

August 11, 1998

Mr. Roger O. Anderson, Director  
Nuclear Energy Engineering  
Northern States Power Company  
414 Nicollet Mall  
Minneapolis, MN 55401

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO  
FACILITY OPERATING LICENSES, PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION AND OPPORTUNITY FOR HEARING - PRAIRIE ISLAND  
NUCLEAR GENERATING PLANT, UNIT 1 AND UNIT 2 (TAC NOS. MA1675  
AND 1676)

Dear Mr. Anderson:

Enclosed is a copy of the subject notice that relates to Northern States Power Company's application for amendments for Prairie Island Nuclear Generating Plant, Units 1 and 2, dated February 27, 1998, as supplemented July 14, 1998.

The proposed amendments would allow a design modification to the existing Anticipated Transient Without Scram (ATWS) Mitigation System Actuation Circuitry (AMSAC). The design modification would install a Diverse Scram System (DSS) designed to meet the requirements of a DSS described by 10 CFR 50.62 (ATWS Rule) for non-Westinghouse designed plants and make major modifications to the existing AMSAC

The notice has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by:

Tae Kim, Senior Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-282  
and 50-306

Enclosure: Notice

cc w/encl: See next page

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Division of Reactor Projects - III/IV  
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DATE	8/ 11 /98		8/ 11 /98		8/ 11 /98		8/ 11 /98	

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

August 11, 1998

Mr. Roger O. Anderson, Director  
Nuclear Energy Engineering  
Northern States Power Company  
414 Nicollet Mall  
Minneapolis, MN 55401

SUBJECT: NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO  
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Sincerely,

A handwritten signature in cursive script, reading "Tae Kim", is positioned above the typed name.

Tae Kim, Senior Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-282  
and 50-306

Enclosure: Notice

cc w/encl: See next page

Mr. Roger O. Anderson, Director  
Northern States Power Company

Prairie Island Nuclear Generating  
Plant

cc:

J. E. Silberg, Esquire  
Shaw, Pittman, Potts and Trowbridge  
2300 N Street, N. W.  
Washington DC 20037

Site Licensing  
Prairie Island Nuclear Generating  
Plant  
Northern States Power Company  
1717 Wakonade Drive East  
Welch, Minnesota 55089

Plant Manager  
Prairie Island Nuclear Generating  
Plant  
Northern States Power Company  
1717 Wakonade Drive East  
Welch, Minnesota 55089

Tribal Council  
Prairie Island Indian Community  
ATTN: Environmental Department  
5636 Sturgeon Lake Road  
Welch, Minnesota 55089

Adonis A. Neblett  
Assistant Attorney General  
Office of the Attorney General  
455 Minnesota Street  
Suite 900  
St. Paul, Minnesota 55101-2127

U.S. Nuclear Regulatory Commission  
Resident Inspector's Office  
1719 Wakonade Drive East  
Welch, Minnesota 55089-9642

Regional Administrator, Region III  
U.S. Nuclear Regulatory Commission  
801 Warrenville Road  
Lisle, Illinois 60532-4351

Mr. Stephen Bloom, Administrator  
Goodhue County Courthouse  
Box 408  
Red Wing, Minnesota 55066-0408

Kris Sanda, Commissioner  
Department of Public Service  
121 Seventh Place East  
Suite 200  
St. Paul, Minnesota 55101-2145

UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

DOCKET NOS. 50-282 AND 50-306

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENTS TO

FACILITY OPERATING LICENSES DPR-42 AND DPR-60

PROPOSED NO SIGNIFICANT HAZARDS

CONSIDERATION DETERMINATION, AND OPPORTUNITY FOR A HEARING

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

The proposed amendments would allow a design modification to the existing Anticipated Transient Without Scram (ATWS) Mitigation System Actuation Circuitry (AMSAC). The design modification would install a Diverse Scram System (DSS) designed to meet the requirements of a DSS described by 10 Code of Federal Regulations (10 CFR) 50.62 (ATWS Rule) for non-Westinghouse designed plants and make major modifications to the existing AMSAC.

Before issuance of the proposed license amendments, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendments would not (1) involve a significant increase in the probability or consequences of an accident

previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

1. Does operation of the facility with the proposed amendment[s] involve a significant increase in the probability or consequences of an accident previously evaluated?

The proposed changes affect two systems which are contributors to initiating events for previously evaluated anticipated operational occurrences. These systems are rod control and turbine generator. The AMSAC also affects the auxiliary feedwater system. The interaction of the AMSAC/DSS with these systems will not significantly increase the probability or consequences of an accident previously evaluated.

The addition of another means of initiating a signal to cause rods to drop into the core introduces an increased probability for an RCCA [rod cluster control assembly] Misalignment event (USAR [Updated Safety Analysis Report section] 14.4.3). Because the AMSAC/DSS circuitry has been designed to minimize spurious actuations, this increased probability is not significant. In addition, because the AMSAC/DSS circuitry is designed to provide a signal to each rod control power cabinet resulting in the cancellation of gripper coil current for all rods powered from that cabinet, the probability of dropping a single rod of sufficiently small worth not to trigger the negative rate reactor trip is not significant. Previous analysis has indicated that more than one rod dropping into the core at the same time will trigger the negative rate reactor trip.

The addition of another means of initiating a signal to cause a turbine trip introduces an increased probability for an event nearly identical to a Loss of External Electrical Load event (USAR 14.4.9). Because the AMSAC/DSS circuitry has been designed to minimize spurious actuations, this increased probability is not significant.

The addition of another means of initiating a signal to start auxiliary feedwater flow to the steam generators introduces an increased probability for an event similar to an Excessive Heat Removal Due to Feedwater System Malfunction event (USAR 14.4.6) though greatly reduced in magnitude. Because the flow capacity of the auxiliary feedwater system is much less than the flow capacity of the main feedwater system, the consequences of any spurious actuation of the auxiliary feedwater system are bounded by the Feedwater System Malfunction event. In addition, because the AMSAC/DSS circuitry has been designed to minimize spurious actuations the increased probability of this "event of negligible consequence" is not significant.

2. Does operation of the facility with the proposed amendment[s] create the possibility of a new or different kind of accident from any accident previously evaluated?

The AMSAC/DSS is an instrumentation system that is separated and isolated from the reactor protection system. The AMSAC/DSS may initiate a spurious signal which results in tripping the turbine generator, dropping some or all control rods into the core, starting auxiliary feedwater flow to the steam generators, or any combination of these events. Individually and in combination these events are well understood and have been previously analyzed. Review of this modification does not indicate that it will create the possibility for a new or different kind of accident from any accident previously evaluated.

3. Does operation of the facility with the proposed amendment[s] involve a significant reduction in a margin of safety?

Deterministic analyses have demonstrated that the proposed AMSAC/DSS will preserve all safety margins inherent in the fuel cladding and the RCS [reactor coolant system] boundary during postulated ATWS events.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish in the FEDERAL REGISTER a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

Written comments may be submitted by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and should cite the publication date and page number of this FEDERAL REGISTER notice. Written comments may also be delivered to Room 6D59, Two White Flint North, 11545 Rockville Pike, Rockville, Maryland, from 7:30 a.m. to 4:15 p.m. Federal workdays. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC.

The filing of requests for hearing and petitions for leave to intervene is discussed below.

By September 16, 1998, the licensee may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written request for a hearing and a petition for leave to intervene. Requests for a hearing and a petition for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. Interested persons should consult a current copy of 10 CFR 2.714 which is available 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. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition; and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.



As required by 10 CFR 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding, and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to 15 days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than 15 days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter. Each contention must consist of a specific statement of the issue of law or fact to be raised or controverted. In addition, the petitioner shall provide a brief explanation of the bases of the contention and a concise statement of the alleged facts or expert opinion which support the contention and on which the petitioner intends to rely in proving the contention at the hearing. The petitioner must also provide references to those specific sources and documents of which the petitioner is aware and on which the petitioner intends to rely to establish those facts or expert opinion. Petitioner must provide sufficient information to show that a genuine dispute exists with the applicant on a material issue of law or fact. Contentions shall be limited to matters within the scope of the amendment under consideration. The contention must be one which, if proven,

would entitle the petitioner to relief. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it immediately effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment request involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemakings and Adjudications Staff, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC, by close of business on the above date. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and to Jay Silberg, Esq., Shaw, Pittman, Potts, and Trowbridge, 2300 N Street, NW, Washington, DC 20037, attorney for the licensee.

Nontimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the presiding Atomic Safety and Licensing Board that the petition and/or request should be granted based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment dated February 27, 1998, as supplemented July 14, 1998, which is 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 *11<sup>th</sup>* day of August 1998.

FOR THE NUCLEAR REGULATORY COMMISSION



Tae Kim, Senior Project Manager  
Project Directorate III-1  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation