Xcel Energy®

1717 Wakonade Drive
Welch, MN 55089

December 15, 2021

L-PI-21-048
TS 5.6.8

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant, Unit 2
Docket No. 50-306
Renewed Facility Operating License No. DPR-60

Prairie Island Nuclear Generating Plant (PINGP) Unit 2 Special Report

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), hereby submits a special report per Technical Specification 5.6.8, EM Report. The special report provides notification that one Containment High Range Radiation Monitor was declared inoperable.

If you have any questions about this submittal, please contact Carrie Seipp, Senior Regulatory Engineer, at 612-330-5576.

Summary of Commitments

This letter makes no new commitments and no revisions to existing commitments.

Christopher P. Domingos
Site Vice President, Prairie Island Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosure (1)

cc: Administrator, Region III, USNRC
Project Manager, Prairie Island, USNRC
Resident Inspector, Prairie Island, USNRC
State of Minnesota

ENCLOSURE 1

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
UNIT 2 SPECIAL REPORT

EVENT DESCRIPTION

At 2350 on November 1, 2021, Prairie Island Nuclear Generating Plant (PINGP) declared 2R-48, Unit 2 Train B Containment High Range Radiation Monitor (CHRRM), inoperable. The Operations department personnel were performing the 31-day frequency channel check of the Event Monitoring (EM) instruments and observed that 2R-48 output was failed low on the scale. The Train A CHRRM, 2R-49, was verified as OPERABLE.

The actions for Technical Specification (TS) 3.3.3, Event Monitoring (EM) Instrumentation, Table 3.3.3-1, Function 10, requires that with one inoperable CHRRM channel, the channel is to be restored to OPERABLE within 30 days. If the channel is not restored within 30 days, a report in accordance with TS 5.6.8, EM Report, is required within the following 14 days. TS 5.6.8 states that the report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the function to OPERABLE status.

The CHRRM is provided to monitor for the potential of significant radiation releases and to provide release assessment for use by the Operations department in determining the need to invoke site emergency plans. Containment radiation level is used to determine if a Loss of Coolant Accident (LOCA) with core damage has occurred.

PREPLANNED ALTERNATE METHOD OF MONITORING

Beyond the indication available with the Train A CHRRM 2R-49, there is no alternate method of monitoring containment radiation for the purpose of classifying an emergency event. The CHRRMs are used for the fission product barrier Emergency Action Level (EAL) matrix for fuel clad, reactor coolant system, and containment. In addition to the CHRRMs, there are other diverse instruments in the EAL matrix (for example Core Exit Thermocouple temperature) to identify fission product barrier degradation. The use of 2R-49 and the other diverse instruments will ensure timely and accurate classification of emergencies.

CAUSE OF INOPERABILITY

The cause of the CHRRM inoperability is a degraded switch which caused the module to fail.

PLANS AND SCHEDULE FOR RESTORING OPERABILITY

NSPM is pursuing multiple parallel paths in order to expedite restoration of operability of 2R-48:

1. Refurbishment of spare module:
   On November 4, 2021, the on-site spare module failed pre-installation bench testing. The spare module was sent to the vendor for refurbishment. Completion of the vendor's evaluation to determine refurbishment scope is expected by December 16, 2021. A meeting is scheduled for December 17, 2021 with NSPM Supply Chain management and the vendor to establish the expedited refurbishment milestones.
2. Obtaining spare module from another licensee:
   NSPM Supply Chain has initiated actions to determine the feasibility of obtaining a spare module from another licensee.
3. Procurement of a new module:
   A new module is expected to be delivered on September 23, 2022.

Installation, testing, and restoration of 2R-48 will occur after obtaining a functioning module.