Central file

NSP

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

August 29, 1979

Mr. James G. Keppler
Director - Region III
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Dockets No. 50-282 and No. 50-306

In response to IE Bulletin 79-06C, the following is offered:

Short-Term Action Item 1

The actions required were implemented on July 31, 1979.

Short-Term Action Items 2 through 5 and Long-Term Action Item 1

Northern States Power Company has pursued the response to these items as a member of the Westinghouse Owners Group and has participated in all activities of the Group and its working committees. We have found that the Group's generic study applies to both Prairie Island units, and we fully subscribe to the Group position as follows:

2. A series of Loss of Coolant Accident (LOCA) analyses for a range of break sizes and a range of time lapses between initiation of break and pump trip applicable to the 2, 3, and 4 loop plants has been performed by the Westinghouse Owners Group. A report summarizing the results of the analysis of delayed Reactor Coolant Pump trip during small loss of coolant accidents for Westinghouse and NSSS will be submitted to Mr. D. F. Ross by Mr. Cordell Reed on August 31, 1979. In the report, maximum PCT's for each break size considered and pump shutoff times have been provided. The report concludes that, if the reactor coolant pumps are tripped prior to the reactor coolant system pressure reaching 1250 psia, the resulting peak clad temperatures are less than or equal to those reported in the FSAR. In addition, it is s own that there is a finite range of break sizes and RCP trip times in all cases 10 minutes or later which will result in PCT's

in excess of 2200°F as calculated with conservative Appendix K models. The operator in any event would have at least 10 minutes to trip the RCP's following a small break LOCA especially in light of the conservatisms in the calculations. This is appropriate for manual rather than automatic action based on the guidelines for termination of RCP operation presented in WCAP-9600.

3. The Westinghouse Owners Group has developed guidelines which were submitted to the NRC in Section 6 and Appendix A of WCAP 9600. The analyses provided as the response to item 2 are consistent with the guidelines in WCAP 9600. No changes to these guidelines are needed for both LOCA and non-LOCA transients.

4. The Owners Group effort to revise emergency procedures covers many issues including operation of the Reactor Coolant Pumps. The action taken in response to item 1 is sufficient as an interim measure, and no immediate need exists for changing our emergency procedures to include the tripping of the Reactor Coolant Pumps. The expected schedule for revising the LOCA, steamline break, and steam generator tube rupture emergency procedures is the following:

Mid-October:	Guidelines which have been reviewed by the NRC will be provided to each utility. Appropriate utility personnel associated with writing procedures will meet with the Owners Group Subcommittee on Procedures and Westinghouse to provide the background for revising their emergency procedures.
1 to 2 months from: Mid-October	Plant specific procedures will be revised.
3 to 4 months from: Mid-October	Revised procedures will be implemented and operators trained.

5. Analyses related to inadequate core cooling and definition of conditions under which a restart of the RCP's should be attempted will be performed. Resolution of the requirements for the analyses and an acceptable schedule for providing the analyses and guidelines and procedures resulting from the analyses will be arrived at between the Westinghouse Owners Group and the NRC staff.

Long-Term

As discussed in our response to short-term item 2, we do not believe that automatic tripping of the RCP's is a required function based on the analyses that have been performed and the guidelines that have been developed for manual RCP tripping. We propose that this item be discussed with the NRC staff following their review of the Owners Group submittal.

As discussed under Short-Term Item 2 above, a report summarizing the results of analysis of delayed reactor coolant pump trip during small loss of coolant accidents for Westinghouse units will be submitted to Mr. D. F. Ross by Mr. Cordell Reed on or about August 31, 1979. We request that Mr. Reed's submittal be incorporated in the Prairie Island Dockets No. 50-282 and No. 50-306.

Yours very truly,

GH Neils for LJW

L. J. Wachter
Vice President - Power Production
and System Operation

cc: Mr. G. Charnoff
Director - Office of Inspection and Enforcement
Washington, D.C.
Director - Office of Nuclear Reactor Regulation
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