June 21, 2005

Mr. Thomas J. Palmisano
Site Vice President
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

SUBJECT: REQUESTS FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE MONTICELLO NUCLEAR GENERATING PLANT, LICENSE RENEWAL APPLICATION

Dear Mr. Palmisano:

By letter dated March 16, 2005, Nuclear Management Company, LLC, (NMC or the applicant) submitted an application pursuant to 10 CFR Part 54, to renew the operating license for Monticello Nuclear Generating Plant (MNGP), for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application (LRA) and has identified, in the enclosure, areas where additional information is needed to complete the review.

These RAIs were discussed with your staff, Mr. Patrick Burke, and a mutually agreeable date for this response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-3777 or e-mail DXM2@nrc.gov.

Sincerely,

/RA/ (J. Rowley for)

Daniel J. Merzke, Project Manager
License Renewal Section A
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No.: 50-263

Enclosure: As stated

cc w/encl: See next page

June 21, 2005

Mr. Thomas J. Palmisano
Site Vice President
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION FOR THE REVIEW OF THE MONTICELLO NUCLEAR GENERATING PLANT, LICENSE RENEWAL APPLICATION

Dear Mr. Palmisano:

By letter dated March 16, 2005, Nuclear Management Company, LLC, (NMC or the applicant) submitted an application pursuant to 10 CFR Part 54, to renew the operating license for Monticello Nuclear Generating Plant (MNGP), for review by the U.S. Nuclear Regulatory Commission (NRC). The NRC staff is reviewing the information contained in the license renewal application (LRA) and has identified, in the enclosure, areas where additional information is needed to complete the review.

These RAIs were discussed with your staff, Mr. Patrick Burke, and a mutually agreeable date for this response is within 30 days from the date of this letter. If you have any questions, please contact me at 301-415-3777 or e-mail DXM2@nrc.gov.

Sincerely,

/RA/ (J. Rowley for)

Daniel J. Merzke, Project Manager
License Renewal Section A
License Renewal and Environmental Impacts Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No.: 50-263

Enclosure: As stated

cc w/encl: See next page

DISTRIBUTION: See next page

ADAMS Accession no.: ML051720593

Document Name: E:\Filenet\ML051720593.wpd

OFFICE	PM:RLEP	LA:RLEP	SC:RLEP
NAME	DMerzke (J. Rowley for)	MJenkins	SLee (R. Auluck for)
DATE	06/21/05	06/21/05	06/21/05

OFFICIAL RECORD COPY

Monticello Nuclear Generating Plant

cc:

Jonathan Rogoff, Esquire
Vice President, Counsel & Secretary
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
2807 W. County Road 75
Monticello, MN 55362

Manager, Regulatory Affairs
Monticello Nuclear Generating Plant
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

Robert Nelson, President
Minnesota Environmental Control
Citizens Association (MECCA)
1051 South McKnight Road
St. Paul, MN 55119

Commissioner
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155-4194

Regional Administrator, Region III
U.S. Nuclear Regulatory Commission
801 Warrenville Road
Lisle, IL 60532-4351

Commissioner
Minnesota Department of Health
717 Delaware Street, S. E.
Minneapolis, MN 55440

Douglas M. Gruber, Auditor/Treasurer
Wright County Government Center
10 NW Second Street
Buffalo, MN 55313

Commissioner
Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

Manager - Environmental Protection Division
Minnesota Attorney General's Office
445 Minnesota St., Suite 900
St. Paul, MN 55101-2127

John Paul Cowan
Executive Vice President & Chief Nuclear
Officer
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

Nuclear Asset Manager
Xcel Energy, Inc.
414 Nicollet Mall, R.S. 8
Minneapolis, MN 55401

Mr. James Ross
Nuclear Energy Institute
1776 I Street, NW, Suite 400
Washington, DC 20006-3708

Patrick Burke
License Renewal Project Manager
Monticello Nuclear Generating Plant
Nuclear Management Company, LLC
2807 West County Road 75
Monticello, MN 55362-9637

Mr. Douglas F. Johnson
Director, Plant Life Cycle Issues
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

DISTRIBUTION: Letter to T. Palmisano, Re: RAIs for the review of Monticello, Dated: June 21 , 2005
ADAMS Accession No.: ML051720593

HARD COPY
RLEP RF

E-MAIL:
RidsNrrDrip
RidsNrrDe
G. Bagchi
K. Manoly
W. Bateman
J. Calvo
R. Jenkins
P. Shemanski
J. Fair
RidsNrrDssa
RidsNrrDipm
D. Thatcher
R. Pettis
G. Galletti
C. Li
K. Winsberg (RidsOgcMailCenter)
R. Weisman
M. Mayfield
A. Murphy
S. Smith (srs3)
S. Duraiswamy
Y. L. (Renee) Li
RLEP Staff

L. Raghavan
L. Padovan
A. Stone, RIII
B. Burgess, RIII
P. Lougheed, RIII
R. Orlikowski, RIII
T. Mensah
OPA

MONTICELLO NUCLEAR GENERATING PLANT
LICENSE RENEWAL APPLICATION (LRA)
REQUESTS FOR ADDITIONAL INFORMATION (RAIs)

Plant Level Scoping Results

<u>RAI 2.2-1</u>
The Control Rod Velocity Limiters are described in Section 6.4 of the USAR. The Control Rod Velocity Limiters are provided as an integral part of each control rod. They provide hydraulic damping to reduce the free fall velocity of the rod and thereby reduce the consequences in the event the control rod became detached from its drive and dropped from the core. The LRA does not mention this component, nor does it appear to refer to USAR Section 6.4 in the text. Please provide justification.

<u>RAI 2.2-2</u>
The Safety Parameter Display System is described in Section 7.13 of the MNGP USAR. The purpose of the Safety Parameter Display System (SPDS) is to provide a concise display of critical plant variables to control room operators, to aid them in rapidly and reliably determining the safety status of the plant. The LRA does not mention this system, nor does it appear to refer to USAR Section 7.13 in the text. Please provide justification.

Metal Fatigue TLAAs

<u>RAI 4.3.1-1</u>
Section 4.3.1 of the license renewal application (LRA) discusses the evaluation of the reactor pressure vessel (RPV) components. The LRA indicates that a reanalysis of the fatigue usage of RPV components was performed as part of the 1998 power uprate. The LRA also indicates that revised fatigue usage factors were determined from the MNGP fatigue monitoring program (FMP). Describe how these revised fatigue usage factors were calculated. Provide a copy of SASR 89-77, “Accumulated Fatigue Usage for the Monticello Nuclear Generating Station Reactor Pressure Vessel,” December 1989.

<u>RAI 4.3.2-1</u>
Section 4.3.2 of the LRA discusses the evaluation of the reactor vessel internals (RVI). The LRA indicates that the 60-year fatigue usage was estimated by multiplying original fatigue usage by a factor of 1.5. Confirm that this extrapolation bounds the number of startup/shutdown design cycles listed in Section 4.3.1 of the LRA.

<u>RAI 4.3.3-1</u>
Section 4.3.3 of the LRA discusses the evaluation of reactor coolant pressure boundary (RCPB) piping. The LRA indicates that portions of the RCPB were required to be analyzed for fatigue in accordance with the ASME Code Section III for Nuclear Class 1 piping. Provide the basis for this requirement. The LRA further indicates that the design fatigue usage at the limiting location for RCPB core spray piping is less than 0.65 (core spray valve joint). The LRA estimates the 60-year fatigue usage by multiplying the design value by 1.5. Table 4.3.1-1 of the LRA indicates that the projected 60-year fatigue usage of the core spray nozzle is 0.65 based on the FMP. Indicate whether the number of thermal transient cycles used to estimate the 60-year fatigue usage of the core spray valve joint is consistent with the number of thermal transient cycles, obtained from the FMP, used to estimate the 60-year fatigue usage of the core spray nozzle.

RAI 4.5-1
Section 4.5 of the LRA discusses the evaluation of the impact of the reactor water environment on the fatigue life of the locations identified in NUREG/CR-6260, "Application of NUREG/CR-5999 Interim Fatigue Curves to Selected Nuclear Power Plant Components." The environmental fatigue usage for the core spray nozzle (safe end) is much lower than the fatigue usage of the core spray nozzle (without environmental effects) provided in Table 4.3.3-1 of the LRA. Provide the basis for the reported usage factors. In addition, discuss the calculation of the Fen multipliers used for each of the NUREG/CR-6260 locations. Provide the calculated Fen multipliers.

RAI 4.6.1-1
Section 4.6.1 of the LRA discusses the evaluation of the suppression chamber. The LRA indicates that the maximum fatigue usage for the torus shell was calculated to be 0.98. Provide the number of safety relief valve (SRV) lifts used in this analysis.