



January 23, 2003

L-MT-03-005
10 CFR Part 50,
Section 50.90

US Nuclear Regulatory Commission
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MONTICELLO NUCLEAR GENERATING PLANT
Docket No. 50-263 License No. DPR-22

**Supplemental Information Regarding Response to Request for Additional Information
Regarding Question No. 6, License Amendment Request for
Five Year Extension of Type A Test Interval (TAC No. MB4919)**

Reference 1: Nuclear Management Company, LLC Submittal of License Amendment Request for Monticello Nuclear Generating Plant Regarding, Risk-Informed Technical Specification Change Regarding Five Year Extension of Type A Test Interval, dated April 22, 2002

Reference 2: NRC Request For Additional Information Related To License Amendment Request (TAC No. MB4919), dated September 23, 2002

Reference 3: Response to Request for Additional Information Regarding License Amendment Request for Five Year Extension of Type A Test Interval (TAC No. MB4919), dated October 25, 2002

Reference 1 proposed Technical Specifications changes to Appendix A of Operating License DPR-22 for the Monticello Nuclear Generating Plant (MNGP). The purpose of the License Amendment Request was to revise the Monticello Technical Specifications (TS) to incorporate a one-time five-year extension to the Type A Test Interval.

Reference 2 requested Nuclear Management Company, LLC (NMC) to provide additional information in support of the License Amendment Request submitted by Reference 1.

Reference 3 provided NMC's response to the NRC's Request for Additional Information (RAI) for the previously submitted License Amendment Request.

This submittal contains supplemental information contained in Exhibit A. This information supplements our answer to Question No. 6 in our October 25, 2002 (Reference 3) submittal. During a conference call between NMC (Doug Neve, et al) and the NRC (Darl Hood, et al) on January 13, 2003, it was requested that NMC provide

further information in this area. The information in Exhibit A contains the results of a calculation, which documents the estimated change in Large Early Release Frequency (LERF) based on the impact of corrosion in the uninspectable areas of the MNGP containment structure.

This submittal does not contain any new NRC commitments and does not modify any prior commitments.

The original changes were evaluated in accordance with 10 CFR 50.91(a)(1), using the criteria in 10 CFR 50.92(c). We believe the attached information does not impact that evaluation; therefore, the Determination of No Significant Hazards Consideration submitted by the original letter dated April 22, 2002, is also applicable to this submittal.

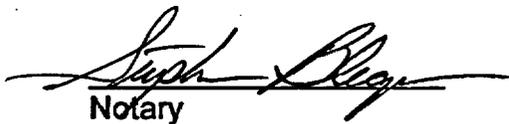
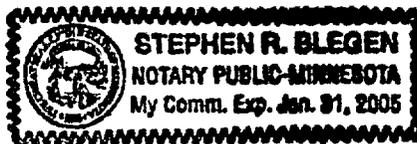
Additionally, the original changes were evaluated in accordance with 10 CFR 51.22(c)(9) to meet the eligibility criterion for categorical exclusion, and thus pursuant to 10 CFR 51.22(b), we determined that an Environmental Assessment was not required. We believe that the attached information does not impact that evaluation; therefore, the Environmental Assessment submitted by the original letter dated April 22, 2002, is also applicable to this submittal.

If you have any questions regarding this response to Request for Additional Information please contact John Fields, Senior Licensing Engineer, at (763) 295-1663.



David L. Wilson
Site Vice President
Monticello Nuclear Generating Plant

Subscribed to and sworn before me this 23 day of January, 2003


Notary

Attachment: Exhibit A – Supplemental Information Regarding Response to Request for Additional Information Regarding Question No. 6 Related to License Amendment Request Regarding Five Year Extension of Type A Test Interval

cc: Regional Administrator-III, NRC
NRR Project Manager, NRC
Sr. Resident Inspector, NRC
Minnesota Department of Commerce
J. Silberg, Esq.

Exhibit A

Supplemental Information Regarding Response to Request for Additional Information Regarding Question No. 6 Related to License Amendment Request Regarding Five Year Extension for Type A Test Interval

The NRC RAI (Reference 2), Question No. 6 in part asked for the MNGP to "...address how potential leakage due to age related degradation from these uninspectable areas are factored into the risk assessment in support of the requested ILRT interval extension." During a conference call between the NMC and NRC on January 13, 2003, it was requested that NMC provide further information in this area.

NMC has prepared a calculation approximating the methodology used for a similar analysis performed by Calvert Cliffs Nuclear Power Plant¹. The calculation documents the estimated increase in Large Early Release Frequency (LERF) due to the potential age related degradation from corrosion in the uninspectable areas of the primary containment. Although the requested ILRT interval extension adds five years to the existing ten year interval, this calculation conservatively quantifies the change in LERF resulting from the difference between a 3-in-10 year Type A test interval to a 1-in-15 year interval.

The calculation employs the following methodology:

- Two events of age-related degradation resulting in penetration of the primary containment have been observed over a 5.5 year period for 70 steel lined containments beginning in September 1996. This results in a failure rate of 5.2 E-03 per year.
- A one-half failure is assumed for portions of the MNGP containment that are uninspectable. For the 5.5-year data period, this corresponds to a failure rate of 1.3 E-03 per year.
- The likelihood of containment penetration due to age-related degradation is assumed to double every five years.
- The change in LERF (Δ LERF) is equal to the product of the core damage frequency (CDF), the change in containment failure probability due to the interval extension (Δ U), and the probability of containment breach given a failure of the basemat portion of the containment liner (P). Thus:

$$\begin{aligned}\Delta \text{ LERF} &= \text{CDF} \times \Delta \text{U} \times \text{P} \\ &= 1.59 \text{ E-05/yr} \times 2.5 \text{ E-02} \times 1\% \\ &= 4.0 \text{ E-09/yr}\end{aligned}$$

Using the above methodology, the calculation concludes that the estimated increase in LERF due to the potential age-related degradation from corrosion in the uninspectable areas of the MNGP primary containment due to extending the ILRT Type A test interval from 3-in-10 to 1-in-15 years is considered very small (<1 E-07) per Regulatory Guide 1.174. A conservative estimate of the change in LERF is calculated to be 4.0 E-09 per year.

¹ Constellation Nuclear, Calvert Cliffs Nuclear Power Plant Letter to the NRC, Subject: Response to Request for Additional Information Concerning the License Amendment Request for a One-Time Integrated Leakage Rate Test Extension, dated 3/27/2002