

Mr. John H. Mueller
 Chief Nuclear Officer
 Niagara Mohawk Power Corporation
 Nine Mile Point Nuclear Station
 Operations Building, Second Floor
 P.O. Box 63
 Lycoming, NY 13093

February 8, 1999

SUBJECT: SUPPLEMENTAL REQUEST FOR ADDITIONAL INFORMATION REGARDING
 GENERIC LETTER 95-07, "PRESSURE LOCKING AND THERMAL BINDING OF
 SAFETY-RELATED POWER OPERATED GATE VALVES," NINE MILE POINT
 NUCLEAR STATION, UNIT NO. 2 (TAC NO. M93489)

Dear Mr. Mueller:

The U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 95-07 on August 17, 1995, and you responded by letters dated October 16, 1995, and February 13, 1996. The NRC staff requested additional information on May 21, 1996, and you responded June 20, 1996. On November 21, 1996, you revised your response to our request of May 21, 1996, based upon further review of your method for evaluating pressure locking and thermal binding. We are reviewing your November 21, 1996, response and find that additional information, identified in the enclosure, is needed.

The schedule for responding to this letter was discussed with Mr. S. Leonard and others in your organization. Based upon that discussion, a mutually agreeable response date is April 15, 1999.

If you have questions regarding this letter or are unable to meet this response schedule, please contact me by phone on (301) 415-3049 or by electronic mail at dsh@nrc.gov.

Sincerely,

Original signed by:

Darl S. Hood, Senior Project Manager
 Project Directorate I-1
 Division of Reactor Projects - I/II
 Office of Nuclear Reactor Regulation

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Docket No. 50-410

Enclosure: Supplemental Request for Additional
 Information

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 8, 1999

Mr. John H. Mueller
Chief Nuclear Officer
Niagara Mohawk Power Corporation
Nine Mile Point Nuclear Station
Operations Building, Second Floor
P.O. Box 63
Lycoming, NY 13093

SUBJECT: SUPPLEMENTAL REQUEST FOR ADDITIONAL INFORMATION REGARDING
GENERIC LETTER 95-07, "PRESSURE LOCKING AND THERMAL BINDING OF
SAFETY-RELATED POWER OPERATED GATE VALVES," NINE MILE POINT
NUCLEAR STATION, UNIT NO. 2 (TAC NO. M93489)

Dear Mr. Mueller:

The U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 95-07 on August 17, 1995, and you responded by letters dated October 16, 1995, and February 13, 1996. The NRC staff requested additional information on May 21, 1996, and you responded June 20, 1996. On November 21, 1996, you revised your response to our request of May 21, 1996, based upon further review of your method for evaluating pressure locking and thermal binding. We are reviewing your November 21, 1996, response and find that additional information, identified in the enclosure, is needed.

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Sincerely,

A handwritten signature in cursive script that reads "Darl S. Hood".

Darl S. Hood, Senior Project Manager
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-410

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John H. Mueller
Niagara Mohawk Power Corporation

Nine Mile Point Nuclear Station
Unit No. 2

cc:

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SUPPLEMENTAL REQUEST FOR ADDITIONAL INFORMATION
REGARDING RESPONSE TO GENERIC LETTER 95-07
NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION, UNIT NO. 2
DOCKET NO. 50-410

1. Your November 21, 1996, submittal states that the RCIC-steam-exhaust-to-suppression-pool valve, 2ICS*MOV122, is susceptible to thermal binding. It also states that no corrective action is required because the valve would be declared inoperable and a Technical Specification (TS) action statement would be entered. Please clarify when the valve would be declared inoperable (i.e., the instant the valve closed or when the valve failed to open?).
2. You performed calculations for numerous valves to demonstrate that they could operate without pressure locking. If additional calculations have been performed that change the November 26, 1996 results regarding the valves listed below, then provide those calculations. You evaluated the following valves as having adequate actuator capacity to overcome pressure locking scenarios at the specific point of operation during an accident; therefore, you plan no modification for pressure locking mitigation:

2CSH*MOV101	High Pressure Core Spray (HPCS) Pump Suction Isolation
2CSL*MOV107	Low Pressure Core Spray (LPCS) Pump Minimum Flow Bypass Isolation
2ICS*MOV121	Reactor Core Isolation Cooling (RCIC) Steam Supply Outboard Isolation
2ICS*MOV122	RCIC Steam Exhaust to Suppression Pool
2ICS*MOV129	RCIC Pump Suction Isolation
2ICS*MOV128	RCIC Steam Supply Inboard Isolation
2RHS*MOV4A/B/C	Residual Heat Removal (RHR) Loop Pump Minimum Flow Isolation
2RHS*MOV115	Service Water (SW)/RHR Containment Flooding Cross Tie
2RHS*MOV116	SW/RHR Containment Flooding Cross Tie Isolation
2SWP*MOV17A/B	SW to Spent Fuel Cooling (SFC) Heat Exchanger Isolation
2SWP*MOV18A/B	SW from SFC Heat Exchanger Isolation
2SWP*MOV21A/B	SW Spent Fuel Pool Makeup Isolation
2SWP*MOV66A/B	SW Return Isolation From Diesel Generator (DG) Cooler
2SWP*MOV67A/B	SW To Control Room Chiller Isolation
2SWP*MOV94A/B	SW Return From HPCS DG Cooler Isolation

Enclosure



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Regarding the methodology used for these calculations, discuss:

- (1) Minimum margins that should be applied between calculated pressure-locking thrust and actuator capability,
- (2) Any diagnostic equipment accuracy requirements, and
- (3) Methodology limitations.

Is this methodology used for flexible and/or double disk gate valves?

How did you validate this methodology?¹

¹ NUREG/CR-6611, "Results of Pressure locking and thermal Binding Tests of Gate Valves," may help in validating your methodology. The margins along with diagnostic equipment accuracy and methodology limitations for the Commonwealth Edison (ComEd) methodology are defined in a letter from ComEd to the NRC dated May 29, 1998. The above questions about your methodology are similar to the questions we asked regarding the ComEd methodology.

