

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

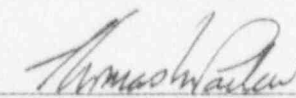
LICENSE AMENDMENT REQUEST DATED December 26, 1990

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, 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

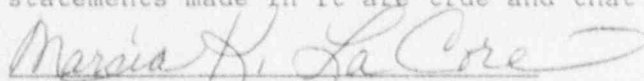


Thomas M Parker

Manager

Nuclear Support Services

On this 26<sup>th</sup> day of December 1990 before me a notary public in and for said County, personally appeared Thomas M Parker, Manager Nuclear Support Services, 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.



## Exhibit A

### Prairie Island Nuclear Generating Plant License Amendment Request Dated December 26, 1990

#### 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:

#### 1. Feedwater Isolation Changes

##### Proposed Changes

Add a second page to Technical Specification Table TS.3.5-4 as shown in Exhibit B to incorporate limiting conditions for operations for feedwater isolation.

Revise Item 11 of Technical Specification Table TS.4.1-1 as shown in Exhibit B to indicate surveillance of both low and high steam generator water level instrumentation.

##### Reason For Changes

Generic Letter 89-19, "Request for Action Related to Resolution of Unresolved Safety Issue A-47" recommended that Technical Specifications for all Westinghouse plants include provisions to periodically verify the operability of the main feedwater overflow protection and ensure that the automatic overflow protection is operable during reactor power operation. In our response to Generic Letter 89-19, dated March 15, 1990, we committed to submit a License Amendment Request to revise Technical Specification Table TS.3.5-4 to include limiting conditions for operations for feedwater isolation. The changes to Table TS.3.5-4, as shown in Exhibit B, are provided in response to that commitment.

The NRC closeout of our response to Generic Letter 89-19, transmitted by letter dated July 17, 1990, requested that Technical Specification Surveillance Section 4.0 also be changed to indicate surveillance of both low and high steam generator water level instrumentation. The changes to Item 11 of Table TS.4.1-1, as shown in Exhibit B, are provided in response to that request.

Safety Evaluation and 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 will not reduce the ability of the Feedwater Isolation System to perform its intended safety function (steam generator overfill protection). Inclusion of Feedwater Isolation Limiting Conditions for Operations and surveillance requirements for both low and high steam generator level instrumentation will reduce the potential for a steam generator overfill event. By reducing the potential for a steam generator overfill event the probability of a steamline break or a steam generator tube rupture resulting from an overfill event may also be reduced.

The actual surveillance testing performed at power will not be affected by the proposed changes. The proposed changes are only adding currently performed surveillance tests to the Technical Specifications. No additional testing beyond what is already performed will be required. Because there is no additional testing required, the addition of the proposed surveillance requirements to the Technical Specifications will have no effect on the probability or consequences of an accident previously evaluated.

Therefore, based on the conclusions of the above discussion, the proposed changes will not involve a significant increase in 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.

There are no new failure modes or mechanisms associated with the proposed changes. The proposed changes do not involve any additional testing or any modification in the operational limits or physical design of the involved systems. The change merely invokes new Technical Specification limiting conditions for operation and surveillance requirements for the feedwater isolation instrumentation, thus reducing the potential for a steam generator overfill event.

As discussed above, the proposed changes do not result in any significant change in the configuration of the plant, equipment design or equipment use nor do they require any change in the accident analysis methodology. Therefore, no different type of accident is created. No safety analyses are affected. The accident analyses presented in the Updated Safety Analysis Report remain bounding.

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

The incorporation of limiting conditions for operations and additional surveillance requirements for the feedwater isolation instrumentation will enhance the margin of safety provided by the Technical Specifications. The increase in the margin of safety is provided by the reduction in the potential for a steam generator overflow event and the resulting reduction in the probability of a steamline break or a steam generator tube rupture resulting from an overflow event. Therefore, the proposed changes will not result in a significant reduction in the plant's margin of safety.

The Commission has provided guidance concerning the application of the standards in 10 CFR 50.92 for determining whether a significant hazards consideration exists by providing certain examples of amendments that will likely be found to involve no significant hazards considerations. These examples were published in the Federal Register on March 6, 1986.

The changes to the Prairie Island Technical Specifications proposed above are equivalent to NRC example (ii), because they involve changes that constitute additional limitations, restrictions or controls not presently included in the Technical Specifications. Based on this guidance and the reasons discussed above, we have concluded that the proposed changes do not involve a significant hazards consideration.

2. Steam Generator Flow Mismatch Surveillance Deletion

Proposed Changes

Revise Item 12 of Table TS.4.1-1 as shown in Exhibit B to eliminate the reference to flow mismatch and to only require surveillance of the steam flow instrument channels.

Revise Table TS.4.1-1 as shown in Exhibit B to eliminate the footnote referenced from Item 12.

Reason For Changes

License Amendments Nos. 87 and 80 issued by letter dated April 3, 1989 found the Technical Specification changes associated with the elimination of the reactor trip initiated by low steam generator water level coincidence with steam/feedwater mismatch acceptable. However, the limiting conditions for operation and surveillances associated with that reactor trip remained in the Technical Specifications with footnotes stating that they would no longer be applicable following installation of the digital feedwater control system.

Following completion of the installation of the digital feedwater control system, the limiting conditions for operation and associated footnote were

removed from the Technical Specifications by License Amendments Nos. 92 and 85, issued by letter dated March 13, 1990. Due to an oversight, the associated surveillance (Item 12 of Table TS.4.1-1) was not revised to eliminate the reference to flow mismatch and the footnote referenced from Item 12 was not eliminated.

The intent of the proposed changes described above is to complete the removal of the steam/feedwater flow mismatch reactor trip from the Prairie Island Technical Specifications as previously approved by License Amendments Nos. 87 and 80.

#### Safety Evaluation and 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.

Removal of the reactor trip initiated by low steam generator level coincident with steam/feedwater flow mismatch was previously approved by License Amendments Nos. 87 and 80. The proposed changes are administrative in nature, and are only removing material from the Technical Specifications approved for removal by prior license amendments.

Therefore, based on the discussion above, and because the subject reactor trip is no longer in service, removal of the surveillance requirements associated with it will not involve a significant increase in 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.

There are no new failure modes or mechanisms associated with the proposed changes. The proposed changes do not involve any additional modifications in the operational limits or physical design of the involved systems not previously approved. The change merely removes material from the Technical Specifications approved for removal by prior license amendments.

As discussed above, the proposed changes do not result in any significant change in the configuration of the plant, equipment design or equipment use nor do they require any change in the accident analysis methodology. Therefore, no different type of accident is created. No safety analyses are affected. The accident analyses presented in the Updated Safety Analysis Report remain bounding.

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

The proposed changes are administrative in nature, and are only removing material from the Technical Specifications approved for removal by prior license amendments. Because the changes are administrative in nature and are not making any changes that have not already been approved by the NRC, the proposed changes will not result in any reduction in the margin of safety provided by the Technical Specifications.

The Commission has provided guidance concerning the application of the standards in 10 CFR 50.92 for determining whether a significant hazards consideration exists by providing certain examples of amendments that will likely be found to involve no significant hazards considerations. These examples were published in the Federal Register on March 6, 1986.

The changes to the Prairie Island Technical Specifications proposed above are equivalent to NRC example (i), because they are purely administrative changes to the Technical Specifications. Based on this guidance and the reasons discussed above, we have concluded that the proposed changes do not involve a significant hazards consideration.

#### Environmental Assessment

This license amendment request does not change effluent types or total effluent amounts nor does it involve an increase in power level. Therefore, this change will not result in any significant environmental impact.