

March 22, 2001

10 CFR Part 2

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

Response to Notice of Violation, Inspection Report No. 00-13 (DRS)

Your letter of February 20, 2001, which transmitted Inspection Report No. 50-282/00-13 (DRS); 50-306/00-13 (DRS), required a response to a Notice of Violation. Our response to the notice is contained in the attachment to this letter.

In this response we repeat Nuclear Regulatory Commission commitments contained in Revision 1 to LER 1-00-04, dated March 22, 2001, noted as the corrective action statements in italics but make no new commitments. Please contact Jack Leveille (651-388-1121, Ext. 4142) if you have any questions related to this letter.



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c: Regional Administrator -- Region III, NRC
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Attachment: RESPONSE TO NOTICE OF VIOLATION

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RESPONSE TO NOTICE OF VIOLATION

VIOLATION

Title 10 of the Code of Federal Regulations, Part 50, Appendix B, Criterion III, "Design Control," requires, in part, that design control measures shall verify the adequacy of design and shall assure that appropriate quality standards are specified.

General Design Criteria 38, "Reliability and Testability of Engineered Safety Features," dated July 1967, required, in part, that all engineering safety features, and support systems such as the cooling water system, shall be designed to provide high functional reliability.

General Design Criteria 39, "Emergency Power for Engineering Safety Features," dated July 1967, required, in part, onsite power systems shall be provided and designed with adequate independency, redundancy and capability to permit the functioning required of the engineered safety systems, and support systems such as the cooling water system, assuming a single failure.

Contrary to the above, as of November 3, 2000:

- A. The licensee did not verify that the original design provided adequate independence, redundancy, or capability for the Units 1 and 2 cooling water pump lubricating water filter backwash systems. Specifically, the licensee did not verify that the original design provided safety related electrical power from a vital bus to these systems to assure continued functionality, assuming a single failure.
- B. The licensee did not maintain a quality standard for the cooling water pump lubricating water filter backwash systems, consistent with its safety related function. Specifically, a 1977 safety evaluation incorrectly reduced the classification of the drive shaft bearing lubricating water supply from safety related to non-safety related.

This violation is associated with a White SDP finding.

RESPONSE TO VIOLATION

The details of the conditions of the violation are contained in the Prairie Island LER 1-00-4, Revision 1, "Inoperability of Safeguards Cooling Water (Essential Service Water) Pumps Caused by Unqualified Lubricating Water Supply to the Pump Shaft Bearings," dated March 22, 2001. The LER was originally submitted December 1, 2000 and has been revised to correct some misunderstandings regarding the timeline of

plant conditions addressed in the LER. The revision also expands on the corrective actions.

Specifically, the system configuration at plant startup did not necessitate a safeguards power supply to the Filtered Water system backwash valves in order to provide lubricating water to the safeguards cooling water pumps. The requirement for a safeguards power supply did not occur until 1988 following a modification which made the lubricating water dependent on the backwash function. Hence, the statement of the specifics of the violation is not entirely accurate because it is based on the information which we provided in the original version of the LER. We accept the violation as a violation of the Appendix B design control criterion and the General Design Criteria 38 and 39 and are only pointing out the change of our understanding of the timing of the failure to provide an adequate power supply to the backwash valves.

Please refer to the LER for the history.

Reason for the Violation

As detailed in the LER, the reason for the violation was an inadequately prepared safety evaluation in 1977 which downgraded the lubricating water supply to the safeguards cooling water system, due to a weak safety evaluation process. Also addressed in the LER is the failure to catch this inappropriate downgrade in spite of several opportunities over the years.

Corrective Steps Taken and Results Achieved

The LER outlines the compensatory measures that were promptly taken following discovery of the design error.

Modifications have restored a qualified lubricating water supply to each of the safeguards cooling water pumps.

Corrective Steps To Avoid Further Violations

The following corrective actions are NRC commitments made in the LER:

- *The final disposition of the lubricating water supply will be managed through the design change process.*
- The safety evaluation that downgraded the water supply has been revised to correct the determination of the quality level required for the water supply; *the Q-list will also be revised.*

- *All safety evaluations, not associated with modifications, which have resulted in downgraded components will be re-reviewed. Additionally, a statistical sample of safety evaluations associated with modifications will be reviewed to determine if components were downgraded by the modification process and any downgrades identified will be evaluated for appropriateness.*
- *The related cooling water pump lubricating system design documentation will be reviewed and revised as necessary, including the technical manual.*
- *The root cause evaluation determined that several opportunities to catch the inappropriate downgrade made in 1977 were missed. A determination will be made of the fundamental reasons these opportunities were missed.*
- *A project has been initiated to continue determining the extent of condition by choosing risk significant systems and performing vertical slice assessments of those systems, in order to determine if additional unrecognized vulnerabilities exist.*

The Date When Full Compliance will be Achieved

Full compliance was achieved upon completion of the modifications establishing a safety related source of lubricating water to the safeguards cooling water pumps.