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Docket No. 50-220

Niagara Mohawk Power Corporation
ATTN: Mr. Gerald K. Rhode
Vice President - Engineering
300 Erie Boulevard West
Syracuse, New York 13202

Gentlemen:

RE: Nine Mile Point, Unit No. 1

In September 1973, The Atomic Energy Commission published the "Technical Report on Anticipated Transients Without Scram for Water-Cooled Power Reactors" (WASH-1270) establishing acceptance criteria for anticipated transients without scram (ATWS). These criteria were developed because we believed that a fully satisfactory methodology for analyzing the reliability of protection systems from the standpoint of common mode failures was not available at that time, that these types of failures had occurred in protection systems and that the potential consequences of some postulated anticipated transients without scram might be hazardous to the public. Subsequent to the publication of WASH-1270, we met with your Nuclear Steam Supply System Vendor, the General Electric Company (GE), on a regular basis and reviewed their evaluation model, the results of analyses of anticipated transients without scram, the diversity of the systems relied upon to mitigate the consequences of ATWS, and the susceptibility of the Reactor Protection System to common mode failure.

In January of 1976, the status of our ATWS review and the generic analyses and proposals of GE were discussed before the ACRS. A status report describing the information discussed is enclosed. We requested from GE additional information needed to complete our generic review, and they responded by letter dated July 2, 1976. We intend to complete our review of their report and determine any necessary plant changes as soon as practicable. In the interim, based on our review as decribed in the status report, we believe that the addition of a recirculation pump trip would

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significantly limit the consequences of an ATWS event. GE took credit for a recirculation pump trip in the ATWS analysis they provided us and which you referenced. A trip of the recirculation pumps in the event of high reactor vessel pressure has the effect of causing an increase in the moderator voids in the reactor core. A substantial negative reactivity results, and the power and pressure surges that might otherwise occur in the most limiting transient (MSIV closure) are substantially reduced.

We have found that a recirculation pump trip similar in design to the trip described in the enclosed report and in General Electric Report NEDO-20626 will provide substantial additional protection which is required for the public health and safety. Therefore we request that you inform us of your commitment to modify your plant to provide a recirculation pump trip, and the schedule for doing so. We will review your detailed design to assure that the pump trip conforms to current regulatory practice and the description in the enclosed status report. At least 90 days before your scheduled installation, you should propose Technical Specifications for pressure and level setpoints for your recirculating pump trips and for surveillance requirements.

Please provide us with the above information within 30 days of receipt of this letter, including your schedule for submitting the detailed design for NRC approval, your schedule for procurement, and your schedule for completion of modifications.

Sincerely,

Original signed by

Victor Stello, Jr., Director
Division of Operating Reactors

Enclosure:
Status Report on Anticipated
Transients Without Scram for
GE Reactors - December 9, 1975

cc: Arvin E. Upton, Esquire
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