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

Prairie Island Nuclear Generating Plant
Docket No. 50-282 License No. DPR-42
50-306 DPR-60

Resolution of Environmental Qualification
of Equipment in the Auxiliary Feedwater Pump Room

On September 19, 1984 a meeting was held in Bethesda, Maryland with members of the NRC Staff to discuss a recently discovered deficiency related to environmental qualification of electrical equipment in the auxiliary feedwater pump room at the Prairie Island Nuclear Generating Plant. Three acceptable options were identified by the NRC Staff at this meeting for resolving this matter. The purpose of this letter is to provide our commitment to implement one of these options.

The environmental qualification deficiency and acceptable options for resolving this deficiency were described in a summary of the meeting prepared by the NRC Licensing Project Manager for Prairie Island dated October 22, 1984. Northern States Power Company will implement option (1) described on page two of this meeting summary and relocate the turbine stop valves for the steam-driven auxiliary feedwater pumps outside of the auxiliary feedwater pump room.

We are now working with the Prairie Island architect-engineer to finalize the design for this modification. We will attempt to complete this work during the upcoming ten-year refueling and inspection outages scheduled to begin in January, 1985 for Unit No. 1 and August, 1985 for Unit No. 2. Additional schedule relief from the requirements of 10 CFR Part 50, Section 50.49, will be required for Unit No. 2. A request for schedule relief will be submitted when more information is available related to the design, procurement, and installation requirements for this modification.

We have reviewed the discrepancy in Section I.7 of Appendix I to the Prairie Island Final Safety Analysis Report and have concluded that following the modification described above, the analysis will be valid. Changes to the Updated Safety Analysis Report will be submitted following

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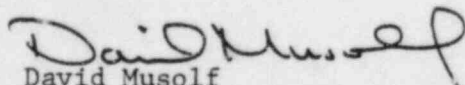
the modification to update the description of this system and the basis for concluding that the auxiliary feedwater pump room is a mild environment for electrical equipment qualification purposes.

To support continued operation of the Prairie Island plant prior to the completion of this modification, Impell Corporation was requested to perform a fracture mechanics evaluation of the steam supply piping in the auxiliary feedwater pump room. This analysis concluded:

1. The double-ended guillotine breaks that were previously postulated to cause harsh steam environments in the auxiliary feedwater pump room need not be postulated
2. There is significant margin on crack initiation for postulated cracks in the steam supply lines
3. The leakage from small, stable cracks is detectable
4. The leakage from larger cracks will not impact the function of safety related equipment

Therefore, we believe that operation of the plant may safely continue until the work is completed next year.

Please contact us if you require additional information related to our resolution of this matter.


David Musolf
Manager - Nuclear Support Services

cc: Regional Administrator-III, NRC
Resident Inspector, NRC
G Charnoff