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May 1, 1992

10 CFR Part 50
Section 50.54(f)

U S Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

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

Revised Response to Generic Letter 91-11, "Resolution of Generic Issues 48, 'LCOs for Class 1E Vital Instrument Buses', and 49, 'Interlocks and LCOs for Class 1E Tie Breakers' Pursuant to 10 CFR 50.54(f)"

Reference: Letter from Thomas M Parker, Northern States Power, to U S Nuclear Regulatory Commission dated January 29, 1992 titled "Response to Generic Letter 91-11, 'Resolution of Generic Issues 48, "LCOs for Class 1E Vital Instrument Buses", and 49, "Interlocks and LCOs for Class 1E Tie Breakers' Pursuant to 10 CFR 50.54(f)'"

This letter provides a revised response to Generic Letter 91-11, "Resolution of Generic Issues 48, 'LCOs for Class 1E Vital Instrument Buses', and 49, 'Interlocks and LCOs for Class 1E Tie Breakers' Pursuant to 10 CFR 50.54(f)". Questions from Mr Om Chopra of the NRC staff have prompted us to revise our response for clarity.

As recommended by Enclosure 1 to the Generic Letter, a review was conducted of the Prairie Island Nuclear Generating Plant vital instrument buses, their power supplies, and their associated procedures and instructions. A revised summary of the results of this review is provided as Attachment 1 to this letter.

Please contact us if you have any questions related to our response.

Thomas M Parker
Manager
Nuclear Support Services

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c: Regional Administrator - Region III, NRC
Senior Resident Inspector, NRC
NRR Project Manager, NRC
J E Silberg

Attachments: Affidavit to the US Nuclear Regulatory Commission
Attachment 1 - Generic Letter 91-11 Response

UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT DOCKET NO. 50-282
50-306

Revised Response to Generic Letter 91-11, "Resolution of Generic Issues 48, 'LCOs for Class 1E Vital Instrument Buses', and 49, 'Interlocks and LCOs for Class 1E Tie Breakers' Pursuant to 10 CFR 50.54(f)"

Northern States Power Company, a Minnesota corporation, with this letter is submitting information requested by NRC Generic Letter 91-11.

This letter contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

By _____
Thomas M Parker
Manager, Nuclear Support Services

On this 1st day of May 1992 before me a notary public in and for said County, personally appeared Thomas M Parker, Manager, Nuclear Support Services, and being first duly sworn acknowledged that he is authorized to execute this document on behalf of Northern States Power Company, that he knows the contents thereof, and that to the best of his knowledge, information, and belief the statements made in it are true and that it is not interposed for delay.

Marcia K LaCore

MARCIA K LaCORE
NOTARY PUBLIC—MINNESOTA
HENNEPIN COUNTY
My Commission Expires Sept. 24, 1993

Attachment 1

RESPONSE TO NRC GENERIC LETTER 91-11

The results of our review of the recommendations contained in Enclosure 1 to Generic Letter 91-11 are summarized below:

Generic Letter 91-11 Recommended Action

Ensure that your plant has procedures that include time limitations and surveillance requirements for:

1. *Vital instrument buses (typically 120V ac buses),*

   Results of Review:

   a. Time Limitations - Prairie Island Tech Specs allow no more than one vital instrument bus to be powered by an alternate source or its associated instrument inverter bypass source.

   b. Surveillance Requirements - Weekly surveillance procedures have been implemented to verify the operability and correct configuration of the vital instrument buses.

2. *Inverters or other onsite power sources to the vital instrument buses, and*

   Results of Review:

   a. Time Limitations - New adminstrative controls limit the maximum time an instrument inverter should be out of service (while the associated unit is above cold shutdown) to 24 hours. Only one instrument inverter should be out of service at a time. ~~A second~~ but one additional inverter supplying a vital instrument bus may be powered from an inverter bypass source for 8 hours.

   b. Surveillance Requirements - Weekly surveillance procedures have been implemented to verify the operability and correct configuration of the inverters and instrument buses.

3. *Tie breakers that can connect redundant class 1E buses at one unit or that can connect class 1E buses between units at the same site.*

   Results of Review:

   120VAC and DC Buses

   The 120VAC and DC buses at Prairie Island are not configured with bus ties.

   480V Buses

   Bus ties at the 480V level are between the opposite trains of the same unit and normally only used during cold shutdown.

The 480VAC bus ties will be eliminated when the Station Black Out / Electrical Safeguards Upgrade (SBO/ESU) modification is complete in 1994.

a. Time Limitations - Prairie Island administrative controls specifies an 8 hour limit on 480V bus tie closed time when the unit is above 200°F.

b. Surveillance Requirements - Weekly surveillance procedures have been implemented to ensure correct breaker alignment and indicated voltage on the 480V buses.

Other 480V Concerns

Group B pressurizer heaters' sources are switchable between a safeguards bus and a non-safeguards bus. Procedure C20.6 requires both breakers supplying the group B pressurizer heaters be opened before a transfer is made. Therefore, the transfer of the heaters is an administrative break-before-make transfer.

The supply breakers to motor control centers 1T1 and 1T2 can be switched from one unit to the other. These breakers are interlocked to only allow a break-before-make transfer. The break-before-make configuration prevents these load breakers from becoming a bus tie.

4.16 KV Buses

4.16 KV bus ties exist between the same trains of the opposite units and are used in the automatic voltage restoration scheme. This configuration has been evaluated by the Updated Safety Analysis Report section 8.3 which states that "in the extremely remote case of a bus tie breaker failure resulting in loss of the two associated buses, the engineered safety features on the remaining buses are sufficient for safe shutdown of either unit." This configuration is presently necessary because there are only two emergency diesel generators which are shared between the two units. Each diesel generator feeds one train on each unit and has the capacity to supply power for both the mitigation of a design basis accident on one unit and the safe shutdown of the other unit.

a. Time Limitations - There are no time limitations per the Updated Safety Analysis Report discussion reference above.

b. Surveillance Requirements - Weekly surveillance procedures will be implemented by April 30, 1992 to ensure correct breaker alignment and indicated voltage on the 4.16 KV buses.

After the SBO/ESU modification (which adds two additional emergency diesel generators), the 4.16 KV bus ties will be manually operated only (no longer closed as part of the voltage restoration scheme), and under administrative control. In addition, there will be two breakers per bus tie.