



October 28, 2009

L-MT-09-100
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 Facility Operating License
License No. DPR-22

Xcel Energy Request for NRC Concurrent Review of Monticello Nuclear Generating Plant Maximum Extended Load Line Limit Analysis Plus (MELLLA+) License Amendment Request (LAR) with MNGP Extended Power Uprate (EPU) LAR Review Delay

- References:
- 1) NSPM letter to NRC, "License Amendment Request: Extended Power Uprate (L-MT-08-052)," dated November 5, 2008
 - 2) Letter from NRR to MNGP, "Monticello Nuclear Generating Plant - Revised Schedule for Review of Extended power Uprate Amendment Application (TAC No. MD9990)," dated October 1, 2009
 - 3) Letter from MNGP to Document Control Desk, "Monticello Extended Power Uprate: Acknowledgement of NRC Review Delay (TAC No. MD9990), dated October 13, 2009

The purpose of this letter is to request concurrent review of the Maximum Extended Load Line Limit Analysis Plus (MELLLA+) license amendment request (LAR) while the Extended Power Uprate (EPU) LAR is still under NRC review.

Pursuant to 10 CFR 50.90, the Northern States Power Company, a Minnesota corporation (NSPM), requested in Reference 1 an amendment to the Monticello Nuclear Generating Plant (MNGP) Renewed Operating License (OL) and Technical Specifications to increase the maximum authorized power level from 1775 megawatts thermal (MWt) to 2004 MWt. In Reference 2, NSPM was informed of the US Nuclear Regulatory Commission (NRC) staff's decision to delay the review of the MNGP EPU LAR. This delay is based on the Commission's direction for the Office of Nuclear Reactor Regulation (NRR) staff to continue to work towards resolving Advisory Committee on Reactor safeguards (ACRS) concerns regarding the application of containment accident pressure (CAP) credit. Reference 3 contains NSPM's acknowledgement of the EPU application review delay.

As discussed with NRC staff previously, NSPM planned to submit the MELLLA+ LAR immediately following the approval of the EPU LAR, which was scheduled for the first quarter, 2010. NSPM has continued development of the MELLLA+ LAR on the schedule previously communicated to the NRC. With the delay in the EPU LAR review, submittal of the MELLLA+ LAR (on the original schedule) would result in the MELLLA+ LAR and the EPU LAR being considered by the staff as "linked" licensing actions. NSPM requests the concurrent review in order to minimize any scheduling gaps between the EPU implementation and MELLLA+ implementation at MNGP.

MELLLA+, and the included transition to the Detect and Suppress Solution – Confirmation Density (DSS-CD) for stability protection, is an important operational change for MNGP that supports operation at EPU power levels. NSPM desires to minimize the schedule gap between implementation of the MNGP EPU and MELLLA+ in order to operate at the EPU power level in the most safe, effective, and efficient manner. NSPM's initial evaluation of plant operation under EPU conditions (licensed to 2004 MWt) indicates that MNGP would likely voluntarily de-rate the plant to approximately 1880 MWt pending the approval and implementation of MELLLA+. This voluntary de-rate would be applied to ensure an appropriately conservative "full power" flow window is established. The voluntary de-rate and related conservative flow window would provide margin to the boundaries of allowed operation on the MNGP power-to-flow map for normal plant operation and control rod pattern adjustments. Even with the voluntary de-rate, NSPM estimates the need to perform control rod pattern adjustments about two (2) to three (3) times more frequently.

In the Safety Evaluation for Licensing Topical Report NEDC-33006P, "General Electric Boiling Water Reactor Maximum Extended Load Line Limit Analysis Plus," October 2008, the NRC recognizes that EPU plants operating in the MELLLA+ range will require a significantly lower number of control rod movements and considered that element a "significant improvement on operating flexibility." The NRC also recognized that MELLLA+ operation "provides safer operation" because reducing the number of control rod manipulations minimizes the likelihood of fuel failures and reduces the likelihood of accidents initiated by reactor maneuvers required to achieve an operating condition where control rods can be extracted.

NSPM understands concurrent review of the MELLLA+ LAR would be considered linked because the analysis assumes EPU has been approved and is the current licensing basis for Monticello. NSPM also acknowledges that the MELLLA+ amendment contains a CAP evaluation section. This circumstance also does not meet LIC-109, Acceptance Review Procedures," in regard to "promised information" and "completeness of scope." However, 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. NRR staff expects resolution of the CAP review criteria in spring of 2010.

The current status of the NRR reviews for the MNGP EPU LAR is mostly complete. NSPM's understanding is that two review areas remain outstanding, with one of those areas being dependent on resolution of the application of CAP credit. The MELLLA+ amendment technical areas are an extension of the work done for EPU; therefore, the review of the majority of the MELLLA+ LAR technical areas could begin.

As demonstrated above, there are strong economic and operational safety reasons for minimizing the schedule gap between approval of the MNGP EPU LAR and the MNGP MELLLA+ LAR. Based on that information, the EPU schedule delay, the LIC-109 guidance, and the EPU review status (mostly complete), NSPM proposes NRR accept for review the MELLLA+ LAR as a situation with "rare circumstances" (LIC-109, Appendix B, 3.1.3). The rare circumstance is the delay in the EPU LAR review due to the resolution of the containment accident pressure credit issue.

Please direct any questions regarding this matter to Lynne Gunderson, Projects Licensing Manager, 612-330-6588.

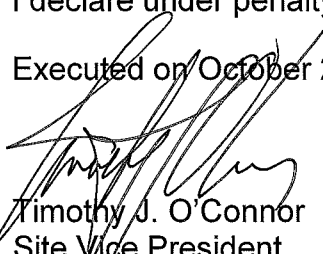
In accordance with 10 CFR 50.91, a copy of this letter is being provided to the designated Minnesota Official without the proprietary version.

Commitment Summary

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.

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

Executed on October 28, 2009.



Timothy J. O'Connor
Site Vice President
Monticello Nuclear Generating Plant
Northern States Power Company - Minnesota

cc: Administrator, Region III, USNRC
Project Manager, Monticello, USNRC
Resident Inspector, Monticello, USNRC
Minnesota Department of Commerce