

Northern States Power Company

414 Nicollet Mall Minneapolis, Minnesota 55401 Telephone (612) 330-5500



June 15, 1984

Director Office of Nuclear Reactor Regulation U S Nuclear Regulatory Commission Washington, DC 20555

> PRAIRIE ISLAND NUCLEAR GENERATING PLANT Docket Nos. 50-282 License Nos. DPR-42 50-306 DPR-60

Resolution of Asymmetric LOCA Loads Issue (Unresolved Safety Issue A-2)

In 1980 Westinghouse performed a preliminary structural analysis for the Prairie Island and Kewaunee Plants to address the issue of asymmetric LOCA loads resulting from breaks in the reactor coolant loop piping. Pipe rupture restraints were installed at Prairie Island and Kewaunee to reduce the break area near the reactor vessel to less than one square foot thereby reducing the postulated loads considered in this analysis. The analysis was submitted on our behalf for NRC Staff review on April 11, 1980 by Westinghouse.

On May 8, 1984 we received a number of questions related to the Westinghouse analysis from our Project Manager in the Division of Licensing. Our review of these questions indicated that a great deal of time and analytical effort, at a high cost, would be involved in answering them. The NRC Staff has recently approved a process for dropping asymmetric blowdown loads resulting from pipe breaks in reactor coolant loop piping from the design basis for plants. Generic Letter 84-04 dated February 1, 1984 describes the NRC Staff position on this matter.

The purpose of this letter is to provide, for the information of the NRC Staff, a description of our plans for resolution of this issue taking into account the guidance recently issued in Generic Letter 84-04. Northern States Power will contract with Westinghouse to perform a mechanistic fracture evaluation for the reactor coolant loops to provide justification for eliminating postulated double-ended breaks in this piping. When this analysis is completed, a request for exemption from the requirements of General Design Criterion 4 will be submitted in accordance with Generic Letter 84-04 to eliminate asymmetric blowdown loads from the design basis for the plant. This would also allow the removal of the rupture restraints recently installed in the reactor shield wall of both units.

8406290249 840615 PDR ADOCK 0500028

Dir of NRR, USNRC June 15, 1984 Page 2

Northern States Power Company

We believe that the Westinghouse analysis and our exemption request can be submitted by September 15, 1984 based on the schedule provided to us by Westinghouse. Please contact us if you have any questions related to our plans for resolving this issue.

.. 0

David Musolf Manager - Nuclear Support Services

DMM/dab

c: Regional Administrator-III, NRC Resident Inspector, NRC NRR Project Manager, NRC G Charnoff