

Revised Exhibit C

Prairie Island Nuclear Generating Plant

License Amendment Request Dated February 22, 1993

REVISED TECHNICAL SPECIFICATION PAGES

Exhibit C consists of revised pages for the Prairie Island Nuclear Generating Plant Technical Specifications with the proposed changes incorporated as listed below:

Pages

TS-xiii  
TS.6.1-1  
TS.6.1-2  
TS.6.1-3  
TABLE TS.6.1-1  
TS.6.2-3  
TS.6.2-4  
TS.6.2-5  
TS.6.2-6  
TS.6.4-1  
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APPENDIX A TECHNICAL SPECIFICATIONSLIST OF FIGURES

<u>TS FIGURE</u>	<u>TITLE</u>
2.1-1	Safety Limits, Reactor Core, Thermal and Hydraulic Two Loop Operation
3.1-1	Unit 1 and Unit 2 Reactor Coolant System Heatup Limitations
3.1-2	Unit 1 and Unit 2 Reactor Coolant System Cooldown Limitations
3.1-3	DOSE EQUIVALENT I-131 Primary Coolant Specific Activity Limit Versus Percent of RATED THERMAL POWER with the Primary Coolant Specific Activity >1.0 uCi/gram DOSE EQUIVALENT I-131
3.9-1	Prairie Island Nuclear Generating Plant Site Boundary for Liquid Effluents
3.9-2	Prairie Island Nuclear Generating Plant Site Boundary for Gaseous Effluents
3.10-1	Required Shutdown Margin Vs Reactor Boron Concentration
4.4-1	Shield Building Design In-Leakage Rate

## 6.0 ADMINISTRATIVE CONTROLS

### 6.1 Organization

- A. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite activities necessary for safe operation and maintenance of the plant. The Plant Manager shall delegate in writing the succession to this responsibility during his absence. The General Manager Prairie Island Site has the responsibility for the Fire Protection Program.

B. Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for plant operation and corporate management. The onsite and offsite organizations shall include the positions responsible for activities affecting plant safety.

1. Lines of authority, responsibility and communication shall be established and defined for the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the Operational Quality Assurance Plan or the Updated Safety Analysis Report.
2. There shall be an individual executive position (Vice President Nuclear Generation) in the offsite organization having corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining and providing technical support to the plant to ensure nuclear safety.
3. There shall be an individual management position (Plant Manager) in the onsite organization having responsibility for overall unit safe operation and who shall have control over those onsite resources necessary for safe operation and maintenance of the plant.
4. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

C. Plant Staff:

1. Each on duty shift shall be composed of at least the minimum shift crew composition shown on Table TS.6.1-1.
2. For each reactor that contains fuel: a licensed operator in the control room.

3. At least two licensed operators shall be present in the control room during a reactor startup, a scheduled reactor shutdown, and during recovery from a reactor trip. These operators are in addition to those required for the other reactor.
  4. An individual qualified in radiation protection procedures shall be on site when fuel is in a reactor.
  5. All refueling operations shall be directly supervised by a licensed Senior Reactor Operator or a Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
  6. A fire brigade of at least five members shall be maintained on site at all times.\* The fire brigade shall not include the six members of the minimum shift crew for safe shutdown of the reactors.
  7. The General Superintendent Plant Operations shall be formerly licensed or hold a current license.
  8. At least one member of plant management holding a current Senior Reactor Operator license shall be assigned to the plant operations group on a long term basis (approximately two years). This individual shall not be assigned to a rotating shift.
- D. Each member of the plant staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the General Superintendent Radiation Protection who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975, and (2) the Shift Manager who shall have a bachelors degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents, and (3) the General Superintendent Plant Operations who shall meet the requirements of ANSI N18.1-1971, except that NRC license requirements are as specified in Specification 6.1.C.7. The training program shall be under the direction of a designated member of Northern States Power management.

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 \*Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of Fire Brigade members provided immediate action is taken to restore the Fire Brigade to within the minimum requirements.

- E. A training program for the fire brigade shall be maintained under the direction of a designated member of Northern States Power management. This program shall meet the requirements of Section 27 of the NFPA Code - 1976 with the exception of training scheduling. Fire brigade training shall be scheduled as set forth in the training program.
- F. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel. Procedures shall include the following provisions:
  - 1. Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a nominal 40-hour week while the plant is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modifications, on a temporary basis, the following guidelines shall be followed:
    - a. An individual should not be permitted to work more than 16 hours straight excluding shift turnover time.
    - b. Overtime should be limited for all nuclear plant staff personnel so that total work time does not exceed 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 84 hours in any seven day period, all excluding shift turnover time. Individuals should not be required to work more than 15 consecutive days without two consecutive days off.
    - c. A break of at least eight hours including shift turnover time should be allowed between work periods.
    - d. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.
    - e. Shift Emergency Coordinator (SEC) on-site rest time periods shall not be considered as hours worked when determining the total work time for which the above limitations apply.

TABLE TS.6.1-1

## MINIMUM SHIFT CREW COMPOSITION (Note 1 and 3)

CATEGORY	BOTH UNITS IN COLD SHUTDOWN OR REFUELING SHUTDOWN	ONE UNIT IN COLD SHUTDOWN OR REFUELING SHUTDOWN AND ONE UNIT ABOVE COLD SHUTDOWN	BOTH UNITS ABOVE COLD SHUTDOWN
No. Licensed Senior Operators (LSO)	2 (Note 2)	2 (Notes 2, 4)	2 (Note 4)
Total No. Licensed Operators (LSO & LO)	4	4	5
Total No. Licensed & Unlicensed Operators	6	7	8
Shift Manager (Note 5)	0	1	1

NOTES:

1. Shift crew composition may be one less than the minimum requirements for a period of time not to exceed two hours in order to accommodate an unexpected absence of one duty shift crew member provided immediate action is taken to restore the shift crew composition to within the minimum requirements specified.
2. Does not include the licensed Senior Reactor Operator, or Senior Reactor Operator Limited to Fuel Handling, supervising refueling operations.
3. Each LSO and LO shall be licensed on each unit.
4. One LSO shall be in the control room at all times when a reactor is above cold shutdown.
5. The Shift Manager performs the functions of the Shift Technical Advisor

- f. Investigation of all Reportable Events and events requiring Special Reports to the Commission.
  - g. Revisions to the Facility Emergency Plan, Facility Security Plan, and the Fire Protection Program.
  - h. Operations Committee minutes to determine if matters considered by that Committee involve unreviewed or unresolved safety questions.
  - i. Other nuclear safety matters referred to the SAC by the Operations Committee, plant management or company management.
  - j. All recognized indications of an unanticipated deficiency in some aspect of design or operation of safety related structures systems, or components.
  - k. Reports of special inspections and audits conducted in accordance with Specification 6.3.
  - l. Changes to the Offsite Dose Calculation Manual (ODCM)
  - m. Review of investigative reports of unplanned releases of radioactive material to the environs.
6. Audit The operation of the nuclear power plant shall be audited formally under the cognizance of the SAC to assure safe facility operation.
- a. Audits of selected aspects of plant operation, as delineated in Paragraph 4.4 of ANSI N18.7-1972, shall be performed with a frequency commensurate with their nuclear safety significant and in a manner to assure that an audit of all nuclear safety related activities is completed within a period of two years. The audits shall be performed in accordance with appropriate written instructions and procedures.
  - b. Audits of aspects of plant radioactive effluent treatment and radiological environmental monitoring shall be performed as follows:
    - 1. Implementation of the Offsite Dose Calculation Manual at least once every two years.
    - 2. Implementation of the Process Control Program for solidification of radioactive wastes at least once every two years.
    - 3. The Radiological Environmental Monitoring Program and the results thereof, including quality controls, at least once every year.
  - c. Periodic review of the audit program should be performed by the SAC at least twice a year to assure its adequacy.
  - d. Written reports of the audits shall be reviewed by the Vice President Nuclear Generation, by the SAC at a scheduled meeting, and by members of management having responsibility in the areas audited.

7. Authority

The SAC shall be advisory to the Vice President Nuclear Generation.

8. Records

Minutes shall be prepared and retained for all scheduled meetings of the Safety Audit Committee. The minutes shall be distributed within one month of the meeting to the Vice President Nuclear Generation, each member of the SAC and others designated by the Chairman. There shall be a formal approval of the minutes.

9. Procedures

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

- a. Subjects within the purview of the group.
- b. Responsibility and authority of the group.
- c. Mechanisms for convening meetings.
- d. Provisions for use of specialists or subgroups.
- e. Authority to obtain access to the nuclear power plant operating record files and operating personnel when assigned audit functions.
- f. Requirements for distribution of reports and minutes prepared by the group to others in the NSP organization.



## B. Operations Committee (OC)

## 1. Membership

The Operations Committee shall consist of at least six (6) regular members drawn from the key supervisors of the onsite staff. The key supervisors include, at least, the following positions: Plant Manager, General Superintendent Plant Operations, General Superintendent Plant Maintenance, General Superintendent Radiation Protection and plant engineering supervisors.

Alternates to the regular members shall be designated in writing by the Chairman to serve on a temporary basis. No more than two alternates shall participate as voting members of the Operations Committee at any one time.

The Plant Manager shall serve as Chairman of the OC and shall appoint a regular member to act as Chairman in his absence.

## 2. Meeting Frequency

The Operations Committee will meet on call by the Chairman or as requested by individual members and at least monthly.

## 3. Quorum

A majority of the membership, including the Chairman.

## 4. Responsibilities The following subjects shall be reviewed by the Operations Committee:

- a. Proposed tests and experiments and their results.
- b. Modifications to plant systems or equipment as described in the Updated Safety Analysis Report and having nuclear safety significance or which involve an unreviewed safety question as defined in Paragraph 50.59 (c), Part 50, Title 10, Code of Federal Regulations.
- c. Proposals which would effect permanent changes to normal and emergency operating procedures and any other proposed changes or procedures that will affect nuclear safety as determined by the Plant Manager.
- d. Proposed changes to the Technical Specifications or operating licenses.
- e. All reported or suspected violations of Technical Specifications, operating license requirements, administrative procedures, operating procedures, Results of investigations, including evaluation and recommendation to prevent recurrence will be reported in writing to the Vice President Nuclear Generation and to the Chairman of the Safety Audit Committee.

- f. Investigations of all Reportable Events and events requiring Special Reports to the Commission.
- g. Drills on emergency procedures (including plant evacuation) and adequacy of communication with offsite support groups.
- h. All procedures required by these Technical Specifications, including implementing procedures of the Emergency Plan, and the Security Plan (except as exempted in Section 6.5.F), shall be reviewed initially and periodically with a frequency commensurate with their safety significance but at an interval of not more than two years. Maintenance work requests and their associated procedures shall be reviewed per the requirements of Section 6.2.C.
- i. Special reviews and investigations, as requested by the Safety Audit Committee.
- j. Review of investigative reports of unplanned releases of radioactive material to the environs.
- k. All changes to the Process Control Program (PCP) and the Offsite Dose Calculation Manual (ODCM).
- l. The review of safety evaluations, when safety evaluations are required by 10 CFR Part 50, Section 50.59, for procedures or procedure changes to verify that such actions do not constitute an unreviewed safety question.

#### 5. Authority

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

#### 6. Records

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

#### 7. Procedures

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

- a. Responsibility and authority of the group

## 6.4 SAFETY LIMIT VIOLATION

If a Safety Limit is exceeded, the reactor shall be shut down and the Commission shall be notified immediately. It shall also be promptly reported to the Vice President Nuclear Generation and the Chairman of the Safety Audit Committee, or their designated alternates. A safety limit violation report shall be prepared. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) the basis for corrective action taken to preclude recurrence. The report shall be reviewed by the Operations Committee. The safety limit violation report shall be submitted to the Commission, the Vice President Nuclear Generation and the Safety Audit Committee within two weeks of the event.

Operation shall not be resumed until authorized by the Nuclear Regulatory Commission.

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 Semi-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.