
TABLE TS 4.17-4 (Pg 3 of 3)  
TS 6.5-3  
TS 6.5-4  
TS 6.7-3

INSERT

TS ix  
TS 4.10-2  
TABLE TS 4.17-3 (Pg 4 of 4)  
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TS 6.5-4  
TS 6.7-3

TABLE OF CONTENTS (Continued)

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	B. Reportable Events	TS.6.7-5
	C. Environmental Reports	TS.6.7-6
	1. Annual Radiation Environmental Monitoring Reports	TS.6.7-6
	2. Environmental Special Reports	TS.6.7-6
	3. Other Environmental Reports (non-radiological, non-aquatic)	TS.6.7-7
	D. Special Reports	TS.6.7-7

5. Although deviations from the required sampling schedule are permitted under Paragraph 3 above, whenever milk or leafy green vegetables can no longer be obtained from the designated sample locations required by Table 4.10-1, the Annual Radioactive Effluent Report for this period shall explain why the samples can no longer be obtained and will identify the new locations which will be added to and deleted from the monitoring program as soon as practicable.

B. Land Use Census

1. A land use census shall be conducted and shall identify the location of the nearest milk animal, the nearest residence, and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of the 16 meteorological sectors within a distance of five miles. This census shall be conducted at least once per 12 months between the dates May 1 and October 31 by door to door survey, aerial survey, or by consulting local agricultural authorities or associations.
2. With a land use census identifying a location(s) which yields a calculated dose or dose commitment (via the same exposure pathway) 20 percent greater than at a location from which samples are currently being obtained in accordance with Specification 4.10-A.1, the Annual Radioactive Effluent Report for this period shall identify the new location. The new location shall be added to the radiological environmental monitoring program within 30 days. The sampling location, excluding the control station location, having the lowest calculated dose or dose commitments (via the same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted.

C. Interlaboratory Comparison Program

1. Analyses shall be performed on radioactive materials supplied as part of an approved interlaboratory comparison program as described in the ODCM.
2. The results of analyses performed as a part of the above required program shall be included in the Annual Radiation Environmental Monitoring Report. When required analyses are not performed, corrective action shall be reported in the Annual Radiation Environmental Monitoring Report.

Prairie Island Unit 1  
Prairie Island Unit 2

Amendment No. 11, 88, 114  
Amendment No. 8, 83, 107

## TABLE TS.4.17-3

## TABLE NOTATION (continued)

## Notes:

- b. A composite sample is one in which the quantity of liquid sampled is proportional to the quantity of liquid waste discharged and in which the method of sampling employed results in a specimen which is representative of the liquids released.
- c. The principal gamma emitters for which the LLD specification will apply are exclusively the following radionuclides: Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141, and Ce-144. This list does not mean that only these nuclides are to be detected and reported. Other peaks which are measurable and identifiable, together with the above nuclides, shall also be identified and reported.
- d. Nuclides which are below the LLD for the analyses should not be reported as being present at the LLD level. When unusual circumstances result in LLDs higher than required, the reasons shall be documented in the Annual Radioactive Effluent Report.
- e. A continuous release is the discharge of liquid wastes of a non-discrete volume; e.g., from a volume of system that has an input flow during the continuous release.
- f. To be representative of the quantities and concentrations of radioactive materials in liquid effluents, samples shall be collected continuously in proportion to the rate of flow of the effluent stream. Prior to analyses, all samples taken for the composite shall be thoroughly mixed in order for the composite sample to be representative of the effluent release.
- g. A batch release is the discharge of liquid wastes of a discrete volume. Prior to sampling for analyses, each batch shall be isolated, and then thoroughly mixed. to assure representative sampling.
- h. Daily grab samples from the turbine building sumps shall be collected and analyzed for principal gamma emitters, including I-131, whenever primary to secondary leakage exceeds 0.5 gpm in any steam generator. This sampling is provided in lieu of continuous monitoring with automatic isolation.
- i. Grab samples shall be collected at least once per 8 hours when steam generator blowdown releases are being made and the specific activity of the secondary coolant is  $>0.01$  uCi/gram dose equivalent I-131 or primary to secondary leakage exceeds 0.5 gpm.

## TABLE TS.4.17-4

TABLE NOTATION (Continued)

- b. Grab samples taken at the ventilation exhausts are generally below minimum detectable levels for most nuclides with existing analytical equipment. If this is the case, PWR GALE Code noble gas isotopic ratios may be assumed.
- c. With  $>1$  uCi/gm Dose Equivalent I-131 in either Unit 1 or Unit 2 reactor Coolant system, the iodine and particulate collection devices for all release points shall be removed and analyzed daily until it is shown that a pattern exists which can be used to predict the release rate. Sampling may then revert to weekly. When samples collected for one day are analyzed, the corresponding LLD's may be increased by a factor of 10. Samples shall be analyzed within 48 hours after removal.
- d. To be representative of the average quantities and concentrations of radioactive materials in particulate form in gaseous effluents, samples should be collected in proportion to the rate of flow of the effluent streams.
- e. The principal gamma emitters for which the LLD specification will apply are exclusively the following radionuclides: Kr-87, Kr-88, Xe-133, Xe-133m, Xe-135, and Xe-138 for gaseous emissions and Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141, and Ce-144 for particulate emissions. This list does not mean that only these nuclides are to be detected and reported. Other peaks which are measurable and identifiable, together with the above nuclides, shall also be identified and reported.
- f. Nuclides which are below the LLD for the analyses should not be reported as being present at the LLD level for that nuclide. When unusual circumstances result in LLD's higher than reported, the reasons shall be documented in the Annual Radioactive Effluent Report.
- g. The ratio of the sample flow rate to the sampled stream flow rate shall be known for the time period sampled. Design flow rates may be used for building exhaust vent flow rates.
- h. Releases are made via the reactor building vents only during purging, or operation of the shield building ventilation system, or operation of the auxiliary building special ventilation system. In lieu of weekly or monthly removal and analysis of iodine and particulate collection devices, these devices may be removed and analyzed following each release provided that the release lasts less than one week. Removal and analysis of collection devices is not required if releases are not being made.

gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel,
- b. Procedures for sampling and analysis,
- c. Provisions for maintenance of sampling and analysis equipment.

#### C. Maintenance and Test

The following maintenance and test procedures will be developed to satisfy routine inspection, preventive maintenance programs, and operating license requirements.

1. Routine testing of Engineered Safeguards and equipment as required by the facility License and the Technical Specifications.
2. Routine testing of standby and redundant equipment.
3. Preventive or corrective maintenance of plant equipment and systems that could have an effect on nuclear safety.
4. Calibration and preventive maintenance of instrumentation that could affect the nuclear safety of the plant.
5. Special testing of equipment for proposed changes to operational procedures or proposed system design changes.

#### D. Process Control Program (PCP)

The PCP shall be approved by the Commission prior to initial implementation. Changes to the PCP shall satisfy the following requirements:

1. A description of changes shall be submitted to the Commission with the Annual Radioactive Effluent Report for the period in which the change(s) were made. This submittal shall contain:
  - a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;
  - b. a determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and
  - c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.
2. Shall become effective upon review and acceptance by the Operations Committee.

#### E. Offsite Dose Calculation Manual (ODCM)

The ODCM shall be approved by the Commission prior to initial implementation. Changes to the ODCM shall satisfy the following requirements:

1. Shall be submitted to the Commission with the Annual Radioactive Effluent Report for the period in which the change(s) were made effective. This submittal shall contain:
  - a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered and provided with a revision date, together with appropriate analyses or evaluations justifying the change(s).
  - b. a determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and
  - c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.
2. Shall become effective upon review and acceptance by the Operations Committee.

#### F. Security

Procedures shall be developed to implement the requirements of the Security Plan and the Security Contingency Plan. These implementing procedures, with the exception of those non-safety related procedures which govern work activities exclusively applicable to or performed by security personnel, shall be reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager. Security procedures not reviewed by the Operations Committee shall be reviewed and approved by the Superintendent Security.

#### G. Temporary Changes to Procedures

Temporary changes to Operations Committee reviewed procedures described in A,B,C,D,E and F above, which do not change the intent of the original procedure may be made with the concurrence of two members of the unit management staff, at least one of whom holds a Senior Reactor Operator License. Such changes shall be documented, reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager within one month.

Temporary changes to security procedures not reviewed by the Operations Committee shall be reviewed by two (2) individuals knowledgeable in the area affected by the procedure.

## 6.7.A.4. Annual Radioactive Effluent Report

Routine radioactive effluent reports covering the operation of the unit during the previous calendar year of operation shall be submitted by May 1st of each year.

The radioactive effluent report shall include a summary of the quantities of radioactive liquid and gaseous effluents as outlined in Appendix B of Regulatory Guide 1.21, Revision 1, June, 1974, with data summarized on a quarterly basis.

The report shall include an assessment of the radiation doses from radioactive effluents released from the plant during the previous calendar year. The report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to individuals due to their activities inside the site boundary (Figures 3.9-1 and 3.9-2) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in the report. The assessment of radiation doses shall be performed in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM) or standard NRC computer codes.

The report shall also include an assessment of radiation doses to the likely most exposed member of the general public from reactor releases and other nearby uranium fuel cycle sources (including doses from primary effluent pathways and direct radiation) for the previous 12 consecutive months to show conformance with 40 CFR 190, Environmental Radiation Protection Standards for Nuclear Power Operation.

The radioactive effluent report shall include the following information for solid waste shipped offsite during the report period.

- a. container volume,
- b. total curie quantity (specify whether determined by measurement or estimate).
- c. principal radionuclides (specify whether determined by measurement or estimate),
- d. type of waste (e.g., spent resin, compacted dry waste, evaporator bottoms),
- e. type of container (e.g., LSA, Type A, Type B, Large Quantity), and
- f. solidification agent (e.g., cement, urea formaldehyde).

The radioactive effluent report shall include unplanned releases from the site of radioactive materials in gaseous and liquid effluents on a quarterly basis, changes to the ODCM, a description of changes to the PCP, a report of when milk or vegetable samples cannot be obtained as required by Table 4.10-1, and changes in land use resulting in significant increases in calculated doses.



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. 107  
License No. DPR-60

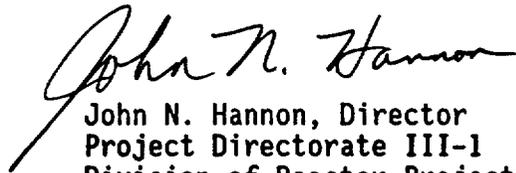
1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Northern States Power Company (the licensee) dated October 17, 1994, as supplemented October 27, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (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:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 107, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION



John N. Hannon, Director  
Project Directorate III-1  
Division of Reactor Projects III/IV  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: January 11, 1995

ATTACHMENT TO LICENSE AMENDMENT NO. 107

FACILITY OPERATING LICENSE NO. DPR-60

DOCKET NO. 50-306

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

TS ix  
TS 4.10-2  
TABLE TS 4.17-3 (Pg 4 of 4)  
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TS 6.5-4  
TS 6.7-3

INSERT

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5. Although deviations from the required sampling schedule are permitted under Paragraph 3 above, whenever milk or leafy green vegetables can no longer be obtained from the designated sample locations required by Table 4.10-1, the Annual Radioactive Effluent Report for this period shall explain why the samples can no longer be obtained and will identify the new locations which will be added to and deleted from the monitoring program as soon as practicable.

**B. Land Use Census**

1. A land use census shall be conducted and shall identify the location of the nearest milk animal, the nearest residence, and the nearest garden of greater than 500 square feet producing fresh leafy vegetables in each of the 16 meteorological sectors within a distance of five miles. This census shall be conducted at least once per 12 months between the dates May 1 and October 31 by door to door survey, aerial survey, or by consulting local agricultural authorities or associations.
2. With a land use census identifying a location(s) which yields a calculated dose or dose commitment (via the same exposure pathway) 20 percent greater than at a location from which samples are currently being obtained in accordance with Specification 4.10-A.1, the Annual Radioactive Effluent Report for this period shall identify the new location. The new location shall be added to the radiological environmental monitoring program within 30 days. The sampling location, excluding the control station location, having the lowest calculated dose or dose commitments (via the same exposure pathway) may be deleted from this monitoring program after October 31 of the year in which this land use census was conducted.

**C. Interlaboratory Comparison Program**

1. Analyses shall be performed on radioactive materials supplied as part of an approved interlaboratory comparison program as described in the ODCM.
2. The results of analyses performed as a part of the above required program shall be included in the Annual Radiation Environmental Monitoring Report. When required analyses are not performed, corrective action shall be reported in the Annual Radiation Environmental Monitoring Report.

Prairie Island Unit 1  
Prairie Island Unit 2

Amendment No. 11, §§, 114  
Amendment No. §, §§, 107

## TABLE TS.4.17-3

## TABLE NOTATION (continued)

## Notes:

- b. A composite sample is one in which the quantity of liquid sampled is proportional to the quantity of liquid waste discharged and in which the method of sampling employed results in a specimen which is representative of the liquids released.
- c. The principal gamma emitters for which the LLD specification will apply are exclusively the following radionuclides: Mn-54, Fe-59, Co-58, Co-60, Zn-65, Mo-99, Cs-134, Cs-137, Ce-141, and Ce-144. This list does not mean that only these nuclides are to be detected and reported. Other peaks which are measurable and identifiable, together with the above nuclides, shall also be identified and reported.
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## TABLE TS.4.17-4

TABLE NOTATION (Continued)

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- c. With  $>1$  uCi/gm Dose Equivalent I-131 in either Unit 1 or Unit 2 reactor Coolant system, the iodine and particulate collection devices for all release points shall be removed and analyzed daily until it is shown that a pattern exists which can be used to predict the release rate. Sampling may then revert to weekly. When samples collected for one day are analyzed, the corresponding LLD's may be increased by a factor of 10. Samples shall be analyzed within 48 hours after removal.
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C. Maintenance and Test

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- 2. Routine testing of standby and redundant equipment.
- 3. Preventive or corrective maintenance of plant equipment and systems that could have an effect on nuclear safety.
- 4. Calibration and preventive maintenance of instrumentation that could affect the nuclear safety of the plant.
- 5. Special testing of equipment for proposed changes to operational procedures or proposed system design changes.

D. Process Control Program (PCP)

The PCP shall be approved by the Commission prior to initial implementation. Changes to the PCP shall satisfy the following requirements:

- 1. A description of changes shall be submitted to the Commission with the Annual Radioactive Effluent Report for the period in which the change(s) were made. This submittal shall contain:
  - a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;
  - b. a determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and
  - c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.
- 2. Shall become effective upon review and acceptance by the Operations Committee.

**E. Offsite Dose Calculation Manual (ODCM)**

The ODCM shall be approved by the Commission prior to initial implementation. Changes to the ODCM shall satisfy the following requirements:

1. Shall be submitted to the Commission with the Annual Radioactive Effluent Report for the period in which the change(s) were made effective. This submittal shall contain:
  - a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered and provided with a revision date, together with appropriate analyses or evaluations justifying the change(s).
  - b. a determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and
  - c. documentation of the fact that the change has been reviewed and found acceptable by the Operations Committee.
2. Shall become effective upon review and acceptance by the Operations Committee.

**F. Security**

Procedures shall be developed to implement the requirements of the Security Plan and the Security Contingency Plan. These implementing procedures, with the exception of those non-safety related procedures which govern work activities exclusively applicable to or performed by security personnel, shall be reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager. Security procedures not reviewed by the Operations Committee shall be reviewed and approved by the Superintendent Security.

**G. Temporary Changes to Procedures**

Temporary changes to Operations Committee reviewed procedures described in A,B,C,D,E and F above, which do not change the intent of the original procedure may be made with the concurrence of two members of the unit management staff, at least one of whom holds a Senior Reactor Operator License. Such changes shall be documented, reviewed by the Operations Committee and approved by a member of plant management designated by the Plant Manager within one month.

Temporary changes to security procedures not reviewed by the Operations Committee shall be reviewed by two (2) individuals knowledgeable in the area affected by the procedure.

#### 6.7.A.4. Annual Radioactive Effluent Report

Routine radioactive effluent reports covering the operation of the unit during the previous calendar year of operation shall be submitted by May 1st of each year.

The radioactive effluent report shall include a summary of the quantities of radioactive liquid and gaseous effluents as outlined in Appendix B of Regulatory Guide 1.21, Revision 1, June, 1974, with data summarized on a quarterly basis.

The report shall include an assessment of the radiation doses from radioactive effluents released from the plant during the previous calendar year. The report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to individuals due to their activities inside the site boundary (Figures 3.9-1 and 3.9-2) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in the report. The assessment of radiation doses shall be performed in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM) or standard NRC computer codes.

The report shall also include an assessment of radiation doses to the likely most exposed member of the general public from reactor releases and other nearby uranium fuel cycle sources (including doses from primary effluent pathways and direct radiation) for the previous 12 consecutive months to show conformance with 40 CFR 190, Environmental Radiation Protection Standards for Nuclear Power Operation.

The radioactive effluent report shall include the following information for solid waste shipped offsite during the report period.

- a. container volume,
- b. total curie quantity (specify whether determined by measurement or estimate).
- c. principal radionuclides (specify whether determined by measurement or estimate),
- d. type of waste (e.g., spent resin, compacted dry waste, evaporator bottoms),
- e. type of container (e.g., LSA, Type A, Type B, Large Quantity), and
- f. solidification agent (e.g., cement, urea formaldehyde).

The radioactive effluent report shall include unplanned releases from the site of radioactive materials in gaseous and liquid effluents on a quarterly basis, changes to the ODCM, a description of changes to the PCP, a report of when milk or vegetable samples cannot be obtained as required by Table 4.10-1, and changes in land use resulting in significant increases in calculated doses.



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 114 AND 107 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

By letter dated October 17, 1994, as supplemented October 27, 1994, the Northern States Power Company (NSP or the licensee) requested amendments to the Technical Specifications (TS) appended to Facility Operating License Nos. DPR-42 and DPR-60 for the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2. The proposed amendments would change the Prairie Island TS to extend the Radioactive Effluent Release Report submittal frequency from semiannual to annual. These requested changes are in accordance with the change in Title 10, Code of Federal Regulations, Section 50.36a, "Technical specifications on effluents from nuclear power reactors," effective October 1, 1992.

2.0 EVALUATION

As indicated above, 10 CFR 50.36a was changed to require that a report to the Commission specifying the quantity of each of the principal radionuclides released to unrestricted areas during the previous 12 months should be prepared and submitted. The new regulation also requires that the time interval between submissions of the reports must be no longer than 12 months. Previously, 10 CFR 50.36a required these reports to be submitted semiannually and within 60 days after January 1 and July 1 of each year.

The most recent report for Prairie Island Nuclear Generating Plant was submitted on August 26, 1994. In accordance with existing Prairie Island TS, the next report will be a semiannual report submitted 60 days after January 1, 1995, for the third and fourth quarters of 1994. The initial submittal of an annual report containing the radioactive effluent data will be made by May 1, 1996. The initial annual report will present the data for the four quarter period representing 1995.

Since the requested TS changes are consistent with the new regulation and since the submittals of the required reports will provide continuity in the periods covered, the staff finds that the licensee's proposed changes to the Prairie Island TS meet the regulations and are, therefore, acceptable.

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### 3.0 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.

### 4.0 ENVIRONMENTAL CONSIDERATION

The amendments change recordkeeping, reporting, or administrative procedures or requirements. Accordingly, these amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental assessment need be prepared in connection with the issuance of these amendments.

### 5.0 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.

Principal Contributor: S. Peterson

Date: January 11, 1995