



Northern States Power Company

Prairie Island Nuclear Generating Plant

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Welch, Minnesota 55089

October 26, 1994

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

Additional Information Related to Inspection Followup Items
NRC Inspection Report Nos. 50-282/93012(DRS) and 50-306/93012(DRS)
Motor-Operated Valve (MOV) Testing and Surveillance

This letter refers to the Generic Letter 89-10 motor operated valve inspection conducted September 27 through November 15, 1993. Your letter of December 2, 1993, which transmitted Inspection Report No. 50-282/93012(DRS) and 50-306/93012(DRS), required responses to each of 3 inspection followup items. Our letter of February 4, 1994 provided responses to those items. This letter provides additional information related to Inspection Followup Item 2.

Statement of Inspection Followup Item 2

The preliminary assessment of Limitorque's May 13, 1993, Part 21 report regarding high ambient temperature effects on MOV motor output torque assumed that there would be no net loss of torque and assigned a date of March 1994 for completion. The licensee assumed that torque output losses due to high temperature would be offset by gains due to Limitorque's allowance to use an application factor of 1.0 in certain instances instead of the 0.9 originally used. This assumption was questioned by the inspectors and found to be invalid. In response to the inspectors' concerns, the licensee performed calculations for some of the most affected MOV's and showed that the worst case torque reduction would be 4.7%. These MOV's were shown to have sufficient margin to compensate for the loss in torque; however, a more thorough initial review should have been done to preclude operability concerns. The licensee will request additional information from Limitorque in order to evaluate some MOV motors and detailed calculations will be performed for each MOV affected by the Part 21. This is considered an inspection followup item that will be evaluated in a future inspection (50-282/93012-02; 50-306/93012-02(DRS)).

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February 4, 1994 Response to Inspection Followup Item 2

A review of MOV's for which we have data has been completed. Six MOV's still need review upon receipt of motor curve and torque derate data from Limitorque. The results indicate that all the MOV's reviewed retain sufficient margin to compensate for the torque capability changes arising from the Part 21 report. Results of the review are summarized below.

- 1) 104 of 140 MOV's which have had their torque switches set diagnostically with either VOTES or MOVATS have been verified to have sufficient margin to compensate for the torque capability changes.

The 6 remaining MOV's were not addressed in the Part 21 report. Limitorque was contacted by letter dated 10/15/93, and numerous followup calls, requesting motor curve and torque derate data. To date this data has not been received.

Upon receipt of the requested motor data from Limitorque, the remaining 6 MOV's shall be reviewed. Based on current margins, no operability concerns are expected.

- 2) Of the remaining Generic Letter 89-10 MOV's:

Six of the MOV's (not the same six as in 1 above) are not motor stall limited, and remain as such after application of the Part 21 report. The Part 21 report has no impact on these valves.

The remaining MOVs are non-environmentally qualified and therefore have a maximum temperature of 130 degrees F when required to operate during an accident. The resulting torque capability increase due to Limitorque's allowance to use an application factor of 1.0 instead of 0.9 more than offsets any torque loss at this temperature. Torque capability increases for these MOV's as a result of the Part 21 report.

The results of this Part 21 review of MOV's will be incorporated into the next revision of the Site Engineering Manual MOV target thrust calculations (ENG-ME-046). The complete implementation of this revision will be completed 30 days after receipt of the remaining motor data from Limitorque.

The italicized sentences above represent commitments which we have made. However, we did not complete the revision of the Site Engineering Manual

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within 30 days after receipt of the remaining motor data from Limitorque as we had committed. The data was received prior to our Unit 1 refueling outage last spring and the data was factored into the test program for all valves tested after receipt of the information. The Site Engineering Manual was not revised until recently. A decision had been made that use of the proper motor data met the intent of the commitment. When this decision was brought to the attention of plant management, it was determined that we, indeed, had not met the letter of the commitment regardless of whether or not we met the intent. We revised the manual and notified the Senior Resident Inspector of the situation.

We do recognize the significance of commitments made to the NRC and intend to complete them as stated. We believe that our commitments are generally fulfilled as promised, this instance was not typical. We apologize for any inconvenience this oversight may have caused.

Please contact Jack Leveille (612-388-1121, Ext. 4662) if you have any questions related to our response to the subject inspection report.

Jack Leveille for

Roger O Anderson
Director
Licensing and Management Issues

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