



Richard B. Abbott  
Vice President  
Nuclear Engineering

Phone: 315.349.1812  
Fax: 315.349.4417

June 18, 2001  
NMP1L 1599

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

RE:                   Nine Mile Point Unit 1  
                          Docket No. 50-220  
                          DPR-63

**Subject:**        *Revision to Inservice Testing Relief Request PMP-RR-1 (TAC No. MB2168)*

Gentlemen:

By letter dated June 23, 1999 (NMP1L 1443), Niagara Mohawk Power Corporation (NMPC) submitted the third 10-year interval inservice testing program for pumps and valves at the Nine Mile Point Nuclear Station, Unit 1 (NMP1). Included in this submittal was Relief Request PMP-RR-1, which requested relief from performing quarterly flow rate measurements for certain reactor building closed loop cooling (RBCLC) and emergency service water (ESW) pumps. This relief request was approved by the NRC staff by letter dated December 14, 1999.

During a recent review, an omission was discovered in the approved relief request. Relief Request PMP-RR-1 was based on the consolidation of several similar relief requests approved for use during the second 10-year interval (see NMP1L 0376 dated March 28, 1989, and the NRC safety evaluation dated March 7, 1991). Relief Request PR-1 from the second 10-year interval requested relief from two inservice test quantities, quarterly differential pressure and flow rate measurements for RBCLC pumps. Relief Request PMP-RR-1 for the third 10-year interval omitted inclusion of the impractical differential pressure measurements for the RBCLC pumps. A request for relief from quarterly differential pressure measurements for the RBCLC pumps has been added to the attached Revision 1 to Relief Request PMP-RR-1. The relief request has also been reformatted to differentiate between the reliefs requested for the RBCLC and ESW pumps and to make editorial corrections.

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Consistent with the NRC staff's approval of Relief Request PMP-RR-1 for the third 10-year interval, NMPC requests approval of Revision 1 to Relief Request PMP-RR-1 per 10 CFR 50.55a(f)(6)(i) on the basis that the differential pressure tests are impractical to perform quarterly on the RBCLC pumps during the third 10-year interval.

Very truly yours,



Richard B. Abbott  
Vice President Nuclear Engineering

RBA/JJD/mlg  
Attachment

cc: Mr. H. J. Miller, NRC Regional Administrator, Region I  
Mr. R. P. Correia, Acting Section Chief PD-I, Section 1, NRR  
Mr. G. K. Hunegs, NRC Senior Resident Inspector  
Mr. P. S. Tam, Senior Project Manager, NRR  
Records Management

## PMP-RR-1 (Revision 1)

System: Reactor Building Closed Loop Cooling Water (RBCLC)  
Emergency Service Water (ESW)

Pump: PMP-70-01, PMP-70-02, PMP-70-03 (RBCLC),  
PMP-72-03, PMP-72-04 (ESW)

Class: 3

Function: Provide cooling water to safety related equipment

Test  
Requirements:

- A. Frequency of flow rate (Q) and differential pressure ( $\Delta P$ ) measurement per OM-6, 5.1 (RBCLC) and frequency of flow rate (Q) measurement, per OM-6, 5.1 (ESW)
- B. Effect of Pump Replacement, Repair, and Maintenance on Reference Values per OM-6, 4.4 (RBCLC & ESW)

Basis for Relief: In accordance with 10CFR50.55a(f)(6)(i), relief is requested from the requirements of ASME/ANSI OMa-1988 Part 6, Sections 4.4 and 5.1 based on impracticality as described below. Similar relief requests were approved for the 2nd Ten-Year Program Plan per the staff's Safety Evaluation Reports of March 7, 1991 (TAC No. 60450), and January 10, 1995 (TAC No. M90927).

- A. The Reactor Building Closed Loop Cooling (RBCLC) and the Emergency Service Water (ESW) systems are not fixed resistance systems.

For the RBCLC system, no pump test loops or individual pump flow instrumentation is installed. The system flow rate and differential pressure are a function of the number of pumps running and system heat loads. During normal plant operations, system heat loads prevent removing the RBCLC system from service. Operating conditions do not permit single pump operation at repeatable test conditions for individual pump parameters (i.e., flow rate and differential pressure) to be measured.

For the ESW system, the installed test line piping configuration does not allow for temporary or permanent flow instrumentation to be installed (i.e., not enough straight runs of piping). Flow instrumentation can be utilized on the service water system inter-tie piping to test the ESW pumps. However, the ESW pumps operate at a lower pressure

than the service water system. During normal plant operations, system heat loads prevent removing a service water header from service or depressurizing a header.

Therefore, during normal plant operation, flow rate and differential pressure measurement for the RBCLC pumps and flow rate measurement for the ESW pumps is not practical.

Testing can be performed during cold shutdown conditions. In most cold shutdown scenarios, it is possible to operate the RBCLC and ESW systems with a single pump and align the systems to achieve OM test conditions without adversely affecting cold shutdown plant operations.

- B. In order to permit rework/repair/replacement of a RBCLC or an ESW pump while the plant remains operating at power, the determination of new reference values for all parameters, prior to returning the pumps to an operable condition, is not practical.

The basis for relief of the frequency of flow rate (Q) and differential pressure ( $\Delta P$ ) measurement of an RBCLC pump and the frequency of flow rate (Q) measurement of an ESW pump, is applicable to the post rework/ repair/replacement. If new reference values must be determined prior to returning the pumps to an operable condition, placing the plant into a cold shutdown condition is required.

Proposed  
Alternate Testing:

- A. Quarterly, vibration (V) shall be measured for each RBCLC pump. During cold shutdowns, flow rate (Q), vibration (V), and differential pressure ( $\Delta P$ ) shall be measured for each RBCLC pump.

Quarterly, vibration (V) and pump differential pressure ( $\Delta P$ ) shall be measured for each ESW pump. During cold shutdowns, flow rate (Q), vibration (V), and differential pressure ( $\Delta P$ ) shall be measured for each ESW pump.

- B. Pump rework/repair/replacement will be performed in accordance with vendor specifications and maintenance procedures. The post maintenance test results will be evaluated to ensure the pump will meet its safety related function. Quarterly, until new reference values can be established at the next cold shutdown, vibration (V) for the RBCLC pumps and vibration (V) and differential pressure ( $\Delta P$ ) for the ESW pumps shall be measured and evaluated.

Attachment to  
NMP1L 1599

At the next cold shutdown, new reference values will be established for pump differential pressure ( $\Delta P$ ), flow rate (Q), and vibration (V).

Authorization:

Revision 1 Submitted. Revision 0 of this Relief Request was granted by NRC Safety Evaluation of Third Ten Year Interval IST Program Requests for Relief, Dated December 14, 1999, (TAC No. MA5957).