

UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

DOCKET NO. 50-282  
50-306

REQUEST FOR AMENDMENT TO  
OPERATING LICENSES DPR-42 & DPR-60

LICENSE AMENDMENT REQUEST DATED October 25, 1996

Northern States Power Company, a Minnesota corporation, requests authorization for changes to Appendix A of the Prairie Island Operating License as shown on the attachments labeled Exhibits A, B, and C. Exhibit A describes the proposed changes, reasons for the changes, safety evaluation and a significant hazards evaluation. Exhibits B and C are copies of the Prairie Island Technical Specifications incorporating the proposed changes.

This letter contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

By Michael D Wadley  
Michael D Wadley  
Plant Manager  
Prairie Island Nuclear Generating Plant

On this 25<sup>th</sup> day of October 1996 before me a notary public in and for said County, personally appeared Michael D Wadley, Plant Manager, Prairie Island Nuclear Generating Plant, and being first duly sworn acknowledged that he is authorized to execute this document on behalf of Northern States Power Company, that he knows the contents thereof, and that to the best of his knowledge, information, and belief the statements made in it are true and that it is not interposed for delay.

Marcia K. LaCore



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## **Exhibit A**

### **Prairie Island Nuclear Generating Plant License Amendment Request Dated October 25, 1996**

#### **Evaluation of Proposed Changes to the Technical Specifications Appendix A of Operating License DPR-42 and DPR-60**

Pursuant to 10 CFR Part 50, Sections 50.59 and 50.90, the holders of Operating Licenses DPR-42 and DPR-60 hereby propose the following changes to Appendix A, Technical Specifications:

#### **Background**

In 1995 the NRC issued a revision to 10 CFR Part 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors." This revision established alternative requirements which may be voluntarily adopted. We have chosen to adopt Option B of the new rule.

This amendment request proposes a change to TS.4.4.A, "Containment Leakage Tests," to incorporate the requirements of 10 CFR Part 50, Appendix J, Option B, which became effective October 26, 1995. The change would delete the current reference to 10 CFR Part 50, Appendix J, published in the Federal Register February 14, 1973. In addition, a new section is proposed, TS.6.5.J, "Containment Leakage Rate Testing Program," which establishes the requirements of the program to be in accordance with the guidelines contained in Regulatory Guide 1.163, dated September 1995, consistent with the Improved Standard Technical Specifications. Also, the Technical Specification Bases section for TS.4.4 has been modified to reflect the leak test program changes.

#### **Proposed Changes**

The specific wording changes to the Technical Specifications are shown in Exhibits B and C.

##### **1. Proposed Changes to Technical Specification 4.4**

TS.4.4.A, "Containment Leakage Tests," is being replaced in its entirety, replacing the test requirements for Types A, B, and C testing with statements referring to the "Containment Leakage Rate Testing Program," which is specified in the new TS.6.5.J. Acceptance criteria for containment isolation valve leakage tests remain the same as the current Technical Specification requirements.

2. Proposed New Technical Specification TS.6.5.J.

New Specification TS.6.5.J, "Containment Leakage Rate Testing Program," is being added to establish that the requirements for the test program are to be in accordance with the guidelines contained in Regulatory Guide 1.163, dated September 1995. Also, the section delineates the leakage rate acceptance criteria, which are unchanged from the current Technical Specifications.

3. Proposed changes to the Technical Specification Bases for TS.4.4

The Bases for Specification 4.4 are revised in accordance with the changes made in the specification as discussed above. The changes to the bases are shown in Exhibit B.

**Justification**

The proposed amendment offers the benefit of reducing the frequency of leak rate testing of the containment and its components when the testing performance supports such a reduction. Reduction of the frequency of testing allows less downtime during refueling outages and less radiation exposure of testing personnel. NUREG-1493, "Performance-Based Containment Leak-Test Program," September 1995, concludes that the testing frequencies could be decreased as allowed by the new regulation without significant risk impacts.

**Safety Evaluation**

The amendment has been proposed to change the containment leak testing requirements from 10 CFR 50, Appendix J requirements of February 14, 1973 to Option B requirements of the current 10 CFR 50, Appendix J, which is based on the premise that the activities of the Regulatory Improvement Program should result in enhanced regulatory focus in areas that are more safety significant. As a result, an overall net increase in safety is expected from the program. The new performance-based regulation will be less prescriptive and will allow Prairie Island the flexibility to adopt cost-effective methods for implementing the safety objectives of the original rule. Therefore, this amendment does not introduce any new safety concerns.

**Conclusions**

In conclusion, Northern States Power believes there is reasonable assurance that health and safety of the public will not be adversely affected by the proposed Technical Specification changes.

## **Determination of Significant Hazards Considerations**

The proposed changes to the Operating License have been evaluated to determine whether they constitute a significant hazards consideration as required by 10 CFR Part 50, Section 50.91 using the standards provided in Section 50.92. This analysis is provided below:

- 1. The proposed amendment will not involve a significant increase in the probability or consequences of an accident previously evaluated.**

The proposed changes provide a mechanism within the TS for implementing a performance-based leakage rate test program which was promulgated by the revision to 10 CFR Part 50 to incorporate Option B to Appendix J. The proposed changes do not involve any physical or operational changes to structures, systems or components. The current safety analyses and safety design basis for the accident mitigation functions of the containment, the airlocks, and the containment isolation valves are maintained. Since the allowable containment leakage is still maintained within the analyzed limit assumed in the accident analyses, there is no adverse effect on either onsite or offsite dose consequences. Therefore, these changes will not increase the probability or consequences of an accident previously evaluated.

- 2. The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously analyzed**

The proposed changes do not involve any physical or operational changes to structures, systems or components. No new failure mechanisms beyond those already considered in the current plant safety analyses are introduced. Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any accident previously analyzed.

- 3. The proposed amendment will not involve a significant reduction in the margin of safety.**

Extending containment leakage rate test intervals from those currently provided in the Technical Specifications to those provided for in 10 CFR (Part) 50 Appendix J, Option B may slightly increase the risk due to an increased likelihood of containment leakage corresponding to the increased testing intervals. However, this is somewhat compensated by the corresponding risk reduction benefits received from the reduction in component cycling, stress, and wear associated with the increased intervals. When considering the total integrated risk, which includes all analyzed accident sequences, the possible additional risk associated with increasing test intervals is negligible.

The NRC letter to NEI (Nuclear Energy Institute) dated November 2, 1995, recognizes that changes similar to the proposed changes at PINGP (Prairie Island Nuclear Generating Plant) are required to implement Option B of 10 CFR (Part) 50,

Appendix J. In NUREG-1493, "Performance-Based Containment Leak-Test Program", dated September 1995, which forms the basis for the Appendix J revision, the NRC concludes that adoption of performance-based testing will not significantly reduce the margin of safety. The containment leak rate data and component performance history at PINGP are consistent with the conclusions reached in NUREG-1493 and NEI 94-01. Thus, the proposed license amendments do not involve a significant reduction in a margin of safety and will continue to support the regulatory goal of ensuring an essentially leak-tight containment boundary.

Based on the above, it is concluded that the proposed change does not result in a significant reduction in margin with respect to plant safety as defined in the USAR or the Technical Specification Bases.

Based on the evaluation described above, and pursuant to 10 CFR Part 50, Section 50.91, Northern States Power Company has determined that operation of the Prairie Island Nuclear Generating Plant in accordance with the proposed license amendment request does not involve any significant hazards considerations as defined by NRC regulations in 10 CFR Part 50, Section 50.92.

### **Environmental Assessment**

Northern States Power has evaluated the proposed changes and determined that:

1. The changes do not involve a significant hazards consideration,
2. The changes do not involve a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or
3. The changes do not involve a significant increase in individual or cumulative occupational radiation exposure.

Therefore, the proposed Technical Specification changes would not result in a significant radiological environmental impact.