

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

NORTHERN STATES POWER COMPANY

DOCKET NO. 50-306

PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 35 License No. DPR-60

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The applications for amendment by Northern States Power Company (the licensee) dated June 25, 1976 and February 20, 1978, comply 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.

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

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 35, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Chuveneer

A. Schwencer, Chief Operating Reactors Branch #1 Division of Operating Reactors

Attachment: Changes to the Technical Specifications

Date of Issuance: February 29, 1980

ATTACHMENT TO LICENSE AMENDMENTS NOS. 41 AND 35

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

DOCKETS NOS. 50-282 AND 50-306

Replace the following pages of the Technical Specifications contained in Appendix B of the above-indicated licenses with the attached pages bearing the same numbers. The changes areas on the revised pages are reflected by a marginal line.

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B-2	B-2
B-12	B-12

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2.0 PROTECTION CONDITIONS

2.1 Closed Cycle Operation

Objective: To minimize the impact on the aquatic biota by limiting the water appropriation and the heat release to the river.

<u>Specification</u>: The plant cooling water system will be operated in the closed cycle mode to the maximum extent practicable. Appropriation of river water is restricted to makeup for evaporative losses and a maximum daily average blowdown of 150 cfs. Operation of the plant in other than closed cycle mode shall be reported annually.

Operation in the open cycle mode is permitted during the winter when extremely cold conditions might preclude operation of the mechanical draft cooling towers. Operation in the open cycle mode is permitted for those test programs described in section four of these specifications. Protection conditions unique to the open cycle mode are applicable, without exception, during such periods of adverse cooling tower operating conditions or testing.

Basis: The plant is provided with cooling towers with sufficient capacity to dissipate a major fraction of the heat rejected in the condensers. Operation in the closed cycle mode greatly reduces entrainment of aquatic biota compared to open cycle. Most of the heat is discharged directly to the air rather than to the river as an intermediary. Consequently, the impact on the aquatic biota in the receiving water may be substantially less.

2.2 Thermal

2.2.1 Maximum Discharge Temperature

Objective: Limit the maximum temperature of the discharge water to protect the indigenous aquatic biota.

Specification: The daily average circulating water temperature shall not exceed the ambient river water temperature by more than $5^{\circ}F$ at the point of discharge to the river for river temperatures greater than $45^{\circ}F$, but in no case shall the

Amendment No. 41, Unit 1 Amendment No. 35, Unit 2

3.3 Fish Impingement

Objective: To determine by number, size and species, fish loss in the traveling screens of the intake structure.

Specification: Fish loss by impingement on the traveling screens shall be determined by biweekly (alternate weeks) sampling. For each alternate week, fish collected in the trash basket shall be counted, identified and reported in the Annual Environmental Monitoring and Ecological Studies Program Report.

Basis: The determination of the species and number of the fish actually lost will provide the staff with the data necessary to determine after an appropriate period of time whether environmental protection will be needed to protect the fish population in Sturgeon Lake and in the Mississippi River.

3.4 Chemical

3.4.1 Chlorine

Objective: To ensure that the amount of residual chlorine discharged does not accelerotection condition 2.4.1 by monitoring the amount of total residual chlorine discharge at the outfall.

regulated and a limit on the rate set so that the total residual chlorine ischarged at the outfall does not exceed the protection corditions. Once each month, during a chlorination cycli, a sample will be taken at the outfall and analyzed for total residual chlorine.

Basis: During no mal power operation, the service water system will be chlorinated to control marine growth in the system. Curves for chlorine concentrations will be developed as functions of chlorine feed rates and concentration at the outfall. After these curves are developed, a test will be conducted to ensure that the total residual chlorine concent ation at the outfall does not exceed 0.05 ppm. The test will consist of analyzing samples taken at the outfall five minutes after the start of chlorine injection and again at ten and fifteen minutes after the .start. If the total residual chlorine concentration at the outfall in any of these samples is found to be greater than 0.05 ppm, the feed rate will be reduced until with repetition of this procedure the concentration is less than or equal to 0.05 ppm. Once the feed rates in relation to

> Amendment No. 41, Unit 1 Amendment No. 35, Unit 2