

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

August 25, 2014

L-PI-14-078 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 Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049) (TAC Nos. MF0834 and MF0835)

References:

- 1. NRC Order EA-12-049, "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012 (ADAMS Accession No. ML12054A735).
- NRC Interim Staff Guidance JLD-ISG-2012-01, "Compliance with Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," Revision 0, dated August 29, 2012 (ADAMS Accession No. ML12229A174).
- NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, dated August 2012 (ADAMS Accession No. ML12242A378).
- NSPM Letter to NRC, "Initial Status Report in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated October 29, 2012 (ADAMS Accession No. ML12305A287).

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- NSPM Letter to NRC, "Prairie Island Nuclear Generating Plant's Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated February 26, 2013 (ADAMS Accession No. ML13060A379).
- 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 Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated August 26, 2013 (ADAMS Accession No. ML13239A094).
- 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 Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated February 26, 2014 (ADAMS Accession No. ML14057A771).

On March 12, 2012, the Nuclear Regulatory Commission (NRC) staff issued Order EA-12-049, "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," (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 develop, implement and maintain guidance and strategies to maintain or restore core cooling, containment and spent fuel pool cooling capabilities following a beyond-designbasis external event for the Prairie Island Nuclear Generating Plant (PINGP). 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 industry guidance document, Nuclear Energy Institute (NEI) 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0 (Reference 3). Reference 4 provided the PINGP initial 60-day status report regarding mitigation strategies. Reference 5 provided the overall integrated plan for PINGP. The first and second six-month status reports were provided in References 6 and 7, respectively.

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

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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

NSPM

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Prairie Island Nuclear Generating Plant Units 1 and 2 Third Six-Month Status Report for Implementation of Order EA-12-049, Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events

1.0 Introduction

The Nuclear Regulatory Commission (NRC) issued Order EA-12-049, "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," on March 12, 2012 (Reference 1). The Order required licensees to develop, implement and maintain guidance and strategies to maintain or restore core cooling, containment and spent fuel pool cooling capabilities following a beyond-design-basis external event. 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) on February 26, 2013. In accordance with Section IV, Condition C.2 of Reference 1, NSPM submitted the first six-month status report on August 26, 2013 (Reference 3) and the second six-month status report on February 26, 2014 (Reference 5).

On February 27, 2014, the NRC issued an Interim Staff Evaluation (ISE) for PINGP's Mitigating Strategies overall integrated plan (Reference 6). The ISE documents the NRC's conclusion that NSPM has provided sufficient information to determine that there is reasonable assurance that the overall integrated plan, when properly implemented, will meet the requirements of Order EA-12-049 at PINGP. The ISE also documents the confirmatory and open items identified by the NRC as a result of their review and audit of PINGP's overall integrated plan.

This Enclosure provides the third six-month status report. This status report includes an update of milestone accomplishments since submittal of the previous six-month status report, including 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 Attachment 2 of the Reference 2 Enclosure. No milestones were scheduled for completion subsequent to the previous six-month status report and prior to July 31st, 2014. Therefore, NSPM has no milestone accomplishments to discuss.

3.0 Milestone Schedule Status

The following Table 1 provides an update of the milestone schedule for the overall integrated plan. This table includes a brief milestone status and a revised target date if

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

• Procure Equipment:

The target completion date for procuring equipment was changed to September 2015 because the equipment specifications are planned to be approved during 3rd Quarter of 2014 with contracts issued in the 4th Quarter of 2014. The equipment is not expected to be on site until September 2015, based on the long lead time for some components.

• Commence Installation for Online Modifications - Phase 2 and 3:

The physical installation of the modifications will not commence until April 2015, due to the time needed to complete, review and approve the design change packages and develop the work plans for installation.

• Implement Storage:

The target completion date for implementing storage was changed to September 2015 because NSPM is currently evaluating multiple building locations, as well as working on (a) design specification(s). The current plan is to issue a contract during 3rd Quarter 2014 and complete physical construction and implementation of storage by September 2015.

• Issue Maintenance Procedures:

The target completion date for issuing maintenance procedures was changed to September 2015 to be consistent with the change in schedule for procuring the equipment.

• Implement Training:

The target completion date for implementing training was changed to August 2015 because completion of training requires two full cycles of Operations training. The first Operations training cycle is for initial training and the second Operations training cycle is for makeup and incorporation of lessons learned during the first training cycle. Hence the final completion of training is scheduled for August 2015.

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| Table 1 – Overall Integrated Plan Milestone Schedule | | | | |
|---|------------------------------|------------------------------|------------------------|--|
| Milestone | Target Completion Date | Activity Status | Revised Target Date | |
| Submit 60 Day Status Report | October 2012 | Complete | • | |
| Submit Overall Integrated Plan | February 2013 | Complete | | |
| Submit First Six-Month Status Report | August 2013 | Complete | | |
| Commence Engineering Modification Design – Phase 2 & 3 | September 2013 | Complete | | |
| Submit Second Six-Month Status Report | February 2014 | Complete | | |
| National SAFER Response Center Operational | January 2015 | Started | | |
| Procure Equipment | December 2014 | Started | September 2015 | |
| Submit Third Six-Month Status Report | August 2014 | Complete with this submittal | | |
| Commence Installation for Online Modifications - Phase 2 and 3 | August 2014 | Not Started | April 2015 | |
| Implement Storage | December 2014 | Not Started | September 2015 | |
| Issue Maintenance Procedures | December 2014 | Not Started | September 2015 | |
| Implement Training | February 2015 | Not Started | August 2015 | |
| Submit Fourth Six-Month Status Report | February 2015 | Not Started | | |
| Submit Phase 2 Staffing Assessment | Four months prior to 2R29 | Not Started | | |
| Implement Communication Recommendations | Four months prior to 2R29 | Not Started | | |

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| Table 1 – Overall Integrated Plan Milestone Schedule | | | | |
|--|---------------------------|--------------------|------------------------|--|
| Milestone | Target Completion Date | Activity Status | Revised Target Date | |
| Issue Procedures updated for FLEX strategies | June 2015 | Not Started | | |
| Submit Fifth Six-Month Status Report | August 2015 | Not Started | | |
| Unit 2 Implementation Outage | Fall 2015 | Not Started | | |
| Submit Sixth Six-Month Status Report | February 2016 | Not Started | | |
| Unit 1 Implementation Outage | Fall 2016 | Not Started | | |
| Validation Walk-throughs | Fall 2016 | Not Started | | |
| Submit Seventh Six-Month Status Report | August 2016 | Not Started | | |
| Submit Completion Report | December 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 did not identify any open items in the PINGP mitigating strategies overall integrated plan. 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).

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The NRC Interim Staff Evaluation (ISE) was issued on February 27, 2014 (Reference 6). The NRC did not identify any open items in the ISE. Closure of the ISE confirmatory items will be completed as part of the NRC's audit process, as described in Reference 7.

7.0 Potential Interim Staff Evaluation Impacts

There are no potential impacts to the ISE identified at this time.

8.0 References

The following references support the updates to the overall integrated plan described in this enclosure.

- 1. NRC Order EA-12-049, "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," dated March 12, 2012 (ADAMS Accession No. ML12054A735).
- 2. NSPM Letter to NRC, "Prairie Island Nuclear Generating Plant's Overall Integrated Plan in Response to March 12, 2012 Commission Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated February 26, 2013 (ADAMS Accession No. ML13060A379).
- 3. 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 Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated August 26, 2013 (ADAMS Accession No. ML13239A094).
- 4. NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, dated August 2012 (ADAMS Accession No. ML12242A378).
- 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 Mitigation Strategies for Beyond-Design-Basis External Events (Order Number EA-12-049)," dated February 26, 2014 (ADAMS Accession No. ML14057A771).

- NRC Letter to NSPM, "Prairie Island Nuclear Generating Plant Units 1 and 2

 Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Order EA-12-049 (Mitigation Strategies)(TAC Nos. MF0834 AND MF0835),"
 dated February 27, 2014 (ADAMS Accession No. ML14030A540).
- 7. NRC memorandum, "Supplemental Staff Guidance for Addressing Order EA-12-049 on Mitigation Strategies for Beyond-Design-Basis External Events," dated August 28, 2013 (ADAMS Accession No. ML13238A263).