

August 16, 1989

Docket Nos. 50-282
and 50-306

Mr. T. M. Parker, Manager
Nuclear Support Services
Northern States Power Company
414 Nicollet Mall
Minneapolis, Minnesota 55401

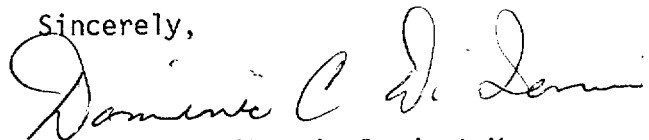
Dear Mr. Parker:

SUBJECT: ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT
(TAC NOS. 72972 AND 72973)

Enclosed is an Environmental Assessment and Finding of No Significant Impact. This assessment relates to your application dated April 6, 1989, for amendments to Facility Operating License Nos. DPR-42 and DPR-60 for the Prairie Island Nuclear Generating Plant, Units Nos. 1 and 2.

The assessment is being forwarded to the Office of the Federal Register for publication.

Sincerely,



Dominic C. DiIanni, Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:

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

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Sincerely,

A handwritten signature in cursive script, reading "Dominic C. DiIanni", is written over the typed name.

Dominic C. DiIanni, Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

UNITED STATES NUCLEAR REGULATORY COMMISSION
NORTHERN STATES POWER COMPANY
PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-282 AND 50-306
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 (licensee), for operation of the Prairie Island Nuclear Generating Plant, Units Nos. 1 and 2, located in Goodhue County, Minnesota.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed amendments would revise the provisions in the Technical Specifications relating to fuel enrichment.

The proposed action is in accordance with the licensee's application for amendment dated April 6, 1989.

The Need for the Proposed Action:

The proposed changes to the Technical Specifications are required so that the licensee can use higher enrichment fuel, and provide the flexibility of extending the fuel irradiation and permitting operation of longer fuel cycles.

Environmental Impacts of the Proposed Action:

The Commission has completed its evaluation of the proposed revisions to the Technical Specifications. The proposed revisions would permit use of fuel enriched to 4.25 weight percent Uranium-235. The safety considerations associated

with reactor operation with higher enrichment have been evaluated by the NRC staff. The staff has concluded that such a change would not adversely affect plant safety. The proposed changes have no adverse effect on the probability of any accident. The increased enrichment may slightly change the mix of fission products that might be released in the event of serious accident but such small changes would not significantly affect the consequences of serious accidents. No changes are being made in the types or amounts of any radiological effluents that may be released offsite during normal operation. There is also no significant increase in the allowable individual or cumulative occupational radiation exposure.

With regard to potential nonradiological impacts of reactor operation with higher enrichment, the proposed changes to the Technical Specifications involve systems located within the restricted area as defined in 10 CFR Part 20. They do not affect nonradiological plant effluents and have no other environmental impact.

The environmental impacts of transportation resulting from the use of higher enrichment fuel have been discussed in the staff assessment entitled, "NRC Assessment of the Environmental Effects of Transportation Resulting from Extended Full Enrichment and Irradiation," dated July 7, 1988 (53 FR 30355). As indicated therein, the environmental cost contribution of the proposed increase in the fuel enrichment is either unchanged or may in fact be reduced from those summarized in Table S-4 as set forth in 10 CFR 51.52(c).

Therefore, the staff concludes that there are no significant radiological or nonradiological environmental impacts associated with the proposed amendment.

Alternative to the Proposed Action:

Since the staff concluded that there are no significant environmental effects that would result from the proposed action, any alternative 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, Unit Nos. 1 and 2, dated May 1973.

Agencies and Persons Contacted:

The NRC 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 amendments.

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 amendments dated April 6, 1989, which is available for public inspection at the Commission's Public Document Room, 2120 L Street, N.W., Washington, D.C., and the Technology and Science Department, Minneapolis Public Library, 300 Nicollet Mall, Minneapolis, Minnesota 55401.

Dated at Rockville, Maryland this 16th day of August.

FOR THE NUCLEAR REGULATORY COMMISSION



Dominic C. DiIanni, Acting Director
Project Directorate III-1
Division of Reactor Projects - III, IV,
V & Special Projects
Office of Nuclear Reactor Regulation