



May 30, 2003

L-MT-03-044  
10 CFR Part 50  
Section 50.55(a)(3)

US Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

**MONTICELLO NUCLEAR GENERATING PLANT**  
**DOCKET 50-263**  
**LICENSE No. DPR-22**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING RELIEF**  
**REQUEST NO. PR-04**  
**(TAC No. MB6807)**

- Reference 1: NMC letter to NRC, "Request for Review and Approval of Relief Requests Associated with Fourth 10-Year Interval Inservice Testing Program Plan Submittal," dated November 22, 2002.
- Reference 2: NRC e-mail to NMC, "10-yr IST Program (TAC No. MB6807) Pump Relief Request PR 04 Question," dated May 22, 2003.

Reference 1 requested approval of the fourth ten-year inservice test interval and associated relief requests for the Monticello Nuclear Generating Plant (MNGP). Relief request PR-04 applied for a deviation from the American Society of Mechanical Engineers Code, OMA-1996, Subsection ISTB 4.7.1(b)(1), constraint that the range of each analog instrument "be not greater than three times the reference value." Relief from this requirement had previously been granted for the MNGP Third 10-Year Interval Inservice Testing Program Plan.

On May 22, 2003, a request for additional information (RAI) was received (Reference 2). This RAI asked whether additional relief was required in conjunction with the performance of comprehensive pump testing. Upon review of this RAI, Nuclear Management Company, LLC (NMC) determined that the relief request should have included comprehensive pump testing. Therefore, Attachment 1 provides revised relief request PR-04 to address this oversight.

This letter contains no new NRC commitments, nor does it modify any prior commitments.

NMC requests review of relief request PR-04 by June 15, 2003.

If you have any questions regarding this letter, please contact John Fields, Senior Licensing Engineer, at 763-295-1663.



David L. Wilson  
Site Vice President  
Monticello Nuclear Generating Plant

**Attachment: Response To Request For Additional Information Regarding Relief Request No. PR-04**

cc: Regional Administrator-III, NRC  
NRR Project Manager, NRC  
Sr. NRC Resident Inspector, NRC  
State of Minnesota Boiler Inspector  
Hartford Insurance

**Attachment 1**

**NUCLEAR MANAGEMENT COMPANY, LLC  
MONTICELLO NUCLEAR GENERATING PLANT  
DOCKET 50-263**

**May 30, 2003**

**RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION REGARDING RELIEF  
REQUEST NO. PR-04**

**2 pages follow**

**PUMP RELIEF REQUEST**  
**NUMBER: PR 04**

**System:** High Pressure Coolant Injection (HPC)  
Reactor Core Isolation Cooling (RCI)

**Pumps:** P-209 HPCI and P-207 RCIC

**P&ID:** NH-36250 (M-124), NH-36252 (M-126)

**Class:** 2

**Pump Group:** B

**Function:** To inject coolant into the reactor independent of AC power.

**Impractical Test Requirement:** ISTB 4.7.1(b)(1), analog instrument range shall not exceed 3 times the reference value.

**Basis for Relief:** The differential pressure for the HPCI and RCIC pumps is determined by subtracting the indicated suction pressure from the indicated discharge pressure. The HPCI pump suction pressure is read in the Control Room from instrument PI-23-116, which is sent a 10 to 50 mA signal from local transmitter PT-23-100. The RCIC pump suction pressure is read locally from instrument PI-13-66. The current instrument ranges exceed three times the current reference values. The relevant data for the instruments is as follows:

Instrument	Pump Range	Reference	Ratio
PI-23-116 (See NOTE 1)	P-209 30" Hg – 100 PSI	33.7 PSI	$114.7/33.7 = 3.4$
PT-23-100 (See NOTE 2)	P-209 10 to 50 mA	11.8 mA	$40/11.8 = 3.4$
PI-13-66 (See NOTE 1)	P-207 30" Hg – 100 PSI	33.7 PSI	$114.7/33.7 = 3.4$

**NOTE 1:** The vacuum range for the pressure indicators was converted to PSI for determining the ratio. 30" HG Vacuum = 14.7 PSI; thus the range = 100 + 14.7 PSI. The same principle was applied to the reference value. With a reference value of 19 PSI indicated on the instrument, the reference value used for the ratio determination is  $19 + 14.7 = 33.7$  PSI.

**NOTE 2:** The pressure transmitter has a 10 to 50 mA range, or a span of 40 mA. The ratio for this instrument must be determined by reducing the reference value to its value on the 40 mA span.

Group A and B Tests: In accordance with ISTB 4.7.1(b)(1) NMC proposes to apply three times the reference value for determination of the code equivalent range for the instrument(s). The  $\pm 2\%$  code allowable instrument accuracy (see ISTB 4.7.1(a)) for Group A and B Tests is then determined from this code equivalent range as described below.

Instrument	Reference Value	Code Equivalent Range	$\pm 2\%$ of Code Equivalent Range
PI-23-116	33.7 psi	$3 \times 33.7 = 101$ psi	$\pm 2$ psi
PT-23-100	21.8 mAmps	$3 \times 11.8 = 35.4$ mAmps	$\pm 0.7$ mAmps
PI-13-66	33.7 psi	$3 \times 33.7 = 101$ psi	$\pm 2$ psi

\* 21.8 mAmps equates to 11.8 mAmps on the 40 mAmp span

The as-found data in the calibration history for these instruments shows that they have been consistently well within these current code required accuracy.

Comprehensive Tests: The full scale range of pressure transmitter PT-23-100 is approximately 3.4 times the reference value, which is greater than the ISTB 4.7.1(b)(1) requirement of 3 times the reference value.

Therefore, NMC proposes that the instrument accuracy requirements (see ISTB 1.3) of ISTB 4.7.1(a) be demonstrated by determining the loop accuracy using both temporary and in-plant installed instrumentation (PT-23-100).

The as-found data in the calibration history for PT-23-100 shows that it has consistently been well within the current code required accuracy.

Relief is requested in accordance with 10 CFR 50.55a(a)(3)(i). The alternative testing described below provides an acceptable level of quality and safety.

**Alternative Testing:**

Group A and B Tests: The instruments identified above will be calibrated to  $\pm 2\%$  of the code equivalent range for Group A and B Tests. The code equivalent range will be calculated by multiplying the current test parameter reference value by three.

Comprehensive Tests:

The instrument accuracy requirements of ISTB 4.7.1(a) will be demonstrated by determining the loop accuracy using both temporary and in-plant installed instrumentation (PT-23-100).

**Status:** Approval of similar relief was previously granted to Monticello by the NRC on December 8, 1994.