



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

August 26, 2013

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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 Facility Operating License Nos. DPR-42 and DPR-60

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)

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. ML12054A679).
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.
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. ML13064A268).

6. 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.

On March 12, 2012, the 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 directs 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 industry guidance document, 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. Reference 6 provided the NSPM responses to NRC Requests for Additional Information (RAIs) regarding the overall integrated plan for PINGP.

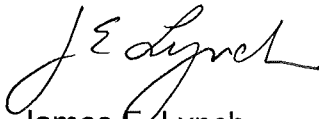
The purpose of this letter is to provide the first six-month status report pursuant to Section IV, Condition C.2 of Reference 1, which delineates the progress made in implementing the requirements of the Reference 1 Order. The enclosed report provides an update of milestone accomplishments since the overall integrated plan was submitted, including changes to the compliance method, schedule, or the need and basis for relief, if any.

Please contact Lynne Gunderson, Licensing Engineer, at 612-396-0173, if additional information or clarification is required.

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 26, 2013.

A handwritten signature in black ink, appearing to read "J E Lynch". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

James E. Lynch  
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 First 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.

This Enclosure provides the PINGP Units 1 and 2 first six-month status report. This status report includes an update of milestone accomplishments since submittal of the overall integrated plan 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 2.0 of Reference 2. The following milestones have been completed since the overall integrated plan was submitted and is current as of July 31, 2013.

- Select Instrument Vendor (instrument vendor was selected)
- Commence Engineering Design (design process has started)

#### **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 a revised target date if the

date has changed. The dates are planning dates subject to change as design and implementation details are developed.

<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 Update	August 2013	Complete with this submittal	
Commence Engineering Design	3 <sup>rd</sup> Quarter 2013	Complete (Design Started)	
Submit Second Six-Month Status Update	February 2014	Not Started	
Submit Third Six-Month Status Update	August 2014	Not Started	
Submit Fourth Six-Month Status Update (includes responses to Requests for Additional Information (RAIs))	February 2015	Not Started	
Commence Installation	2 <sup>nd</sup> Quarter 2015	Not Started	
Submit Fifth Six-Month Status Update (includes responses to remaining RAIs)	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	

No target completion dates for milestones have been changed. Responses to NRC Requests for Additional Information (RAIs) have been added to the fourth and fifth six-month status updates. Incorporation of the RAI responses into these status reports was discussed in Reference 3.

#### **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 and no relief is required at this time.

**6.0 Open Items from Overall Integrated Plan and Draft Safety Evaluation**

NSPM did 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).

No draft Safety Evaluation has been issued as of July 31, 2013. Closure of the draft SE open items, when issued, will be tracked to closure in future status reports. NSPM did receive RAI (Reference 3) of which several responses were deferred to the fourth and fifth six-month status updates. The RAIs are listed below in the draft Safety Evaluation Open Item Table as the responses are seen as necessary for NRC to complete review.

<b>Draft Safety Evaluation Open Items</b>		
<b>Open Item Number</b>	<b>Description</b>	<b>Status</b>
1	<p>RAI-1, Levels of Required Monitoring:</p> <p>a) A detailed NPSH calculations will be completed as part of the design process. Any required changes to the proposed Level 1 to support NPSH will be provided with the February 2015 six-month status report.</p> <p>c) An evaluation will also be performed to assess the radiological impact from stored equipment. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started
2	<p>RAI-2, Arrangement:</p> <p>The final component locations and cable routing will be available upon completion of the final design. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started

3	<p>RAI-3, Mounting (all RAI subparts):</p> <p>The requested information is not available at this time. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started
4	<p>RAI-4, Qualification (all RAI subparts):</p> <p>The requested information is not available at this time. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started
5	<p>RAI-5, Independence (all RAI subparts):</p> <p>The requested information is not available at this time. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started
6	<p>RAI-6, Power Supplies (all RAI subparts):</p> <p>The requested information is not available at this time. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started
7	<p>RAI-7, Accuracy:</p> <p>a) The requested information is not available at this time. The requested information will be provided with the February 2015 six-month status report.</p> <p>b) Setpoints will be determined following Prairie Island procedure EM 3.3.4.1, "Instrument Setpoint/Uncertainty Calculations". Determination of setpoints using this procedure is part of the NSPM design process. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started
8	<p>RAI-8, Testing (all RAI subparts):</p> <p>The requested information is not available at this time. The requested information will be provided with the February 2015 six-month status report.</p>	Not Started

9	RAI-9, Display (all RAI subparts):  The requested information is not available at this time. The requested information will be provided with the February 2015 six-month status report.	Not Started
10	RAI-10, Procedures (all RAI subparts):  The requested information is not available at this time. The requested information will be provided with the August 2015 six-month status report.	Not Started
11	RAI-11, Testing and Calibration (all RAI subparts):  The requested information is not available at this time. The requested information will be provided with the August 2015 six-month status report.	Not Started

## 7.0 Potential Draft Safety Evaluation Impacts

There are no potential impacts to the draft Safety 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. ML12054A679).
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. ML13064A268).
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