



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

November 8, 2013

L-MT-13-109  
10 CFR 50.90

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

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

Subject: Monticello Extended Power Uprate (EPU): Completion of EPU Commitment for Piping Meeting Code Requirements (TAC MD9990)

- References:
- 1) Letter from T J O'Connor - Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy to Document Control Desk (NRC), "License Amendment Request: Extended Power Uprate (TAC MD9990)," L-MT-08-052, dated November 5, 2008. (ADAMS Accession No. ML083230111)
  - 2) Letter from T J O'Connor (NSPM), to Document Control Desk (NRC), "Monticello Extended Power Uprate: Updates to Docketed Information (TAC MD9990)," L-MT-10-072, dated December 21, 2010. (ADAMS Accession No. ML103570026)
  - 3) Letter from T J O'Connor (NSPM), to Document Control Desk (NRC), "Monticello Extended Power Uprate: Update on EPU Commitments (TAC MD9990)," L-MT-11-044, dated August 30, 2011. (ADAMS Accession No. ML11249A045)
  - 4) Letter from K D Fili (NSPM) to Document Control Desk (NRC), "Monticello Extended Power Uprate (EPU): Completion of EPU Commitments, Proposed License Conditions and Revised Power Ascension Test Plan (TAC MD9990)," L-MT-13-092, dated September 30, 2013. (ADAMS Accession No. ML13275A063)

- 5) Letter from M A Schimmel (NSPM) to Document Control Desk (NRC), "Monticello Extended Power Uprate: Supplement to Revise Technical Specification Setpoint for the Automatic Depressurization System Bypass Timer (TAC MD9990)," L-MT-12-091, dated October 30, 2012. (ADAMS Accession No. ML12307A036)

Pursuant to 10 CFR 50.90, the Northern States Power Company, a Minnesota corporation (NSPM), doing business as Xcel Energy, requested in Reference 1 an amendment to the Monticello Nuclear Generating Plant (MNGP) Renewed Operating License (OL) and Technical Specifications (TS) to increase the maximum authorized power level from 1775 megawatts thermal (MWt) to 2004 MWt.

In Reference 2, NSPM modified the No Significant Hazards Consideration (NSHC) and updated certain topics associated with the MNGP Extended Power Uprate (EPU) project (Reference 1). In References 3 and 4, NSPM notified the NRC that certain commitments associated with the MNGP EPU project were modified or completed.

The purpose of this letter is to provide the NRC with the closure of a commitment previously provided to the NRC for the MNGP EPU project. In addition, this letter provides a revised implementation duration for the EPU license amendment.

Enclosure 1 provides information regarding the closure of the commitment to verify that Feedwater/Condensate system piping meets code requirements.

Enclosure 2 provides a final summary of the commitments associated with the MNGP EPU project.

In Reference 1, NSPM indicated that the EPU was to be implemented in two phases. The first phase of the EPU would occur following the spring 2009 refueling outage (RF024). Phase two of the EPU was planned for implementation following completion of modifications scheduled for the refueling outage in 2011 (RF025). These dates are not reflective of the current EPU license amendment schedule.

NSPM now requests an EPU license amendment implementation period of 60 days from NRC approval of the EPU LAR. Implementation is defined as issuing the amended TSs and associated plant documentation, and making the necessary plant changes (e.g., setpoint changes) to permit operation above 1775 MWt. EPU power ascension will include an extended testing period between 1775 MWt and full EPU power conditions (2004 MWt). Further, MNGP cannot achieve 2004 MWt without NRC approval of the Maximum Extended Load Line Limit Analysis Plus (MELLLA+) LAR (ADAMS Accession No. ML100280558). Full EPU power conditions will be achieved following completion of testing requirements for MELLLA+.

The documentation provided herein does not change the conclusions of the No Significant Hazards Consideration and the Environmental Consideration evaluations provided in Reference 1 as revised by References 2 and 5.

In accordance with 10 CFR 50.91(b), a copy of this application supplement, without enclosures, is being provided to the designated Minnesota Official.

Summary of Commitments

This letter makes no new commitments. This letter closes a commitment associated with the MNGP EPU project. See Enclosure 1 for details.

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

Executed on: November 8, 2013



Karen D. Fili  
Site Vice-President  
Monticello Nuclear Generating Plant  
Northern States Power Company-Minnesota

Enclosures (2)

cc: Administrator, Region III, USNRC (w/o enclosures)  
Resident Inspector, Monticello Nuclear Generating Plant, USNRC (w/o enclosures)  
Project Manager, Monticello Nuclear Generating Plant, USNRC  
Minnesota Department of Commerce (w/o enclosures)

## ENCLOSURE 1

### CLOSURE OF THE COMMITMENT TO VERIFY THAT FEEDWATER/CONDENSATE SYSTEM PIPING MEETS CODE REQUIREMENTS

#### **Background**

In Reference E1-1 Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy provided a license amendment request (LAR) for the Monticello Nuclear Generating Plant (MNGP). The Reference E1-1 LAR requested to increase the maximum authorized power level from 1775 megawatts thermal (MWt) to 2004 MWt.

In Reference E1-2 NSPM provided responses to NRC requests for additional information (RAI). As part of the response to RAI 7, NSPM made the following commitment:

*"Confirmation that Feedwater and Condensate pump and heater replacement modifications are complete and meet the code allowables will be provided to the NRC prior to implementation of the EPU license amendment request."*

#### **Discussion**

During the recent refueling outage at MNGP, NSPM installed the final equipment associated with the EPU project. This included replacement of the Condensate Pumps and motors, replacement of the Feedwater Pumps and motors, and completion of feedwater heater replacements and associated piping.

After the refueling outage was completed, NSPM verified that equipment described above, and the field changes and as-built designs conform to the code requirements. Analyses were recently completed that verified that the Feedwater and Condensate pump and heater replacement modifications meet the code requirements.

#### **Conclusion**

Based on the above NSPM confirms that the Feedwater and Condensate pump and heater replacement modifications are complete and meet the code requirements (allowables). Therefore, this commitment can be closed.

**References:**

- E1-1 Letter from Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy to Document Control Desk, "License Amendment Request: Extended Power Uprate (TAC MD9990)," L-MT-08-052, dated November 5, 2008. (ADAMS Accession No. ML083230111)
- E1-2 Letter from T J O'Connor (NSPM) to Document Control Desk, "Monticello Extended Power Uprate: Response to NRC Mechanical and Civil Engineering Review Branch (EMCB) Requests for Additional Information (RAIs) dated March 28, 2009 (TAC MD9990)," L-MT-09-044, dated August 21, 2009. (ADAMS Accession No. ML092390341)

## ENCLOSURE 2

## FINAL SUMMARY OF EXTENDED POWER UPRATE COMMITMENTS

Below is the complete list of NRC commitments for the Extended Power Uprate (EPU) project prior to issuance of this letter.

Extended Power Uprate Commitments			
No.	Letter No. Date	Commitment text	Status
1	L-MT-08-052 11/5/2008	NSPM will inspect the steam dryer during the next refueling outage to confirm no unexpected changes in crack length on the steam dryer.	Complete (L-MT-10-046)
2	L-MT-09-017 3/19/2009	The steady state bypass void fraction for the EPU core will be calculated using the method described by the NSPM response to NRC RAI SNPB-7 of L-MT-09-017.	Complete (L-MT-10-046)
3	L-MT-09-043 8/12/2009	NSPM will provide the evaluation of steam dryer structural integrity to the NRC staff prior to further increases in reactor power when increasing to power levels above CLTP.	Deleted (L-MT-10-046)
4	L-MT-09-043 8/12/2009	NSPM will perform outage steam dryer inspections based on the guidance of BWRVIP.	Active
5	L-MT-09-044 8/21/2009	Confirmation that Feedwater and Condensate pump and heater replacement modifications are complete and meet the code allowables will be provided to the NRC prior to implementation of the EPU license amendment request.	Active
6	L-MT-09-044 8/21/2009	Confirmation that modification of support TWH-143 is complete will be provided to the NRC prior to implementation of the EPU license amendment request.	Complete (L-MT-11-044)

7	L-MT-13-020, revised from L-MT-11-044, Enclosure 1 and revised from original in L-MT- 09-046 6/12/2009	Prior to EPU implementation NSPM will revise operating procedures for Condensate/Feedwater (CFW) transient events, to take prudent actions to recover CFW flow, and place the reactor in a safe and stable condition.	Complete (L-MT-13-092)
8	L-MT-10-072 12/21/2010 Revised from original in L-MT- 09-046 6/12/2009	Prior to implementation of EPU, the USAR will be revised to indicate that the emergency heat load of 24.7 MBTU/hr occurs approximately 192 hours after shutdown.	Complete (L-MT-13-092)
9	L-MT-11-044 Enclosure 1 Revised from original in L-MT- 09-048 7/13/2009	NSPM commits to evaluating the changes in condensate and feed pump area heat load to confirm temperatures remain within design limits prior to EPU implementation. If necessary, modifications to the HVAC system for this area will be implemented to maintain these areas within the design limits.	Complete (L-MT-13-092)
10	L-MT-09-100 10/28/2009	If NRR agrees to review the MELLLA+ LAR concurrent with the EPU LAR, NSPM will commit in the MELLLA+ LAR to resolve the CAP section in the same manner as the issue is resolved for the delayed EPU amendment.	Complete (L-MT-10-046)
11	L-MT-13-092 Enclosure 3, revised from L- MT-10-046 6/30/2010	As part of MNGP restart following installation of the replacement steam dryer, NSPM will implement the Power Ascension Test Plan found in Enclosure 1, Appendix 5 of L-MT- 10-046, as revised by L-MT-13-092.	Active

**Revised or Completed Commitments**

Commitment 5 is completed as described in Enclosure 1.

**Final List of EPU Commitments**

Based on the closure of commitment 5 with this letter the revised EPU commitments table is as follows:

<b>Extended Power Uprate Commitments</b>			
<b>No.</b>	<b>Letter No. Date</b>	<b>Commitment text</b>	<b>Status</b>
1	L-MT-08-052 11/5/2008	NSPM will inspect the steam dryer during the next refueling outage to confirm no unexpected changes in crack length on the steam dryer.	Complete (L-MT-10-046)
2	L-MT-09-017 3/19/2009	The steady state bypass void fraction for the EPU core will be calculated using the method described by the NSPM response to NRC RAI SNPB-7 of L-MT-09-017.	Complete (L-MT-10-046)
3	L-MT-09-043 8/12/2009	NSPM will provide the evaluation of steam dryer structural integrity to the NRC staff prior to further increases in reactor power when increasing to power levels above CLTP.	Deleted (L-MT-10-046)
4	L-MT-09-043 8/12/2009	NSPM will perform outage steam dryer inspections based on the guidance of BWRVIP.	Active
5	L-MT-09-044 8/21/2009	Confirmation that Feedwater and Condensate pump and heater replacement modifications are complete and meet the code allowables will be provided to the NRC prior to implementation of the EPU license amendment request.	Complete (L-MT-13-109)
6	L-MT-09-044 8/21/2009	Confirmation that modification of support TWH-143 is complete will be provided to the NRC prior to implementation of the EPU license amendment request.	Complete (L-MT-11-044)
7	L-MT-13-020, revised from L-MT-11-044, Enclosure 1 and revised from original in L-MT- 09-046 6/12/2009	Prior to EPU implementation NSPM will revise operating procedures for Condensate/Feedwater (CFW) transient events, to take prudent actions to recover CFW flow, and place the reactor in a safe and stable condition.	Complete (L-MT-13-092)

8	L-MT-10-072 12/21/2010 Revised from original in L-MT- 09-046 6/12/2009	Prior to implementation of EPU, the USAR will be revised to indicate that the emergency heat load of 24.7 MBTU/hr occurs approximately 192 hours after shutdown.	Complete (L-MT-13-092)
9	L-MT-11-044 Enclosure 1 Revised from original in L-MT- 09-048 7/13/2009	NSPM commits to evaluating the changes in condensate and feed pump area heat load to confirm temperatures remain within design limits prior to EPU implementation. If necessary, modifications to the HVAC system for this area will be implemented to maintain these areas within the design limits.	Complete (L-MT-13-092)
10	L-MT-09-100 10/28/2009	If NRR agrees to review the MELLLA+ LAR concurrent with the EPU LAR, NSPM will commit in the MELLLA+ LAR to resolve the CAP section in the same manner as the issue is resolved for the delayed EPU amendment.	Complete (L-MT-10-046)
11	L-MT-13-092 Enclosure 3, revised from L- MT-10-046 6/30/2010	As part of MNGP restart following installation of the replacement steam dryer, NSPM will implement the Power Ascension Test Plan found in Enclosure 1, Appendix 5 of L-MT-10-046, as revised by L-MT-13-092.	Active