December 31, 1996

EA No. 96-494

Mr. B. Ralph Sylvia Executive Vice President Generation Business Group and Chief Nuclear Officer Niagara Mohawk Power Corporation Nuclear Learning Center 450 Lake Road Oswego, New York 13126

## SUBJECT: NINE MILE POINT ENGINEERING INSPECTION 96-16

Dear Mr. Sylvia:

This letter refers to the engineering inspection conducted from October 28, 1996, to November 1, 1996, and November 18 - 22, 1996, at Nine Mile Point Units 1 and 2. The purpose of the inspection was to determine whether activities authorized by the license were conducted safely, and in accordance with NRC requirements. At the November 22, 1996, exit meeting, the findings were discussed with Messrs. R. Abbott and C. Terry and other members of your staff. Additional findings were also discussed with Mr. D. Baker of your staff in two telephone calls on December 5, 1996, and December 20, 1996.

The inspection was directed toward areas important to public health and safety. The areas examined during this inspection included: 1) your corrective actions in response to the identification of inoperability of redundant control room chillers on August 14, 1996; 2) your corrective actions following the failure of RCIC turbine lube oil cooler pressure control valve (2ICS\*PCV115) in January 1991; 3) a plant design change (SC2-0077-93) to ascertain whether the design and implementation met the regulatory requirements; and 4) to evaluate for closure of two previously identified inspection items.

Based on the results of this inspection, the inspector identified several apparent violations. The NRC considers these issues to be significant and to reflect numerous examples of weak technical performance and failures to assure quality in engineering activities. These violations involved: 1) making design change in the reactor core isolation cooling (RCIC) system without performing a safety evaluation in accordance with 10 CFR 50.59; 2) two examples of failure to identify and correct deficient conditions promptly as required by 10 CFR 50, Appendix B, Criterion XVI, Corrective Action; 3) three examples of failure to meet the requirements of 10 CFR 50, Appendix B, Criterion III, Design Control; 4) two examples of failure to meet Nine Mile 2 Technical Specifications requirements; and 5) failure to update the Final Safety Analysis Report (FSAR), following the design change of the RCIC turbine lube oil cooler pressure control valve from a self-contained downstream sensing pressure control valve to an electro-hydraulic control valve, to assure that the information included in the FSAR contains the latest material developed, as required by 10 CFR 50.71(e).



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The violations involving multi-examples are explained as follows:

Two examples of failure to identify and correct deficient conditions promptly: 1) the RCIC turbine lube oil cooler pressure control valve was inoperable for more than five years; and 2) the incorrect condenser water low flow setpoints for the control room chillers, which existed from 1988 until August 1996, were not identified and corrected although a control room chiller was tripped three times due to low flow in September 1995.

Three examples of failure to meet the requirements of 10 CFR 50, Appendix B, Criterion III, Design Control: 1) the June 15, 1992, calculation that was used as the basis for two operability determinations was incorrect and had not been independently reviewed, use of this incorrect calculation resulted in a wrong conclusion being drawn for the operability determination; 2) the 1988 setpoint calculation for the control room chiller condenser water low flow trip, and the 1992 review of the adequacy of this setpoint calculation failed to include the effect of pressure and flow transients in the service water system, resulting in an incorrect setpoint being implemented; and 3) the calculation in a recent design change used an incorrect downstream pressure for the pressure control valve, resulting in a wrong size of a restricting orifice in the RCIC system; this wrong orifice size could cause a) the RCIC turbine lube oil cooler and its associated piping to operate beyond their design pressure; and b) continuous opening of relief valve during RCIC operation.

Two examples of Technical Specifications violations: 1) From June 1989, till August 14, 1996, both control room chiller subsystems were inoperable in that the chiller trip setting for the condenser water low flow trip was too high (250 gpm). During a postulated design basis accident when the diesel generators start, the service water pressure transient could cause both chillers to trip. This is in violation of Nine Mile Point Unit 2 Technical Specifications, Section 3.7.3, which requires two independent control room chiller subsystems to be operable when the plant is in operation modes 1, 2, 3 and when irradiated fuel is being handled in the reactor building and during core alterations and operations with a potential for draining the reactor vessel and uncovering irradiated fuel. 2) Nine Mile Point Unit 2 Technical Specifications, Section 3.7.4 requires that the RCIC system shall be operable when the reactor steam dome pressure is greater than 150 psig; however, there was no valid operability determination to demonstrate that the RCIC system was operable between January 26, 1991, and September 1996, when the RCIC turbine lube oil cooler pressure control valve 2ICS\*PCV115 was in the failed open position.

The above apparent violations are being considered for escalated enforcement action in accordance with the "General Statement of Policy and Procedure for NRC Enforcement Action" (Enforcement Policy), NUREG 1600. A predecisional enforcement conference to discuss the apparent violation will be scheduled soon. The decision to hold a predecisional enforcement conference does not mean that the NRC has determined that violations have occurred or that enforcement action will be taken. The conference is being held to obtain information to enable the NRC to make an enforcement decision, such as a common understanding of the facts, root causes, missed opportunities to identify the apparent violations sooner, corrective actions, significance of the issues, and the need for





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lasting and effective corrective action. In addition, this is an opportunity for you to point out any errors in our inspection report and for you to provide any information concerning your perspectives on: (1) the severity of the violations, (2) the application of the factors that the NRC considers when it determines the amount of a civil penalty that may be assessed in accordance with Section VI.B.2 of the Enforcement Policy, and (3) any other application of the Enforcement Policy to this case, including the exercise of discretion in accordance with Section VII.

You will be advised by separate correspondence of the results of our deliberations on these matters. No response regarding the apparent violation is required at this time.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response will be placed in the NRC Public Document Room (PDR).

Sincerely,

ORIGINAL SIGNED BY:

A. Randolph Blough for

James T. Wiggins, Director Division of Reactor Safety

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Attachment: As stated

Docket Nos. 50-220, 50-410

cc w/encl:

- R. Abbott, Vice President & General Manager Nuclear
- C. Terry, Vice President- Safety Assessment and Support
- M. McCormick, Vice President Nuclear Engineering
- N. Rademacher, Unit 1 Plant Manager
- J. Conway, Unit 2 Plant Manager
- D. Wolniak, Manager, Licensing
- J. Warden, New York Consumer Protection Branch
- G. Wilson, Senior Attorney
- M. Wetterhahn, Winston and Strawn
- J. Rettberg, New York State Electric and Gas Corporation
- Director, Electric Division, Department of Public Service, State of New York
- C. Donaldson, Esquire, Assistant Attorney General, New York Department of Law
- J. Vinquist, MATS, Inc.
- P. Eddy, Power Division, Department of Public Service, State of New York
- F. Valentino, President, New York State Energy Research and Development Authority
- J. Spath, Program Director, New York State Energy Research and Development Authority



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Distribution w/encl: D. Screnci, PAO Region I Docket Room (with concurrences) Nuclear Safety Information Center (NSIC) PUBLIC NRC Resident Inspector J. Wiggins, DRS L. Cheung, DRS L. Cheung, DRS W. Ruland, DRS R. Correia, NRR R. Frahm, Jr., NRR DRS File

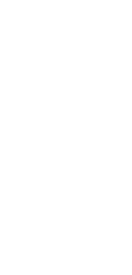
Distribution w/encl: (VIA E-MAIL) W. Dean, OEDO B. Norris - Nine Mile Point S. Bajwa, NRR D. Hood, NRR K. Cotton, NRR M. Campion, RI Inspection Program Branch (IPAS)



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