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

Prairie Island Nuclear Generating Plant Units 1 and 2
Dockets 50-282 and 50-306
License Nos. DPR-42 and DPR-60

Supplement to License Amendment Request (LAR) For Extension Of Technical Specification (TS) 3.8.1, "AC Sources-Operating," Emergency Diesel Generator Completion Time (TAC Nos. MC9001 and MC9002)

By letter dated November 21, 2005, Nuclear Management Company (NMC) submitted an LAR to revise the Emergency Diesel Generator (EDG) Completion Time in TS 3.8.1 Condition B.4 from 7 days to 14 days. By letter dated June 16, 2006, NMC provided supplemental information to this LAR. This letter supplements the LAR to address an NRC request for additional information (RAI) regarding the LAR and the June 16, 2006 supplement. NMC submits this supplement in accordance with the provisions of 10 CFR 50.90.

Enclosure 1 provides the NRC RAI and the NMC response.

The supplemental information provided in this letter and enclosure does not impact the conclusions of the Determination of No Significant Hazards Consideration and Environmental Assessment presented in the November 21, 2005 submittal as supplemented June 16, 2006.

In accordance with 10 CFR 50.91, NMC is notifying the State of Minnesota of this LAR by transmitting a copy of this letter and enclosure to the designated State Official.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

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

Executed on **AUG 31 2006**



Thomas J. Palmisano
Site Vice President, Prairie Island Nuclear Generating Plant Units 1 and 2
Nuclear Management Company, LLC

Enclosures (1)

cc: Administrator, Region III, USNRC
Project Manager, Prairie Island, USNRC
Resident Inspector, Prairie Island, USNRC
State of Minnesota

Enclosure 1

NRC Question:

During an August 9, 2006 conference call, the NRC Staff requested additional information related to the response the Nuclear Management Company (NMC) provided for the NRC request for additional information (RAI) Question 13 in Enclosure 1 to the supplement dated June 16, 2006. Specifically, the NRC Staff requests NMC to provide the Δ CDF and Δ LERF values when 14 days of Completion Time unavailability are added to the existing Preventive Maintenance (PM) values.

Nuclear Management Company, LLC (NMC) response:

As stated in RAI Question 13, the baseline emergency diesel generator (EDG) preventive maintenance values used in the risk analysis provided in the submittal were based on a plant-specific data collection over a 10-year period (8/1/1994 to 9/1/2004). These values include preventive maintenance performed within the current Technical Specification (TS) allowed 7-day Completion Time, and unavailability associated with surveillance and other testing performed on the EDGs. Surveillance testing unavailability is a consideration for the Prairie Island Nuclear Generating Plant (PINGP) Unit 1 EDGs, D1 and D2, which have mechanical governors. Unavailability time is conservatively counted whenever the speed droop governor setting on the EDG set is adjusted away from normal during load testing (including during the monthly test). The PINGP Unit 2 EDGs, D5 and D6, have an electronic governor system and are not subject to this type of unavailability during routine testing.

The current preventive maintenance (PM) program schedules an overhaul for each diesel every 18 months. The response to RAI Question 13 in Reference 1 assumed EDG PM unavailability due to a 14 day major overhaul normalized over the 18 month maintenance cycle ($2.7\text{E-}02$).

In the updated analysis for this supplement, revised PM values were determined by summing the existing PM unavailability term for each EDG with the EDG PM unavailability due to a 14 day major overhaul. The existing Unit 1 EDG PM term is $1.47\text{E-}02$ and the existing Unit 2 PM term is $1.23\text{E-}02$. The 14 day overhaul PM was calculated in response to RAI Question 13 in Reference 1 ($2.7\text{E-}02$). These revised PM values were used to determine core damage frequency (CDF) and large early release frequency (LERF) values.

These revised PM values are conservative. The original PM value already accounts for EDG preventive maintenance activities under the current Technical Specification 7 day

allowed Completion Time, including unavailability due to surveillance testing. This supplement assumes an additional 14 day PM is performed every 18 months. The increased preventive maintenance values are shown in Table 1 below.

Table 1
Increased PM Terms

Diesel Generator	Original PM Value	14-Day CT PM Value	Revised PM Value
D1	1.47E-02	2.70E-02	4.17E-02
D2	1.47E-02	2.70E-02	4.17E-02
D5	1.23E-02	2.70E-02	3.93E-02
D6	1.23E-02	2.70E-02	3.93E-02

The Δ CDF and Δ LERF results for increased preventive maintenance can be found in Table 2 below. Table 2 below corresponds to Table 2 in the original license amendment request (LAR) submittal (Reference 2).

Table 2
 Δ CDF and Δ LERF Results for Increased PM

Risk Parameter	Unit 1 (per yr)	Unit 2 (per yr)	RG¹ 1.174 criteria
Base Line CDF	1.47E-05	1.63E-05	NA
Base Line LERF	5.74E-07	5.74E-07	NA
New CDF	1.51E-05	1.68E-05	NA
New LERF	5.74E-07	5.74E-07	NA
Δ CDF	3.80E-07	5.05E-07	<1E-6
Δ LERF	< 5E-10	< 5E-10	<1E-7

¹ Regulatory Guide

The results presented in Table 2 above show that the Δ CDF and Δ LERF results are less than the RG 1.174 values for very small risk increases.

As a sensitivity study, it was assumed that the corrective maintenance (CM) term may increase as a result of extended outage time available for emergent work. The existing CM term was scaled by the ratio of the proposed and current Completion Time or 14/7. The resulting values are shown in the response to RAI Question 13, Table 13-4 in Reference 1. These PM and CM increases were applied to all EDGs. The Δ CDF and

Δ LERF results for increased preventive maintenance and corrective maintenance can be found in Table 3 below. Table 3 below corresponds to Table 3 in the original LAR submittal (Reference 2).

Table 3
 Δ CDF and Δ LERF Results for Increased PM and CM

Risk Parameter	Unit 1 (per yr)	Unit 2 (per yr)	RG¹ 1.174 criteria
Base Line CDF	1.47E-05	1.63E-05	NA
Base Line LERF	5.74E-07	5.74E-07	NA
New CDF	1.52E-05	1.70E-05	NA
New LERF	5.74E-07	5.74E-07	NA
Δ CDF	5.00E-07	6.72E-07	<1E-6
Δ LERF	< 5E-10	< 5E-10	<1E-7

¹Regulatory Guide

The results presented in Table 3 above show that the Δ CDF and Δ LERF results are less than the RG 1.174 values for very small risk increases.

References:

- 1.) Supplement to License Amendment Request (LAR) For Extension of Technical Specification (TS) 3.8.1, "AC Sources-Operating," Emergency Diesel Generator Completion Time (TAC Nos. MC9001 and MC9002), L-PI-06-031, dated June 16, 2006.
- 2.) License Amendment Request (LAR) For Extension of Technical Specification (TS) 3.8.1, "AC Sources-Operating," Emergency Diesel Generator Completion Time, L-PI-05-036, dated November 21, 2005.