



Prairie Island Nuclear Generating Plant  
1717 Wakonade Drive East  
Welch, MN 55089

August 25, 2014

L-PI-14-079  
10 CFR 2.202  
10 CFR 50.4

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

Prairie Island Nuclear Generating Plant Units 1 and 2  
Docket Numbers 50-282 and 50-306  
Renewed Operating License Nos. DPR-42 and DPR-60

Prairie Island Nuclear Generating Plant's Third Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) (TAC Nos. MF0832 and MF0833)

References:

1. NRC Order EA-12-051, "Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012 (ADAMS Accession No. ML12054A682).
2. NRC Interim Staff Guidance JLD-ISG-2012-03, "Compliance with Order EA-12-051, Reliable Spent Fuel Pool Instrumentation," Revision 0, dated August 29, 2012 (ADAMS Accession No. ML12221A339).
3. NEI 12-02, "Industry Guidance for Compliance with NRC Order EA-12-051, 'To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,'" Revision 1, dated August 2012 (ADAMS Accession No. ML12240A307).
4. NSPM Letter to NRC, "Initial Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated October 29, 2012 (ADAMS Accession No. ML12305A313).

5. NSPM Letter to NRC, "Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated February 26, 2013 (ADAMS Accession No. ML13060A363).
6. NSPM Letter to NRC, "Prairie Island's First Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051)," dated August 26, 2013 (ADAMS Accession No. ML13239A093).
7. NSPM Letter to NRC, "Prairie Island Nuclear Generating Plant's Second Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) (TAC Nos. MF0832 and MF0833)," dated February 26, 2014 (ADAMS Accession No. ML14057A647).

On March 12, 2012, the Nuclear Regulatory Commission (NRC) staff issued Order EA-12-051, "Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," (Reference 1) to all NRC power reactor licensees and holders of construction permits in active or deferred status. Reference 1 was immediately effective and directed Northern States Power Company, a Minnesota corporation (NSPM), doing business as Xcel Energy, to have a reliable indication of the water level in the spent fuel storage pool for Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2. Specific requirements are outlined in Attachment 2 of Reference 1.

Pursuant to Condition C of Section IV, Reference 1 required submission of an initial status report 60 days following issuance of the final interim staff guidance (ISG), an overall integrated plan, and status reports at six-month intervals following the submittal of the overall integrated plan. The ISG (Reference 2) endorses, with exceptions and clarifications, the methodologies described in a guidance document from the Nuclear Energy Institute (NEI), NEI 12-02, "Industry Guidance for Compliance with Order EA-12-051, 'To Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation,'" Revision 1 (Reference 3). Reference 4 provided the PINGP initial 60-day status report regarding reliable spent fuel pool instrumentation. Reference 5 provided the overall integrated plan for PINGP. References 6 and 7 provided the first and second six-month status reports for the overall integrated plan, per Condition C.2 of Section IV of Reference 1.

The purpose of this letter is to provide the third six-month status report pursuant to Section IV, Condition C.2 of Reference 1, which delineates the progress made in implementing the requirements of the Reference 1 Order. The enclosed report provides an update of milestone accomplishments since the Reference 7 status report was

submitted, including changes to the compliance method, schedule, or the need and basis for relief, if any.

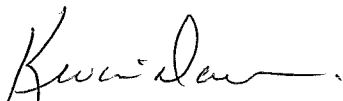
Please contact Jennie Wike, Licensing Engineer, at 612-330-5788, if additional information or clarification is required.

Summary of Commitments

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

I declare under penalty of perjury that the foregoing is true and correct.

Executed on August 25, 2014.



Kevin Davison  
Site Vice President, Prairie Island Nuclear Generating Plant  
Northern States Power Company - Minnesota

Enclosure

cc: Administrator, Region III, USNRC  
Director of Nuclear Reactor Regulation (NRR), USNRC  
Project Manager, Prairie Island Nuclear Generating Plant, USNRC  
Resident Inspector, Prairie Island Nuclear Generating Plant, USNRC

## ENCLOSURE

### **Prairie Island Nuclear Generating Plant Units 1 and 2 Third Six-Month Status Report for Implementation of Order EA-12-051, Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation**

#### **1.0 Introduction**

The Nuclear Regulatory Commission (NRC) issued Order EA-12-051, "Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," on March 12, 2012 (Reference 1). The Order requires licensees to have reliable indication of the water level in associated spent fuel pools capable of supporting identification of the following spent fuel pool water level conditions by trained personnel: (1) level that is adequate to support operation of the normal fuel pool cooling system, (2) level that is adequate to provide substantial radiation shielding for a person standing on the spent fuel pool operating deck, and (3) level where fuel remains covered and actions to implement make-up water addition should no longer be deferred. The Order required licensees to submit an overall integrated plan, including a description of how the requirements in Attachment 2 of the Order would be achieved. Northern States Power Company, a Minnesota corporation (NSPM), doing business as Xcel Energy, submitted the overall integrated plan (Reference 2) for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2, on February 26, 2013. References 4 and 5 provided the first and second six-month status reports for the overall integrated plan, per Condition C.2 of Section IV of Reference 1.

On July 11, 2013, the NRC Staff provided requests for additional information (RAI) in Reference 6 regarding the Spent Fuel Pool Instrumentation (SFPI) overall integrated plan. Reference 3 provided the NSPM responses to NRC Requests for Additional Information (RAIs) regarding the overall integrated plan for PINGP.

On November 14, 2013, the NRC issued an Interim Staff Evaluation (ISE) for PINGP's SFPI overall integrated plan (Reference 7). The ISE documents the NRC Staff's review and provides feedback on NSPM's overall integrated plan. The ISE also includes RAIs, response to which the NRC Staff needs to complete their review. The RAIs issued by the NRC in the ISE supersede the RAIs reported in the Reference 6 letter.

This Enclosure provides the PINGP Units 1 and 2 third six-month status report. This status report includes an update of milestone accomplishments since the previous six-month status report was submitted, including any changes to the compliance method, schedule, or the need and basis for relief, if any.

## 2.0 Milestone Accomplishments

The original milestone schedule, with target dates, was provided in Section 1.2 of Reference 2. No original milestones were scheduled for completion subsequent to the previous six-month status report and prior to July 31<sup>st</sup>, 2014. Therefore, NSPM has no milestone accomplishments to discuss.

## 3.0 Milestone Schedule Status

The following table provides an update of the milestone schedule to support the overall integrated plan. This includes a brief milestone status and an update on whether or not the expected target date has changed. The dates are planning dates subject to change as design and implementation details are developed. No target completion dates for milestones have changed for this six-month status report. However, as noted in Section 6, NSPM will provide the responses to the ISE RAIs via the ePortal by March 31, 2015 instead of in the February 2015 six-month status report.

| <b>Table 1 – Overall Integrated Plan Milestone Schedule</b>         |                               |                              |                                       |
|---|-------------------------------|------------------------------|---------------------------------------|
| <b>Milestone</b>  | <b>Target Completion Date</b> | <b>Activity Status</b>       | <b>Revised Target Completion Date</b> |
| Submit 60 Day Status Report   | October 2012                  | Complete                     |                                       |
| Submit Overall Integrated Plan                                      | February 2013                 | Complete                     |                                       |
| Select Instrument Vendor (Target date 1 <sup>st</sup> Quarter 2013) | 1 <sup>st</sup> Quarter 2013  | Complete                     |                                       |
| Submit First Six-month Status Report                                | August 2013                   | Complete                     |                                       |
| Commence Engineering Design   | 3 <sup>rd</sup> Quarter 2013  | Complete (Design Started)    |                                       |
| Submit Second Six-Month Status Report                               | February 2014                 | Complete                     |                                       |
| Submit Third Six-Month Status Report                                | August 2014                   | Complete with this submittal |                                       |
| Submit Fourth Six-Month Status Report                               | February 2015                 | Not Started                  |                                       |
| Commence Installation   | 2 <sup>nd</sup> Quarter 2015  | Not Started                  |                                       |
| Submit Fifth Six-Month Status Report                                | August 2015                   | Not Started                  |                                       |
| Reliable Spent Fuel Pool Instrumentation Operational                | End of 2R29                   | Not Started                  |                                       |
| Submit Report that Full Compliance is Achieved                      | 1 <sup>st</sup> Quarter 2016  | Not Started                  |                                       |

#### **4.0 Proposed Changes to Compliance Method**

There are no changes proposed to the compliance method described in the overall integrated plan (Reference 2).

#### **5.0 Need and Basis for Relief from the Requirements of the Order**

NSPM expects to comply with the Order implementation date and requirements. No relief from the requirements of the Order is required at this time.

#### **6.0 Open Items from Overall Integrated Plan and Interim Staff Evaluation**

NSPM does not identify any open items in the overall integrated plan for PINGP. The overall integrated plan did contain future actions to ensure compliance with the Order. The future actions were identified internally and are being tracked through NSPM's corrective action program (CAP).

On November 14, 2013, the NRC issued the ISE for PINGP's SFPI overall integrated plan (Reference 7). The ISE identified RAIs that were necessary for the NRC to determine the acceptability of NSPM's plans for implementing the requirements of Order EA-12-051. In Reference 5, NSPM stated that the responses to the NRC's ISE RAIs will be provided in the fourth six-month status report scheduled for February 2015. Subsequently, the NRC notified each licensee participating in the audit not to formally submit their RAI responses on the docket but instead, put their responses and any other supporting information on their ePortals by the date identified in their ISE to support the NRC Staff's review process (Reference 8). In accordance with this guidance from the NRC, NSPM will provide the responses to the ISE RAIs via the ePortal by March 31, 2015 instead of in the February 2015 six-month status report.

#### **7.0 Potential Interim Staff Evaluation Impacts**

There are no potential impacts to the Interim Staff Evaluation identified at this time.

#### **8.0 References**

1. NRC Order EA-12-051, "Issuance of Order to Modify Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," dated March 12, 2012 (ADAMS Accession No. ML12054A682).
2. NSPM Letter to NRC, "Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to

Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051),” dated February 26, 2013 (ADAMS Accession No. ML13060A363).

3. NSPM Letter to NRC, “Responses to Requests for Additional Information Regarding Prairie Island Nuclear Generating Plant’s Overall Integrated Plan Submitted in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) (TAC Nos. MF0832 and MF0833),” dated August 6, 2013 (ADAMS Accession No. ML13219A859).
4. NSPM Letter to NRC, “Prairie Island’s First Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051),” dated August 26, 2013 (ADAMS Accession No. ML13239A093).
5. NSPM Letter to NRC, “Prairie Island Nuclear Generating Plant’s Second Six-Month Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Reliable Spent Fuel Pool Instrumentation (Order Number EA-12-051) (TAC Nos. MF0832 and MF0833),” dated February 26, 2014 (ADAMS Accession No. ML14057A647).
6. NRC Email to NSPM, “Prairie Island Units 1 and 2 - Draft RAI RE: OIP for Reliable SFP Instrumentation (TAC Nos. MF0832 and MF0833),” dated July 11, 2013 (ADAMS Accession No. ML13205A355).
7. NRC Letter to NSPM, “Prairie Island Nuclear Generating Plant, Units 1 and 2 – Interim Staff Evaluation and Request for Additional Information Regarding the Overall Integrated Plan for Implementation of Order EA-12-051, Reliable Spent Fuel Pool Instrumentation (TAC Nos. MF0832 AND MF0833),” dated November 14, 2013 (ADAMS Accession No. ML13311A486).
8. NRC Letter, “Nuclear Regulatory Commission Audits of Licensees Responses to Reliable Spent Fuel Pool Instrumentation Order EA-12-051,” dated March 26, 2014 (ADAMS Accession No. ML14083A620).