

UNITED STATES NUCLEAR REGULATORY COMMISSION
NORTHERN STATES POWER COMPANY
DOCKET NOS. 50-282 AND 50-306
PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NOS. 1 AND 2
ENVIRONMENTAL ASSESSMENT AND FINDING OF
NO 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 (NSP, the licensee), for operation of Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2, located in Goodhue County, Minnesota.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed amendments would revise the technical specifications (TS) to take credit for soluble boron in the spent fuel pool in maintaining an acceptable margin of subcriticality. However, even if the spent fuel pool were to be completely filled with unborated water, the licensee's dilution event calculations show that the spent fuel pool would remain subcritical.

The Need for the Proposed Action:

Currently, compliance with the TS requirement to maintain criticality (k_{eff}) in the spent fuel pool to less than 0.95 with unborated water is accomplished through the use of Boraflex, a neutron absorber. However, recent tests have indicated that the Boraflex is showing degradation induced by gamma radiation. Maintaining a boron concentration of 1800 parts per million in the

spent fuel pool is more than sufficient to ensure that the k_{eff} is maintained below 0.95.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed action and concludes that the licensee's proposal to take credit for soluble boron in the spent fuel pool water to maintain k_{eff} less than or equal to 0.95 is acceptable.

The change will not increase the probability or consequences of accidents, 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 there are no significant radiological environmental impacts associated with the proposed action.

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

Alternatives to the Proposed Action:

Since the Commission has concluded there is no measurable environmental impact associated with the proposed action, any alternatives with equal or greater environmental impact need not be evaluated. As an alternative to the proposed action, the staff considered denial of the proposed action. Denial of the application would result in no change in current environmental impacts.

The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2.

Agencies and Persons Consulted:

In accordance with its stated policy, the NRC staff consulted with the Minnesota State official, Mr. Michael McCarthy of the Department of Public Services, on May 5, 1997, regarding the proposed actions. Mr. McCarthy had no comments.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated July 28, 1995, as revised February 21, 1997, which are available for public inspection at the Commission's Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and at the local public document room located at the Minneapolis Public Library, Technology and Science Department, 300 Nicollet Mall, Minneapolis, Minnesota 55401.

Dated at Rockville, Maryland, this 4th day of June 1997.

FOR THE NUCLEAR REGULATORY COMMISSION

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