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. 122
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 17, 1995, as supplemented October 16, 1995, and November 28, 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 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:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 122, 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, with full implementation within 120 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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 24, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 122

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	INSERT
TS-iii	TS-iii
TS-v	TS-v
TS-vi	TS-vi
TS-vii	TS-vii
TS-viii	TS-viii
TS-ix	TS-ix
TS-x	TS-x
TS-xi	TS-xi
TS-xii	TS-xii
TS-xiii	TS-xiii
TS.1-3	TS.1-3
TS.1-4	TS.1-4
TS.1-5	TS.1-5
TS.1-6	TS.1-6
TS.1-7	---
TS.1-8	---
TS.3.9-1	---
TS.3.9-2	---
TS.3.9-3	---
TS.3.9-4	---
TS.3.9-5	---
TS.3.9-6	---
TS.3.9-7	---
Table TS.3.9-1 (2 pages)	---
Table TS.3.9-2 (2 pages)	---
Figure TS.3.9-1	---
Figure TS.3.9-2	---

TS.4.10-1	---
TS.4.10-2	---
TS.4.10-3	---
Table TS.4.10-1 (4 pages)	---
Table TS.4-10-2 (2 pages)	---
Table TS.4-10-3	---
TS.4.11-1	---
TS.4.11-2	---
TS.4.17-1	---
TS.4.17-2	---
TS.4.17-3	---
TS.4.17-4	---
TS.4.17-5	---
Table TS.4.17-1 (2 pages)	---
Table TS.4.17-2 (2 pages)	---
Table TS.4.17-3 (4 pages)	---
Table TS.4.17-4 (3 pages)	---
TS.5.5-1	---
TS.5.5-2	---
TS.5.5-3	---
Table TS.5.5-1 (2 pages)	---
Table TS.5.5-2	---
TS.6.5-2	TS.6.5-2
TS.6.5-3	TS.6.5-3
TS.6.5-4	TS.6.5-4
---	TS.6.5-5
---	TS.6.5-6
---	TS.6.5-7
TS.6.7-3	TS.6.7-3
TS.6.7-4	TS.6.7-4
TS.6.7-5	TS.6.7-5
TS.6.7-6	TS.6.7-6
TS.6.7-7	---
B.3.9-1	---
B.3.9-2	---
B.3.9-3	---
B.3.9-4	---
B.3.9-5	---
B.4.10-1	---
B.4.11-1	---
B.4.17-1	---
B.4.17-2	---

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

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

APPENDIX A TECHNICAL SPECIFICATIONS

LIST OF FIGURES

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.

FIRE SUPPRESSION WATER SYSTEM

The FIRE SUPPRESSION WATER SYSTEM consists of: Water sources; pumps; and distribution piping with associated sectionalizing isolation valves. Such valves include yard hydrant valves, and the first valve ahead of the water flow alarm device on each sprinkler,hose standpipe, or spray system riser.

LIMITING SAFETY SYSTEM SETTINGS

LIMITING SAFETY SYSTEM SETTINGS are settings, as specified in Section 2.3, for automatic protective devices related to those variables having significant safety functions.

OPERABLE - OPERABILITY

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are OPERABLE, or likewise satisfy the requirements of this paragraph.

The OPERABILITY of a system or component shall be considered to be established when: (1) it satisfies the Limiting Conditions for Operation in Specification 3.0, (2) it has been tested periodically in accordance with Specification 4.0 and has met its performance requirements, and (3) its condition is consistent with the two paragraphs above.

OPERATIONAL MODE - MODE

An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level and average reactor coolant temperature specified in Table TS.1.1.

PHYSICS TESTS

PHYSICS TESTS shall be those tests performed to measure the fundamental characteristics of the core and related instrumentation. PHYSICS TESTS are conducted such that the core power is sufficiently reduced to allow for the perturbation due to the test and therefore avoid exceeding power distribution limits in Specification 3.10.B.

Low power PHYSICS TESTS are run at reactor powers less than 2% of rated power.

OPERABLE - OPERABILITY

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

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Low power PHYSICS TESTS are run at reactor powers less than 2% of rated power.

PROTECTION INSTRUMENTATION AND LOGIC

1. PROTECTION SYSTEM

The PROTECTION SYSTEM consists of both the reactor trip system and the engineered safety feature system. The PROTECTION SYSTEM encompasses all electrical and mechanical devices and circuitry (from sensors through the actuating devices) which are required to operate in order to produce the required protective function. Tests of protection systems will be considered acceptable when overlapped if run in parts.

2. PROTECTION SYSTEM CHANNEL

A PROTECTION SYSTEM CHANNEL is an arrangement of components and modules as required to generate a single protective action signal when required by a unit condition. The channel loses its identity where single action signals are combined.

3. LOGIC CHANNEL

A LOGIC CHANNEL is a group of relay contact matrices which operate in response to analog channel signals to generate a protective action signal.

QUADRANT POWER TILT RATIO

QUADRANT POWER TILT RATIO shall be the ratio of the maximum quadrant power indicated by an upper excore detector to the average reactor power indicated by the upper excore detectors or the ratio of the maximum quadrant power indicated by a lower excore detector to the average reactor power indicated by the lower excore detectors, whichever is greater. Power is proportional to excore detector current times its calibration factor.

RATED THERMAL POWER

RATED THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant of 1650 megawatts thermal (MWt).

REPORTABLE EVENT

A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 of 10 CFR Part 50.

SHIELD BUILDING INTEGRITY

SHIELD BUILDING INTEGRITY shall exist when:

1. Each door in each access opening is closed except when the access opening is being used for normal transit entry and exit, then at least one door shall be closed, and

2. The shield building equipment opening is closed.

3. The Shield Building Ventilation System is OPERABLE.

SHUTDOWN MARGIN

SHUTDOWN MARGIN shall be the instantaneous amount of reactivity by which:

1) the reactor is subcritical

or

2) the reactor would be subcritical from its present condition assuming all rod cluster control assemblies are fully inserted except for the rod cluster control assembly of highest reactivity worth which is assumed to be fully withdrawn.

SOURCE CHECK

A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a source of increased radioactivity.

STAGGERED TEST BASIS

A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the specified Surveillance Frequency so that all systems, subsystems, channels, or other designated components are tested during n Surveillance Frequency intervals, where n is the total number of systems, subsystems, channels or other designated components in the associated function.

For example, the surveillance frequency for the automatic trip and interlock logic specifies that the functional testing of that system is monthly and that each train shall be tested at least every two months on a STAGGERED TEST BASIS. Per the definition above, for the automatic trip and interlock logic, the Surveillance Frequency interval is monthly and the number of trains (channels) is 2 (n=2). Therefore, STAGGERED TEST BASIS requires one train be tested each month such that after two Surveillance Frequency intervals (two months) both trains will have been tested.

STARTUP OPERATION

The process of heating up a reactor above 200°F, making it critical, and bringing it up to POWER OPERATION.

THERMAL POWER

THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

1. a. Pursuant to 10CFR20, paragraph 20.1601(c), in lieu of the requirements of 10CFR20.1601, each high radiation area, as defined in 10CFR20, in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., health physics technicians) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates less than or equal to 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

   Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

   (1) A radiation monitoring device that continuously indicates the radiation dose rate in the area.

   (2) A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.

   (3) An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the radiation protection manager.

   b. In addition to the requirements of Specification 6.5.B.1.a above, areas with radiation levels greater than or equal to 1000 mrem/hr shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Supervisor on duty or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay

times for individuals in those areas. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV or transmitting radiation monitoring device) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

c. For individual high radiation areas with radiation levels of greater than 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be continuously guarded, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded and conspicuously posted, and a flashing light shall be activated as a warning device.

2. A program shall be implemented to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

   a. Provisions establishing preventive maintenance and periodic visual inspection requirements, and

   b. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals

   A program acceptable to the Commission was described in letters from L.O.Mayer, NSP, to Director of Nuclear Reactor Regulation, dated December 31, 1979 "Lessons Learned Implementation" and March 13, 1980, "1/1/80 Lessons Learned Implementation Additional Information".

3. A program shall be implemented which will ensure the capability to accurately determine the airborne iodine concentration in essential plant areas under accident conditions. This program shall include the following:

   a. Training of personnel,

   b. Procedures for monitoring, and

   c. Provisions for maintenance of sampling and analysis equipment

   A program acceptable to the Commission was described in letters from L.O.Mayer, NSP, to Director of Nuclear Reactor Regulation, dated December 31, 1979 "Lessons Learned Implementation" and March 13, 1980, "1/1/80 Lessons Learned Implementation Additional Information".

4. A program shall be implemented which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant 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. Deleted

E. Offsite Dose Calculation Manual (ODCM)

The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities and descriptions of the information that should be included in the Annual Radiological Environmental Monitoring, and Radioactive Effluent Reports required by Specification 6.7.C.1 and Specification 6.7.A.4.

Changes to the ODCM:

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:

   a. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s),

   b. a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose or setpoint calculations;

2. Shall become effective after approval by a member of plant management designated by the Plant Manager.

3. Shall be submitted to the NRC in the form of a complete legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed. The date (i.e., month and year) the change was implemented shall be indicated.

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.

H. Radioactive Effluent Controls Program

This program conforms to 10CFR50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable.

This program shall allocate releases equally to each unit. The liquid radwaste treatment system, waste gas treatment system, containment purge release vent, and spent fuel pool vent are shared by both units. Experience has also shown that contributions from both units are released from each auxiliary building vent. Therefore, all releases will be allocated equally in determining conformance to the design objectives of 10CFR50, Appendix I.

The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

1. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

2. Limitation on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to Appendix B to 10CFR20.1 - 20.601, Table II, Column 2;

3. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10CFR20.1302 and with the methodology and parameters in the ODCM;

4. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10CFR50, Appendix I;

5. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least monthly;

6. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of one month from the liquid effluent releases would exceed 0.12 mrem to the total body or 0.4 mrem to any organ; or from the gaseous effluent releases would exceed 0.4 mrad for gamma air dose, 0.8 mrad for beta air dose, or 0.6 mrem organ dose;

7. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary conforming to the dose associated with Appendix B to 10CFR20.1 - 20.601, Table II, Column 1;

8. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10CFR50, Appendix I;

9. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than eight days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10CFR50, Appendix I; and

10. Limitation on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40CFR190.

I. Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the waste gas holdup system, the quantity of radioactivity contained in gas storage tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks.

The program shall include:

1. The limits for concentration of oxygen in the waste gas holdup system and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria;

2. A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than or equal to 78,000 curies of noble gases (considered as dose equivalent Xe-133); and

3. A surveillance program to ensure that the quantity of radioactivity contained in each of the following tanks shall be limited to 10 curies, excluding tritium and dissolved or entrained noble gases:

   Condensate storage tanks
   Outside temporary tanks

4. The provisions of TS 4.0 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

6.7.A.4. Radioactive Effluent Report

The Radioactive Effluent Report covering the operation of the plant during the previous calendar year shall be submitted by May 15 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the plant. The material provided shall be consistent with the objectives outlined in the ODCM and in conformance with 10CFR50.36a and 10CFR50, Appendix I, Section IV.B.1.

6.7.A.5. Annual Summaries of Meteorological Data

An annual summary of meteorological data shall be submitted for the previous calendar year in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability at the request of the Commission.

6.7.A.6. Core Operating Limits Report

a. Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:

1. Heat Flux Hot Channel Factor Limit (F_Q^{RPT}), Nuclear Enthalpy Rise Hot Channel Factor Limit ($F\Delta_H^{RTP}$), PFDH, K(Z) and V(Z) (Specifications 3.10.B.1, 3.10.B.2 and 3.10.B.3)

2. Axial Flux Difference Limits and Target Band (Specifications 3.10.B.4 through 3.10.B.9)

3. Shutdown and Control Bank Insertion Limits (Specification 3.10.D)

4. Reactor Coolant System Flow Limit (Specification 3.10.J)

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

NSPNAD-8101-A, "Qualification of Reactor Physics Methods for Application to PI Units" (latest approved version)

NSPNAD-8102-A, "Prairie Island Nuclear Power Plant Reload Safety Evaluation Methods for Application to PI Units" (latest approved version)

WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology", July, 1985

WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code", August, 1985

WCAP-10924-P-A, "Westinghouse Large-Break LOCA Best-Estimate Methodology", December, 1988

WCAP-10924-P-A, Volume 1, Addendum 4, "Westinghouse Large Break LOCA Best Estimate Methodology", August, 1990

XN-NF-77-57 (A), XN-NF-77-57, Supplement 1 (A), "Exxon Nuclear Power Distribution Control for Pressurized Water Reactors Phase II", May, 1981

WCAP-13677, "10 CFR 50.46 Evaluation Model Report: W-COBRA/TRAC 2-Loop Upper Plenum Injection Model Update to Support ZIRLO$_{TM}$ Cladding Options", April 1993 (approved by NRC SE dated November 26, 1993).

NSPNAD-93003-A, "Transient Power Distribution Methodology", (latest approved version)

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.

d. The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be supplied upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

B. REPORTABLE EVENTS

The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified by a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the Operations Committee and the results of this review shall be submitted to the Safety Audit Committee and the Vice President Nuclear Generation.

C. Environmental Reports

The reports listed below shall be submitted to the Administrator of the appropriate Regional NRC Office or his designate:

1. Annual Radiological Environmental Monitoring Report

The Annual Radiological Environmental Monitoring Report covering the operation of the plant during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the radiological environmental monitoring program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10CFR50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiation Environmental Monitoring Reports shall include summarized and tabulated results in the format of Regulatory Guide 4.8, December 1975 of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from one reactor; and the results of licensees participation in the Interlaboratory Comparison Program defined in the ODCM.

2. Deleted

3. Other Environmental Reports (non-radiological, non-aquatic)

Written reports for the following items shall be submitted to the appropriate NRC Regional Administrator:

a. Environmental events that indicate or could result in a significant environmental impact casually related to plant operation. The following are examples: excessive bird impaction; onsite plant or animal disease outbreaks; unusual mortality of any species protected by the Endangered Species Act of 1973; or increase in nuisance organisms or conditions. This report shall be submitted within 30 days of the event and shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition

of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

b. Proposed changes, test or experiments which may result in a significant increase in any adverse environmental impact which was not previously reviewed or evaluated in the Final Environmental Statement or supplements thereto. This report shall include an evaluation of the environmental impact of the proposed activity and shall be submitted 30 days prior to implementing the proposed change, test or experiment.

D. Special Reports

Unless otherwise indicated, special reports required by the Technical Specifications shall be submitted to the appropriate NRC Regional Administrator within the time period specified for each report.

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. 115
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 17, 1995, as supplemented October 16, 1995, and November 28, 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 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. 115, 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, with full implementation within 120 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

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 24, 1996

ATTACHMENT TO LICENSE AMENDMENT NO. 115

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	INSERT
TS-iii	TS-iii
TS-v	TS-v
TS-vi	TS-vi
TS-vii	TS-vii
TS-viii	TS-viii
TS-ix	TS-ix
TS-x	TS-x
TS-xi	TS-xi
TS-xii	TS-xii
TS-xiii	TS-xiii
TS.1-3	TS.1-3
TS.1-4	TS.1-4
TS.1-5	TS.1-5
TS.1-6	TS.1-6
TS.1-7	---
TS.1-8	---
TS.3.9-1	---
TS.3.9-2	---
TS.3.9-3	---
TS.3.9-4	---
TS.3.9-5	---
TS.3.9-6	---
TS.3.9-7	---
Table TS.3.9-1 (2 pages)	---
Table TS.3.9-2 (2 pages)	---
Figure TS.3.9-1	---
Figure TS.3.9-2	---

TS.4.10-1	---
TS.4.10-2	---
TS.4.10-3	---
Table TS.4.10-1 (4 pages)	---
Table TS.4-10-2 (2 pages)	---
Table TS.4-10-3	---
TS.4.11-1	---
TS.4.11-2	---
TS.4.17-1	---
TS.4.17-2	---
TS.4.17-3	---
TS.4.17-4	---
TS.4.17-5	---
Table TS.4.17-1 (2 pages)	---
Table TS.4.17-2 (2 pages)	---
Table TS.4.17-3 (4 pages)	---
Table TS.4.17-4 (3 pages)	---
TS.5.5-1	---
TS.5.5-2	---
TS.5.5-3	---
Table TS.5.5-1 (2 pages)	---
Table TS.5.5-2	---
TS.6.5-2	TS.6.5-2
TS.6.5-3	TS.6.5-3
TS.6.5-4	TS.6.5-4
---	TS.6.5-5
---	TS.6.5-6
---	TS.6.5-7
TS.6.7-3	TS.6.7-3
TS.6.7-4	TS.6.7-4
TS.6.7-5	TS.6.7-5
TS.6.7-6	TS.6.7-6
TS.6.7-7	---
B.3.9-1	---
B.3.9-2	---
B.3.9-3	---
B.3.9-4	---
B.3.9-5	---
B.4.10-1	---
B.4.11-1	---
B.4.17-1	---
B.4.17-2	---

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

TABLE OF CONTENTS (Continued)

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

APPENDIX A TECHNICAL SPECIFICATIONS

LIST OF FIGURES

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.

FIRE SUPPRESSION WATER SYSTEM

The FIRE SUPPRESSION WATER SYSTEM consists of: Water sources; pumps; and distribution piping with associated sectionalizing isolation valves. Such valves include yard hydrant valves, and the first valve ahead of the water flow alarm device on each sprinkler, hose standpipe, or spray system riser.

LIMITING SAFETY SYSTEM SETTINGS

LIMITING SAFETY SYSTEM SETTINGS are settings, as specified in Section 2.3, for automatic protective devices related to those variables having significant safety functions.

OPERABLE - OPERABILITY

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered OPERABLE for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is OPERABLE; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are OPERABLE, or likewise satisfy the requirements of this paragraph.

The OPERABILITY of a system or component shall be considered to be established when: (1) it satisfies the Limiting Conditions for Operation in Specification 3.0, (2) it has been tested periodically in accordance with Specification 4.0 and has met its performance requirements, and (3) its condition is consistent with the two paragraphs above.

OPERATIONAL MODE - MODE

An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level and average reactor coolant temperature specified in Table TS.1.1.

PHYSICS TESTS

PHYSICS TESTS shall be those tests performed to measure the fundamental characteristics of the core and related instrumentation. PHYSICS TESTS are conducted such that the core power is sufficiently reduced to allow for the perturbation due to the test and therefore avoid exceeding power distribution limits in Specification 3.10.B.

Low power PHYSICS TESTS are run at reactor powers less than 2% of rated power.

PROTECTION INSTRUMENTATION AND LOGIC

1. PROTECTION SYSTEM

The PROTECTION SYSTEM consists of both the reactor trip system and the engineered safety feature system. The PROTECTION SYSTEM encompasses all electrical and mechanical devices and circuitry (from sensors through the actuating devices) which are required to operate in order to produce the required protective function. Tests of protection systems will be considered acceptable when overlapped if run in parts.

2. PROTECTION SYSTEM CHANNEL

A PROTECTION SYSTEM CHANNEL is an arrangement of components and modules as required to generate a single protective action signal when required by a unit condition. The channel loses its identity where single action signals are combined.

3. LOGIC CHANNEL

A LOGIC CHANNEL is a group of relay contact matrices which operate in response to analog channel signals to generate a protective action signal.

QUADRANT POWER TILT RATIO

QUADRANT POWER TILT RATIO shall be the ratio of the maximum quadrant power indicated by an upper excore detector to the average reactor power indicated by the upper excore detectors or the ratio of the maximum quadrant power indicated by a lower excore detector to the average reactor power indicated by the lower excore detectors, whichever is greater. Power is proportional to excore detector current times its calibration factor.

RATED THERMAL POWER

RATED THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant of 1650 megawatts thermal (MWt).

REPORTABLE EVENT

A REPORTABLE EVENT shall be any of those conditions specified in Section 50.73 of 10 CFR Part 50.

SHIELD BUILDING INTEGRITY

SHIELD BUILDING INTEGRITY shall exist when:

1. Each door in each access opening is closed except when the access opening is being used for normal transit entry and exit, then at least one door shall be closed, and

2. The shield building equipment opening is closed.

3. The Shield Building Ventilation System is OPERABLE.

SHUTDOWN MARGIN

SHUTDOWN MARGIN shall be the instantaneous amount of reactivity by which:

1) the reactor is subcritical

or

2) the reactor would be subcritical from its present condition assuming all rod cluster control assemblies are fully inserted except for the rod cluster control assembly of highest reactivity worth which is assumed to be fully withdrawn.

SOURCE CHECK

A SOURCE CHECK shall be the qualitative assessment of channel response when the channel sensor is exposed to a source of increased radioactivity.

STAGGERED TEST BASIS

A STAGGERED TEST BASIS shall consist of the testing of one of the systems, subsystems, channels, or other designated components during the specified Surveillance Frequency so that all systems, subsystems, channels, or other designated components are tested during n Surveillance Frequency intervals, where n is the total number of systems, subsystems, channels or other designated components in the associated function.

For example, the surveillance frequency for the automatic trip and interlock logic specifies that the functional testing of that system is monthly and that each train shall be tested at least every two months on a STAGGERED TEST BASIS. Per the definition above, for the automatic trip and interlock logic, the Surveillance Frequency interval is monthly and the number of trains (channels) is 2 (n=2). Therefore, STAGGERED TEST BASIS requires one train be tested each month such that after two Surveillance Frequency intervals (two months) both trains will have been tested.

STARTUP OPERATION

The process of heating up a reactor above 200°F, making it critical, and bringing it up to POWER OPERATION.

THERMAL POWER

THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

1. a. Pursuant to 10CFR20, paragraph 20.1601(c), in lieu of the requirements of 10CFR20.1601, each high radiation area, as defined in 10CFR20, in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., health physics technicians) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates less than or equal to 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

   Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

   (1) A radiation monitoring device that continuously indicates the radiation dose rate in the area.

   (2) A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.

   (3) An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the radiation protection manager.

   b. In addition to the requirements of Specification 6.5.B.1.a above, areas with radiation levels greater than or equal to 1000 mrem/hr shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Supervisor on duty or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in the immediate work areas and the maximum allowable stay

times for individuals in those areas. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV or transmitting radiation monitoring device) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

c. For individual high radiation areas with radiation levels of greater than 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be continuously guarded, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded and conspicuously posted, and a flashing light shall be activated as a warning device.

2. A program shall be implemented to reduce leakage from systems outside containment that would or could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. This program shall include the following:

   a. Provisions establishing preventive maintenance and periodic visual inspection requirements, and

   b. Integrated leak test requirements for each system at a frequency not to exceed refueling cycle intervals

   A program acceptable to the Commission was described in letters from L.O.Mayer, NSP, to Director of Nuclear Reactor Regulation, dated December 31, 1979 "Lessons Learned Implementation" and March 13, 1980, "1/1/80 Lessons Learned Implementation Additional Information".

3. A program shall be implemented which will ensure the capability to accurately determine the airborne iodine concentration in essential plant areas under accident conditions. This program shall include the following:

   a. Training of personnel,

   b. Procedures for monitoring, and

   c. Provisions for maintenance of sampling and analysis equipment

   A program acceptable to the Commission was described in letters from L.O.Mayer, NSP, to Director of Nuclear Reactor Regulation, dated December 31, 1979 "Lessons Learned Implementation" and March 13, 1980, "1/1/80 Lessons Learned Implementation Additional Information".

4. A program shall be implemented which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant 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. Deleted

E. Offsite Dose Calculation Manual (ODCM)

The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the radiological environmental monitoring program. The ODCM shall also contain the radioactive effluent controls and radiological environmental monitoring activities and descriptions of the information that should be included in the Annual Radiological Environmental Monitoring, and Radioactive Effluent Reports required by Specification 6.7.C.1 and Specification 6.7.A.4.

Changes to the ODCM:

1. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:

   a. sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s),

   b. a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.1302, 40 CFR190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose or setpoint calculations;

2. Shall become effective after approval by a member of plant management designated by the Plant Manager.

3. Shall be submitted to the NRC in the form of a complete legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed. The date (i.e., month and year) the change was implemented shall be indicated.

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.

H. Radioactive Effluent Controls Program

This program conforms to 10CFR50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable.

This program shall allocate releases equally to each unit. The liquid radwaste treatment system, waste gas treatment system, containment purge release vent, and spent fuel pool vent are shared by both units. Experience has also shown that contributions from both units are released from each auxiliary building vent. Therefore, all releases will be allocated equally in determining conformance to the design objectives of 10CFR50, Appendix I.

The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

1. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;

2. Limitation on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to Appendix B to 10CFR20.1 - 20.601, Table II, Column 2;

3. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10CFR20.1302 and with the methodology and parameters in the ODCM;

4. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10CFR50, Appendix I;

5. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least monthly;

6. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of one month from the liquid effluent releases would exceed 0.12 mrem to the total body or 0.4 mrem to any organ; or from the gaseous effluent releases would exceed 0.4 mrad for gamma air dose, 0.8 mrad for beta air dose, or 0.6 mrem organ dose;

7. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary conforming to the dose associated with Appendix B to 10CFR20.1 - 20.601, Table II, Column 1;

8. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10CFR50, Appendix I;

9. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than eight days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10CFR50, Appendix I; and

10. Limitation on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40CFR190.

I. Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the waste gas holdup system, the quantity of radioactivity contained in gas storage tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks.

The program shall include:

1. The limits for concentration of oxygen in the waste gas holdup system and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria;

2. A surveillance program to ensure that the quantity of radioactivity contained in each gas storage tank is less than or equal to 78,000 curies of noble gases (considered as dose equivalent Xe-133); and

3. A surveillance program to ensure that the quantity of radioactivity contained in each of the following tanks shall be limited to 10 curies, excluding tritium and dissolved or entrained noble gases:

   Condensate storage tanks
   Outside temporary tanks

4. The provisions of TS 4.0 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

6.7.A.4. Radioactive Effluent Report

The Radioactive Effluent Report covering the operation of the plant during the previous calendar year shall be submitted by May 15 of each year. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the plant. The material provided shall be consistent with the objectives outlined in the ODCM and in conformance with 10CFR50.36a and 10CFR50, Appendix I, Section IV.B.1.

6.7.A.5. Annual Summaries of Meteorological Data

An annual summary of metecrological data shall be submitted for the previous calendar year in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability at the request of the Commission.

6.7.A.6. Core Operating Limits Report

a. Core operating limits shall be established and documented in the CORE OPERATING LIMITS REPORT before each reload cycle or any remaining part of a reload cycle for the following:

1. Heat Flux Hot Channel Factor Limit (F_Q^{RPT}), Nuclear Enthalpy Rise Hot Channel Factor Limit ($F\Delta_H^{RTP}$), PFDH, K(Z) and V(Z) (Specifications 3.10.B.1, 3.10.B.2 and 3.10.B.3)

2. Axial Flux Difference Limits and Target Band (Specifications 3.10.B.4 through 3.10.B.9)

3. Shutdown and Control Bank Insertion Limits (Specification 3.10.D)

4. Reactor Coolant System Flow Limit (Specification 3.10.J)

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

NSPNAD-8101-A, "Qualification of Reactor Physics Methods for Application to PI Units" (latest approved version)

NSPNAD-8102-A, "Prairie Island Nuclear Power Plant Reload Safety Evaluation Methods for Application to PI Units" (latest approved version)

WCAP-9272-P-A, "Westinghouse Reload Safety Evaluation Methodology", July, 1985

WCAP-10054-P-A, "Westinghouse Small Break ECCS Evaluation Model Using the NOTRUMP Code", August, 1985

WCAP-10924-P-A, "Westinghouse Large-Break LOCA Best-Estimate Methodology", December, 1988

WCAP-10924-P-A, Volume 1, Addendum 4, "Westinghouse Large Break LOCA Best Estimate Methodology", August, 1990

XN-NF-77-57 (A), XN-NF-77-57, Supplement 1 (A), "Exxon Nuclear Power Distribution Control for Pressurized Water Reactors Phase II", May, 1981

WCAP-13677, "10 CFR 50.46 Evaluation Model Report: W-COBRA/TRAC 2-Loop Upper Plenum Injection Model Update to Support ZIRLO™ Cladding Options", April 1993 (approved by NRC SE dated November 26, 1993).

NSPNAD-93003-A, "Transient Power Distribution Methodology", (latest approved version)

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal-mechanical limits, core thermal-hydraulic limits, ECCS limits, nuclear limits such as shutdown margin, and transient and accident analysis limits) of the safety analysis are met.

d. The CORE OPERATING LIMITS REPORT, including any mid-cycle revisions or supplements thereto, shall be supplied upon issuance, for each reload cycle, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector.

B. REPORTABLE EVENTS

The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified by a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the Operations Committee and the results of this review shall be submitted to the Safety Audit Committee and the Vice President Nuclear Generation.

C. Environmental Reports

The reports listed below shall be submitted to the Administrator of the appropriate Regional NRC Office or his designate:

1. Annual Radiological Environmental Monitoring Report

The Annual Radiological Environmental Monitoring Report covering the operation of the plant during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the radiological environmental monitoring program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10CFR50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiation Environmental Monitoring Reports shall include summarized and tabulated results in the format of Regulatory Guide 4.8, December 1975 of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from one reactor; and the results of licensees participation in the Interlaboratory Comparison Program defined in the ODCM.

2. Deleted

3. Other Environmental Reports (non-radiological, non-aquatic)

Written reports for the following items shall be submitted to the appropriate NRC Regional Administrator:

a. Environmental events that indicate or could result in a significant environmental impact casually related to plant operation. The following are examples: excessive bird impaction; onsite plant or animal disease outbreaks; unusual mortality of any species protected by the Endangered Species Act of 1973; or increase in nuisance organisms or conditions. This report shall be submitted within 30 days of the event and shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact and plant operating characteristics, (b) describe the probable cause of the event, (c) indicate the action taken to correct the reported event, (d) indicate the corrective action taken to preclude repetition

of the event and to prevent similar occurrences involving similar components or systems, and (e) indicate the agencies notified and their preliminary responses.

b. Proposed changes, test or experiments which may result in a significant increase in any adverse environmental impact which was not previously reviewed or evaluated in the Final Environmental Statement or supplements thereto. This report shall include an evaluation of the environmental impact of the proposed activity and shall be submitted 30 days prior to implementing the proposed change, test or experiment.

D. Special Reports

Unless otherwise indicated, special reports required by the Technical Specifications shall be submitted to the appropriate NRC Regional Administrator within the time period specified for each report.