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

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

Clarification of the Revised Long-Term Containment Response and
Net-Positive Suction Head Analyses

Reference 1 requested approval of updates to the design basis loss of coolant accident (LOCA) containment response and overpressure assumed for adequate net positive suction head (NPSH) in the low-pressure emergency core cooling system analyses. These analyses are described in the Monticello Nuclear Generating Plant (MNGP) Updated Safety Analysis Report. References 2, 3, 4 and 5 involve NRC requests for additional information (RAI) and NMC responses.

During a telephone conference call held on March 8, 2004 (Reference 6), the NRC staff requested clarification of the changes NMC was requesting via this license amendment request. Specifically, the NRC requested that NMC clarify application of the service water temperatures discussed in the license amendment request.

In Reference 1, NMC provided a General Electric (GE) report entitled "Monticello Nuclear Generating Plant Long-term Containment Analysis," GE-NE-0000-0002-8817-01, which provided the analytical bases and demonstrated the acceptability of the Containment performance under various scenarios. One purpose of the analysis was to restore the service water temperature to its former design basis value of 90°F. Additionally, objective 7 in the GE report determines the maximum service water temperature from a containment response perspective, which would maintain the peak suppression pool (SP) temperature below the torus attached piping temperature limit.

A long-term containment response analysis was performed for the design basis LOCA, the limiting event, with input assumptions as discussed in, objective 7 and service water temperatures of 90° or 94°F. The results discussed in the GE report and NPSH analyses confirm the acceptability of restoring the service water temperature to its former design basis value of 90°F. The report further indicated that the maximum acceptable service water temperature that would keep the peak SP temperature below

the limiting SP piping design temperature was determined to be 94°F. Therefore, a service water temperature of 94°F was determined to be acceptable for the bounding event, a DBA LOCA, from a containment response perspective.

NMC is clarifying Reference 1 to indicate that a maximum service water temperature of 94°F will be the design and licensing basis value with respect to containment response, based upon the analyses discussed above. Therefore, NMC specifically requests NRC approval of a maximum service water temperature of 94°F to be utilized in conjunction with containment response analyses. A service water temperature of 90°F will continue to be utilized as the design input for other licensing analyses involving service water temperature.

This letter makes no new commitments. If you have any questions regarding this submittal, please contact Rick Loeffler, Senior Regulatory Affairs Engineer at 763-295-1427.



Eric C. Sopkin
Site Engineering Director, Monticello Nuclear Generating Plant
Nuclear Management Company, LLC

for

Thomas J. Palmisano
Site Vice President, Monticello Nuclear Generating Plant
Nuclear Management Company, LLC

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

References

1. NMC Letter to NRC, "License Amendment Request, Revised Analyses of Long-Term Containment Response and Overpressure Required for Adequate NPSH for Low Pressure ECCS Pumps," dated December 6, 2002.
2. NRC Letter to NMC, "Monticello Nuclear Generating Plant – Request for Additional Information Related to Revised Long-Term Containment Response and Net-Positive Suction Head Analyses," (TAC No. MB7185) dated August 19, 2003.
3. NMC Letter to NRC, "Response to Request for Additional Information Related to Revised Long-Term Containment Response and Net-Positive Suction Head Analyses," (TAC No. MB7185) dated September 24, 2003.
4. NRC e-Mail to NMC, "Subject: Re: Monticello: Revised Long-Term Containment," (TAC No. MB7185) dated October 8, 2003.
5. NMC Letter to NRC, "Response to e-Mail Request for Additional Information Related to Revised Long-Term Containment Response and Net-Positive Suction Head Analyses," (TAC No. MB7185) dated October 23, 2003.
6. Telephone Conference Call between NRC and NMC, Subject: Revised Long-Term Containment Response and Net-Positive Suction Head Analyses (TAC No. MB7185), held March 8, 2004.