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

RE: Nine Mile Point Unit 2
Docket No. 50-410
NPF-69

Subject: Request for Authorization to Use an Alternative to Inservice Testing Requirements

Gentlemen:

In a telephone discussion with the NRC staff on August 30, 2000, Niagara Mohawk Power Corporation (NMPC) discussed a proposed alternative to the testing requirements of OM Part 10, "Inservice Testing of Valves in Light Water Reactor Power Plants," for Nine Mile Point Unit 2 (NMP2). Specifically, this alternative relates to the stroke time testing methodology utilized on power-operated valves in the reactor coolant recirculation system.

NMPC requests prompt NRC review and authorization of the alternative testing methodology pursuant to 10CFR50.55a(a)(3) to support the continued operation of NMP2 until its scheduled Fall outage. The attachment to this letter contains a written request for authorization for use of an alternative testing methodology for the flow control hydraulic isolation valves in the reactor coolant recirculation system.

Very truly yours,

A handwritten signature in black ink that reads "Richard B. Abbott".

Richard B. Abbott
Vice President Nuclear Engineering

RBA/SHC/kap
Attachment

xc: Mr. H. J. Miller, NRC Regional Administrator, Region I
Ms. M. K. Gamberoni, 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

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ATTACHMENT
Request for Authorization to Use Alternative to
ASME/ANSI OM-1987 through OMa-1988, Part 10 for Nine Mile Point Unit 2 (NMP2)

System: Reactor Coolant Recirculation System (RCS)

Valves: 2RCS*SOV65A, B; 2RCS*SOV66A, B; 2RCS*SOV67A, B;
2RCS*SOV68A, B; 2RCS*SOV79A, B; 2RCS*SOV80A, B;
2RCS*SOV81A, B; 2RCS*SOV82A, B

ASME Code Class: 2

IST Category: B

Function: Flow Control Hydraulic Isolation Valves

Test Requirements:

Stroke time testing in accordance with OM-10, paragraph 4.2.1.4, "Power-Operated Valve Stroke Testing"; OM-10, paragraph 4.2.1.8, "Stroke Time Acceptance Criteria"; and OM-10, paragraph 4.2.1.9, "Corrective Action".

Although these valves function as containment isolation valves, they are exempt from Type C leakage rate testing in accordance with Appendix J Program Plan exemption RCS-TCE-001, which was authorized in the License.

Basis for Proposed Alternative:

Pursuant to 10CFR50.55a(a)(3), authorization is requested to implement an alternative to the requirement in OM-10, paragraph 4.2.1.4, that the stroke time of all power-operated valves shall be measured. The subject valves are operated in groups of 4 valves, each group being controlled by a single switch:

2RCS*SOV65A, 66A, 67A, 68A – outboard; "A" Flow Control Hydraulic Isolation
2RCS*SOV65B, 66B, 67B, 68B – outboard; "B" Flow Control Hydraulic Isolation
2RCS*SOV79A, 80A, 81A, 82A – inboard; "A" Flow Control Hydraulic Isolation
2RCS*SOV79B, 80B, 81B, 82B – inboard; "B" Flow Control Hydraulic Isolation

When a single switch is operated in the Control Room, four of these valves close together. These valve groups are stroke-timed closed in accordance with the frequency prescribed in the IST program (cold shutdown) and are verified to close automatically in response to a containment isolation signal in accordance with NMP2 Technical Specification 4.6.3.2.

The stroke-time reference values for these four groups are less than 5 seconds, and the limiting stroke-time limit is ≤ 20 seconds. Nuclear safety will not be compromised through valve group testing because acceptance of the group stroke time closure testing results are dependent on the performance of the slowest valve in the group. Prior to any valve closure time degrading and exceeding the limiting value of 20 seconds, the acceptance criterion of OM-10 paragraph 4.2.1.8 would have been exceeded, and corrective action initiated. A closure time below the 50 percent reference value as defined in OM-10 paragraph 4.2.1.8(d) is not measured using this methodology. No minimum design stroke times are specified for these valves and a failure mechanism does not exist to increase the speed of a spring-loaded valve. Spring relaxation over the life of the component would tend to slow the closing time. Therefore, continued operational readiness of these valves is assured. Since the subject valves have continued to be tested at the appropriate frequency, plant shutdown prior to the next planned outage for individual valve stroke time testing would cause a hardship without a compensating increase in the level of safety.

Proposed Alternate Testing:

The proposed alternate testing consists of the following:

Establish group reference values and group acceptance criteria, based on the requirements of OM-10, paragraph 4.2.1.8.

Stroke-time the valve group, recording the stroke time for the slowest valve (that is, the last one to close).

Compare the slowest valve stroke-time to the group acceptance criterion to determine the acceptability of the entire group of four valves.

In the event that the slowest valve in a group exceeds the acceptance criterion, the entire group of four valves will be determined to have exceeded the stroke-time acceptance criterion.

Take corrective actions as necessary for valve group stroke times that are not within the established acceptance criterion per OM-10, paragraph 4.2.1.9.

Implementation:

The effective period for this alternative shall be from the start of the inservice testing program Second 10-Year Interval which began April 5, 1998, through the Fall outage currently planned for September, 2000. During the Fall outage and thereafter, the subject valves will each be individually tested in accordance with the requirements of OM-10.