



Monticello Nuclear Generating Plant
2807 W County Road 75
Monticello, MN 55362

August 19, 2015

L-MT-15-059
10 CFR 2.202
10 CFR 50.4

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

Monticello Nuclear Generating Plant
Docket No. 50-263
Renewed Facility Operating License No. DPR-22

Monticello Nuclear Generating Plant's Fifth 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 No. MF0923)

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).
2. 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).
3. NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, dated August 2012 (ADAMS Accession No. ML12242A378).
4. 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)," L-MT-12-088, dated October 29, 2012 (ADAMS Accession No. ML12305A420).

5. NSPM Letter to NRC, "Monticello 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)," L-MT-13-017, dated February 28, 2013 (ADAMS Accession No. ML13066A066).
6. NSPM Letter to NRC, "Monticello'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)," L-MT-13-079, dated August 28, 2013 (ADAMS Accession No. ML13241A200).
7. NSPM Letter to NRC, "Monticello 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) (TAC No. MF0923)," L-MT-14-014, dated February 28, 2014 (ADAMS Accession No. ML14065A037).
8. NSPM Letter to NRC, "Monticello 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 No. MF0923)," L-MT-14-073, dated August 28, 2014 (ADAMS Accession No. ML14241A260).
9. NSPM Letter to NRC, "Monticello Nuclear Generating Plant's Fourth 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 No. MF0923)," L-MT-15-004, dated February 24, 2015 (ADAMS Accession No. ML15055A599).

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 effective immediately 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-

design-basis external event for the Monticello Nuclear Generating Plant (MNGP). 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 clarifications, an industry guidance document from the Nuclear Energy Institute (NEI), NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0 (Reference 3). Reference 4 provided the MNGP initial 60-day status report regarding mitigation strategies. Reference 5 provided the overall integrated plan for MNGP. The first through fourth six-month status reports were provided in References 6, 7, 8 and 9, respectively.

The purpose of this letter is to provide the fifth 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 9 status report was submitted, including changes to the compliance method, schedule, or the need and basis for relief, if any.

Please contact John Fields, at 763-271-6707, 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 19, 2015.



Peter A. Gardner
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company – Minnesota

Enclosure

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

**Monticello Nuclear Generating Plant
Fifth 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 (OIP), 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 OIP (Reference 2) for the Monticello Nuclear Generating Plant (MNGP) on February 28, 2013. In accordance with Section IV, Condition C.2 of Reference 1, NSPM submitted the first six-month status report on August 28, 2013 (Reference 3), the second six-month report on February 28, 2014 (Reference 4), the third six-month report on August 28, 2014 (Reference 6) and the fourth six-month report on February 24, 2015 (Reference 11).

On November 25, 2013, the NRC issued an Interim Staff Evaluation (ISE) for MNGP's Mitigating Strategies OIP (Reference 5). The ISE documents the NRC's conclusion that NSPM has provided sufficient information to determine that there is reasonable assurance that the OIP, when properly implemented, will meet the requirements of Order EA-12-049 at MNGP. The ISE also documents the confirmatory and open items identified by the NRC as a result of their review and audit of MNGP's OIP.

This Enclosure provides the fifth six-month status report. This status report includes an update of milestone accomplishments since submittal of the fourth six-month status report, including changes to the compliance method, schedule, or the need and basis for relief, if any. This status report also provides an update on NSPM's closure of the open and confirmatory items identified in the NRC's ISE. This information is current as of July 31, 2015.

2.0 Milestone Accomplishments

The original milestone schedule with target dates was provided in Attachment 2 of the Reference 2 Enclosure. The milestone dates were updated in the last six-month status report. Eight milestones were completed since the last six-month status report and prior to July 31, 2015. The following milestones were completed:

- National SAFER Response Center Operational (MNGP)
- Procure Equipment
- Implement Storage
- Issue Maintenance Procedures
- Implement Training
- Issue Procedures Updated for FLEX strategies
- Implementation Outage
- Validation Walk-throughs

3.0 Milestone Schedule Status

The following Table 1 provides an update of the milestone schedule for the OIP. This table includes a brief milestone status and a revised target date, if the target date has changed. The target dates are planning dates subject to change as design and implementation details are developed. This schedule is current as of July 31, 2015.

No target dates have changed for this status report.

| Table 1 – Overall Integrated Plan Milestone Schedule | | | |
|--|------------------------|-----------------|--------------------------------|
| Milestone | Target Completion Date | Activity Status | Revised Target Completion 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 | January 2014 | Complete | |
| Submit Second Six-Month Status Report | February 2014* | Complete | |
| National SAFER Response Center Operational (MNGP) | March 2015 | Complete | |
| Procure Equipment | April 2015 | Complete | |

| Table 1 – Overall Integrated Plan Milestone Schedule | | | |
|--|-------------------------------|------------------------------|---------------------------------------|
| Milestone | Target Completion Date | Activity Status | Revised Target Completion Date |
| Submit Third Six-Month Status Update | August 2014* | Complete | |
| Commence Installation for Online Modifications – Phase 2 and 3 | October 2014 | Complete | |
| Implement Storage | April 2015 | Complete | |
| Issue Maintenance Procedures | March 2015 | Complete | |
| Implement Training | April 2015 | Complete | |
| Submit Fourth Six-Month Status Report | February 2015* | Complete | |
| Submit Fifth Six-Month Status Report | August 2015* | Complete with this submittal | |
| Submit Staffing Assessment | Four months prior to R27* | Complete | |
| Complete Communication Recommendations | Four months prior to R27* | Complete | |
| Issue Procedures Updated for FLEX strategies | May 2015 | Complete | |
| Implementation Outage | May 2015 (End of R27)* | Complete | |
| Validation Walk-throughs | April 2015 | Complete | |
| Submit Completion Report | July 2017 | Not Started | |

*Required dates

4.0 Proposed Changes to Compliance Method

There are no additional changes to the compliance methods in the Reference 2 OIP. No updates to information in the OIP are included in this report.

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

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

On October 1, 2014, NSPM submitted a relaxation request to the NRC for Order EA-12-049 (Reference 9). The relaxation request was proposed because the installation of a containment wetwell vent that meets the requirements of Order EA-13-109, Phase I, will

take additional time to complete, as compared to the compliance dates associated with Order EA-12-049. On November 21, 2014 the NRC approved the requested relaxation (Reference 10).

NSPM plans to provide the NRC with a report that full compliance with the EA-12-049 order has been achieved within 60 days after completion of the 2017 refueling outage. The "Submit Completion Report" milestone is consistent with the current projected completion of the 2017 refueling outage, plus 60 days.

6.0 Open Items from Overall Integrated Plan and Interim Staff Evaluation

NSPM did not identify any open items in the MNGP Mitigating Strategies OIP. The OIP contained 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 25, 2013, the NRC issued the ISE for MNGP's Mitigating Strategies OIP (Reference 5). As a result of the review and audit of MNGP's OIP, the NRC identified a list of confirmatory and open items that required additional follow-up or resolution. Subsequently, during the week of November 17 – 21, 2014 the NRC held an onsite audit to assess MNGP's readiness for compliance with Order EA-12-049.

NSPM will be providing a full update to ISE open items and audit questions in a separate letter to the NRC. NSPM will continue to provide information to the NRC via the online reference portal as necessary.

7.0 Potential Interim Staff Evaluation Impacts

No potential impacts of ISE updates are proposed in this report.

8.0 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).

2. NSPM Letter to NRC, "Monticello 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)," L-MT-13-017, dated February 28, 2013 (ADAMS Accession No. ML13066A066).
3. NSPM Letter to NRC, "Monticello'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)," L-MT-13-079, dated August 28, 2013 (ADAMS Accession No. ML13241A200).
4. NSPM Letter to NRC, "Monticello 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) (TAC No. MF0923)," L-MT-14-014, dated February 28, 2014 (ADAMS Accession No. ML14065A037).
5. NRC Letter to NSPM, "Monticello Nuclear Generating Plant – Interim Staff Evaluation Relating to Overall Integrated Plan in Response to Order EA-12-049 (Mitigation Strategies) (TAC No. MF0923)," dated November 25, 2013 (ADAMS Accession No. ML13220A139).
6. NSPM Letter to NRC, "Monticello 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 No. MF0923)," L-MT-14-073, dated August 28, 2014 (ADAMS Accession No. ML14241A260).
7. NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide," Revision 0, dated August 2012 (ADAMS Accession No. ML12242A378).
8. Not used
9. NSPM Letter to NRC, "Request for Relaxation from NRC Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events" - Monticello Nuclear Generating Plant," L-MT-14-083, dated October 1, 2014. (ADAMS Accession No. ML14289A512)

10. NRC letter to NSPM, "Monticello Nuclear Generating Plant- Relaxation of Certain Schedule Requirements for Order EA-12-049 "Issuance of Order to Modify Licenses with Regard to Requirements for Mitigation Strategies for Beyond Design Basis External Events" (TAC No. MF0923)," dated November 21, 2014. (ADAMS Accession No. ML14294A061)
11. NSPM Letter to NRC, "Monticello Nuclear Generating Plant's Fourth 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 No. MF0923)," L-MT-15-004, dated February 24, 2015 (ADAMS Accession No. ML15055A599).