



Northern States Power Company

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May 25, 1988

Generic Letter 88-05

Director of Nuclear Reactor Regulation
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 Generic Letter 88-05, Boric Acid
Corrosion of Carbon Steel Reactor Pressure
Boundary Components in PWR Plants

The purpose of this letter is to respond to NRC Generic Letter 88-05 for the Prairie Island Nuclear Generating Plant.

Generic Letter 88-05 requested licensees of pressurized water reactors to "provide assurances that a program has been implemented consisting of systematic measures to ensure that boric acid corrosion does not lead to degradation of the assurance that the reactor coolant pressure boundary will have an extremely low probability of abnormal leakage, rapidly propagating failure, or gross rupture." Policies and practices are in place at Prairie Island to accomplish these goals. It has always been our policy to expeditiously repair all leaks in the Reactor Coolant System (RCS) to eliminate the potential for boric acid corrosion and radioactive contamination in the plant.

Our program for identification and correction of small RCS leakage has, until recently, been informal. In response to Generic Letter 88-05, a program document is being prepared which describes the Prairie Island policy with respect to identification and correction of small RCS leakage. The program document will contain the following elements:

1. Potential Critical Leak Locations

A list of principle locations where small leaks could cause corrosion of carbon steel RCS pressure boundary components will be included. This list will focus primarily on mechanical joints at locations adjacent to or over carbon steel materials.

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2. Methods for Identifying and Locating Small Leaks

Plant surveillance procedures and monitoring techniques will be specified which enable the identification of leaks remotely or visually during routine inspections of RCS leakage inside containment.

Remote leakage detection methods have a sensitivity of approximately 0.1 to 0.2 gpm. Visual inspections of accessible areas inside containment, which are used to locate and identify potential corrosion concerns, are more sensitive.

3. Methods for Evaluation and Cleanup

Leakage which contacts carbon steel RCS components will be reported to the System Engineer. The System Engineer will be the individual responsible for evaluating the operating impact, conducting an engineering evaluation of component damage, and specifying clean-up procedures and other corrective actions.

4. Actions to Prevent Recurrence

The System Engineer will be the individual responsible for initiating necessary modifications to equipment, procedures, and specifications to reduce the potential for future boric acid leakage problems. Reduction in the probability of boric acid corrosion, including the use of corrosion resistant materials, will be the goal of these corrective actions.

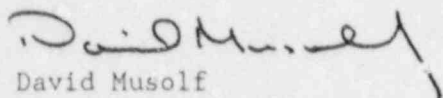
The program for identification and correction of small RCS leakage will be incorporated into the Prairie Island Operation Manual by June 15, 1988.

We believe that the program we have described will provide assurance that the RCS will have an extremely low probability of abnormal leakage, rapidly propagating failure, or gross rupture due to boric acid corrosion of carbon steel components.

Director of NRR
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Northern States Power Company

Please contact us if you have any questions related to the information we have provided.



David Musolf
Manager Nuclear Support Services

c: Regional Administrator, Region III, NRC
NRC Sr Resident Inspector
NRC Project Manager
G Charnoff

UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

DOCKET NOS. 50-282
50-306

RESPONSE TO GENERIC LETTER 88-05
BORIC ACID CORROSION OF CARBON STEEL REACTOR
PRESSURE BOUNDARY COMPONENTS IN PWR PLANTS

Northern States Power Company, a Minnesota corporation, hereby submits information in response to Generic Letter 88-05.

This submittal contains no restricted or other defense information.

NORTHERN STATES POWER COMPANY

By David Musolf
David Musolf
Manager Nuclear Support Services

On this 25th day of May, 1988 before me a notary public in and for said County, personally appeared David Musolf, 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

