

UNITED STATES NUCLEAR REGULATORY COMMISSIONNORTHERN STATES POWER COMPANYDOCKETS NOS. 50-282 AND 50-306ENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of amendments to Facility Operating Licenses Nos. DPR-42 and DPR-60, issued to Northern States Power Company (the licensee), for operation of the Prairie Island Nuclear Generating Plant, Units Nos. 1 and 2, located in Goodhue County, Minnesota.

ENVIRONMENTAL ASSESSMENTIdentification of Proposed Action:

The proposed amendments would revise the Technical Specifications (TSs) to change the values of the nuclear hot channel factor ( $F_Q$ ) and the nuclear enthalpy rise in the hot channel factor ( $F_{\Delta H}$ ) as they relate to the power distribution limits that are used in the departure from nucleate boiling (DNB) calculations for analyzing various potential accidents. Specifically,  $F_Q$  and  $F_{\Delta H}$  will have assigned values of 0.50 and 1.70 respectively, instead of the existing condition where the assigned values are based on a function of each other. The proposed action is in accordance with the licensee's application for amendment dated July 5, 1988.

The Need for the Proposed Action:

The proposed change to the TSs is based on the new evaluation model. This change is necessary to (1) revise the surface heat transfer coefficient

used in the analysis of the rod ejection accident; (2) increase the reliability factor (RF) applied to Doppler coefficient; and (3) ensure conservatism in all cases related to the revised SCRAM reactivity insertion curve and the updated rod bow penalty factor for the minimum departure from nucleate boiling ratio (MDNBR).

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed revision to the TSs. The proposed revision would change the  $F_Q$  and  $F_{\Delta H}$  factors to specific values of 2.50 and 1.70 respectively, instead of determining these factors based on a functional curve related to both values. The evaluation demonstrates that operation of the plant does not exceed the acceptable thermal limits and is bounded by previously approved safety analyses. In addition, the impacts of operation in the proposed manner are within those impacts evaluated in the Final Environmental Statements related to operation of the facility. Therefore, the proposed change does not increase the probability or consequences of any accident, no changes are being made in the types of any effluents that may be released offsite, and there is no significant increase in the allowable individual or cumulative occupational radiation exposure. Accordingly, the Commission concludes that this proposed action would result in no significant radiological environmental impact.

With regard to potential nonradiological impacts, the proposed change to the TSs involves systems located within the restricted area as defined in 10 CFR Part 20. It does not affect nonradiological plant effluents and has no other environmental impact. Therefore, the Commission concludes that there are no significant nonradiological environmental impacts associated with the proposed amendment.

The Notice of Consideration of Issuance of Amendment and Opportunity for Hearing in connection with this action was published in the FEDERAL REGISTER on July 29, 1988 (53 FR 28737). No request for hearing or petition for leave to intervene was filed following this notice.

Alternative to the Proposed Action:

Since the Commission concluded that there are no significant environmental effects that would result from the proposed action, any alternatives with equal or greater environmental impacts need not be evaluated.

The principal alternative would be to deny the requested amendment. This would not reduce environmental impacts of plant operation and would result in reduced operational flexibility.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statements related to the Prairie Island Nuclear Generating Plant dated May 1973.

Agencies and Persons Consulted:

The Commission's staff reviewed the licensee's request and did not consult other agencies or persons.

FINDING OF NO SIGNIFICANT IMPACT

The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

Based upon the foregoing environmental assessment, we conclude that the proposed action will not have a significant effect on the quality of the human environment.

For further details with respect to this action, see the application for amendment dated July 5, 1988, which is available for public inspection at the

Commission's Public Document Room, 1717 H Street, NW., Washington, DC, and  
the Technology and Science Department, Minneapolis Public Library, 300  
Nicollet Mall, Minneapolis, Minnesota 55401.

Dated at Rockville, Maryland, this 31st day of August.

FOR THE NUCLEAR REGULATORY COMMISSION



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