August 30, 2006

Mr. John T. Conway Site Vice President Monticello Nuclear Generating Plant Nuclear Management Company, LLC 2807 West County Road 75 Monticello, MN 55362-9637

### SUBJECT: MONTICELLO NUCLEAR GENERATING PLANT (MNGP) - NRC RECEIPT OF RESPONSE TO GENERIC LETTER (GL) 2003-01 "CONTROL ROOM HABITABILITY" (TAC NO. MB9824)

Dear Mr. Conway:

The Nuclear Regulatory Commission (NRC) acknowledges the receipt of your responses to GL 2003-01 "Control Room Habitability" dated August 5, 2003 (Accession No. ML032310424); November 25, 2003 (Accession No. ML033300162); February 23, 2004 (Accession No. ML040550182); and November 18, 2004 (Accession No. ML043240240). This letter provides a status of your response and describes any actions that may be necessary to consider your response to GL 2003-01 complete.

GL 2003-01 requested that you confirm that your control room meet its design bases (e.g., General Design Criterion (GDC) 1, 3, 4, 5, and 19, draft GDCs, or principal design criteria), with special attention to: (1) Determination of the most limiting unfiltered and/or filtered inleakage into the control room and comparison to values used in your design bases for meeting control room operator dose limits from accidents (Issue 1(a)); (2) Determination that the most limiting unfiltered inleakage is incorporated into your hazardous chemical assessments; and (3) Determination that reactor control capability is maintained in the control room or at the alternate shutdown location in the event of smoke (Issue 1(b)). The GL further requested information on any compensatory measures in use to demonstrate control room habitability, and plans to retire them (Issue 2).

You reported the results of ASTM E741 tracer gas tests for the MNGP control room, which is pressurized for accident mitigation. You determined that the maximum tested value for unfiltered inleakage into the Control Room Envelope (CRE) was 100 (+/- 25) cfm for pressurization mode at time < 8 hours, which is less than the value of 250 cfm assumed in the design basis radiological analyses for control room habitability. For Time  $\geq$  8 hours, you determined that the maximum tested value for inleakage into the CRE was 16 cfm for pressurization mode, which is more than the value of 0 cfm assumed in the design basis radiological analyses for control room habitability. You indicated that the operability evaluation you performed using an alternative source term (AST) methodology demonstrated that whole body and thyroid dose limits are not exceeded provided continuous unfiltered inleakage is less than ~ 500 cfm.

### J. T. Conway

You indicated that the maximum tested unfiltered inleakage value for toxic chemical mode is 188 (+/-9.5) cfm, which is less than the 1800 cfm incorporated into your hazardous chemical assessments. You also indicated that reactor control capability is maintained from either the control room or the alternate shutdown panel in the event of smoke.

The GL further requested that you assess your Technical Specifications (TS) to determine if they verify the integrity of the CRE, including ongoing verification of the inleakage assumed in the design basis analysis for control room habitability, in light of the demonstrated inadequacy of a delta ( $\Delta$ ) P measurement to alone provide such verification (GL Item 1.c). As permitted by the GL, you provided a schedule for revising the surveillance requirement in the TS to reference an acceptable surveillance methodology. In your November 18, 2004, response, you committed to submit proposed changes to your TS based on TSTF-448, adjusted as needed, to account for plant-specific CRE design and licensing basis, within 180 days following NRC approval of TSTF-448.

With respect to compensatory measures to demonstrate control room habitability, you stated that you rely on manual operator action as a backup for actuation on non-redundant, non-safety-related ventilation unit trip devices and closure of a non-redundant isolation damper during the first 8 hours following a design-basis accident. The NRC staff notes that you have now submitted an application for amendment to revise your design-basis analysis using AST methodology that will enable you to retire this compensatory measures.

The information you provided also supported the conclusion that you meet the intent of the GDCs regarding control room habitability.

Your application for amendment to retire the compensatory measures you rely on to demonstrate control room habitability, as well as your commitment to submit an application for amendment based on TSTF-448 following NRC's formal review and approval, are acceptable for the purpose of closing out your response to GL 2003-01. The NRC staff will interact with you as necessary during the amendment review process.

If you have any questions regarding this correspondence, please contact me.

Sincerely,

# /**RA**/

Peter S. Tam, Senior Project Manager Plant Licensing Branch III-1 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket No. 50-263

cc: See next page

### J. T. Conway

You indicated that the maximum tested unfiltered inleakage value for toxic chemical mode is 188 (+/-9.5) cfm, which is less than the 1800 cfm incorporated into your hazardous chemical assessments. You also indicated that reactor control capability is maintained from either the control room or the alternate shutdown panel in the event of smoke.

The GL further requested that you assess your Technical Specifications (TS) to determine if they verify the integrity of the CRE, including ongoing verification of the inleakage assumed in the design basis analysis for control room habitability, in light of the demonstrated inadequacy of a delta ( $\Delta$ ) P measurement to alone provide such verification (GL Item 1.c). As permitted by the GL, you provided a schedule for revising the surveillance requirement in the TS to reference an acceptable surveillance methodology. In your November 18, 2004, response, you committed to submit proposed changes to your TS based on TSTF-448, adjusted as needed, to account for plant-specific CRE design and licensing basis, within 180 days following NRC approval of TSTF-448.

With respect to compensatory measures to demonstrate control room habitability, you stated that you rely on manual operator action as a backup for actuation on non-redundant, nonsafety-related ventilation unit trip devices and closure of a non-redundant isolation damper during the first 8 hours following a design-basis accident. The NRC staff notes that you have now submitted an application for amendment to revise your design-basis analysis using AST methodology that will enable you to retire this compensatory measures.

The information you provided also supported the conclusion that you meet the intent of the GDCs regarding control room habitability.

Your application for amendment to retire the compensatory measures you rely on to demonstrate control room habitability, as well as your commitment to submit an application for amendment based on TSTF-448 following NRC's formal review and approval, are acceptable for the purpose of closing out your response to GL 2003-01. The NRC staff will interact with you as necessary during the amendment review process.

If you have any questions regarding this correspondence, please contact me.

Sincerely,

# **/RA/**

Peter S. Tam, Senior Project Manager Plant Licensing Branch III-1 **Division of Operating Reactor Licensing** Office of Nuclear Reactor Regulation

Docket No. 50-263 cc: See next page **DISTRIBUTION:** PUBLIC

RidsNrrDorlLple

LPL3-1 r/f RidsNrrLATHarris RidsNrrPMPTam RidsOgcRp RidsAcrsAcnwMailCenter RidesRgn3MailCenter JRobinson

Accession Number: ML062350561

OFFICE	LPL3-1/PM	LPL3-1/LA	SCVB/BC	PGCB	LPL3-1/BC(A)
NAME	PTam	THarris	RDennig	CJackson	MMurphy
DATE	8/24/06	8/24/06	8/29/06	8/29/06	8/30/06

# 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, Nuclear Safety Assessment Monticello Nuclear Generating Plant Nuclear Management Company, LLC 2807 West County Road 75 Monticello, MN 55362-9637

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

Regional Administrator, Region III U.S. Nuclear Regulatory Commission Suite 210 2443 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

Michael B. Sellman President and Chief Executive Officer Nuclear Management Company, LLC 700 First Street Hudson, MI 54016

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

November 2005