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

FEB 2 0 1990

Docket No: 50-244

Dr. Robert C. Mecredy, General Manager
Nuclear Production
Rochester Gas & Electric Corporation
89 East Avenue
Rochester, New York 14649

Dear Dr. Mecredy:

SUBJECT: EMERGENCY RESPONSE CAPABILITY - CONFORMANCE TO REGULATORY GUIDE 1.97, REVISION 3 (TAC NO. 51093)

REF.:
1) Rochester Gas and Electric Corporation letter, J. E. Maier to Director of Nuclear Reactor Regulation, NRC, "NUREG-0737, Supplement 1," January 31, 1984.

2) Rochester Gas and Electric Corporation letter, R. W. Kober to Director of Nuclear Reactor Regulation, NRC, "NUREG Regulatory Guide 1.97," February 28, 1985.

3) NRC letter, D. G. Eisenhut, to All Licensees of Operating Reactors, Applicants for Operating Licenses, and Holders of Construction Permits, "Supplement No. 1 to NUREG-0737 -- Requirements for Emergency Response Capability (Generic Letter No. 82-33)," December 17, 1982.

4) NRC letter, M. B. Fairtile, to R. W. Kober, Rochester Gas and Electric Corporation, "Regulatory Guide 1.97, Emergency Response Capability," April 14, 1986.

5) Rochester Gas and Electric Corporation letter, R. W. Kober to Director of Nuclear Reactor Regulation, NRC, "Regulatory Guide 1.97 Review," June 16, 1985.

References 1 and 2, in response to Reference 3, provided detailed descriptions of conformance to Regulatory Guide (R.G.) 1.97, Revision 3. Reference 4 provided an interim report of the staff's review of References 1 and 2. Reference 5 provided additional information on conformance to R.G. 1.97.

Based on the staff's review of Reference 5, several open issues remained to be resolved. On July 28, 1986, during a telephone conversation, the licensee and the NRC discussed these open issues. The issues discussed during this telephone conversation are enclosed (Enclosure 1).

During the July 28, 1986 telephone conversation, the NRC understood that the licensee was to provide a response on these open issues. Answers to these open issues were again discussed and requested in a telephone conversation on May 25, 1989. We therefore request that you respond to these open items so that the NRC staff can issue the safety evaluation report (SER) and complete this action item.

Sincerely,

/S/

Allen Johnson, Project Manager
Project Directorate I-3
Division of Reactor Projects I/II
Office of Nuclear Reactor Regulation

Enclosure:
As stated

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ENCLOSURE 1

EMERGENCY RESPONSE CAPABILITY CONFORMANCE
TO R.G. 1.97, REVISION 3 - OPEN ITEMS

Adherence to R.G. 1.97:

In Reference 5 the licensee indicated that not all Category 2 variables warrant inclusion under 10 CFR 50.49. However, in Reference 5, the licensee did not specify which Category 2 variables they considered not warranting inclusion under 10 CFR 50.49. The licensee agreed to provide this information.

Type A Variables:

The licensee has designated sodium hydroxide tank level as a Type A variable. The licensee's instrumentation to monitor the sodium hydroxide tank level does not meet the Category 1 criteria of R.G. 1.97. The licensee was in the process of evaluating the necessity for the sodium hydroxide tank level to be a Type A variable. The licensee should inform the staff of the results of this evaluation and ensure that instrumentation to monitor Type A variables meet the Category 1 criteria of R.G. 1.97.

Neutron Flux:

The licensee's neutron flux monitoring instrumentation does not meet all the Category 1 criteria of R.G. 1.97. The measurement of neutron flux is a direct measurement of a key variable for detecting an uncontrolled approach to criticality and for determination that an accident has been successfully mitigated. Since key variables are classified Category 1, the licensee should commit to the installation of Category 1 instrumentation for this variable.

Containment Isolation Valve Position:

The licensee has not provided an environmentally qualified containment isolation valve position indication. The licensee stated that valve position indication is a confirmatory type display only, whose failure would not result in any safety consequences. It is the staff's position that indication of the containment isolation valve position should be positive and accurate. Indication that falsely indicates open could mislead the operator into taking unnecessary actions that could cause mismanagement of an accident condition. Indication that shows closed when the valve, in fact, is open also misinforms the operator, so that when action should be taken, it isn't. The licensee should provide containment isolation valve position indication that is environmentally qualified in accordance with 10 CFR 50.49 and seismically qualified in accordance with R.G. 1.100.

ENCLOSURE 1 (Continued)

Pressurizer Heater Status:

The licensee does not monitor pressurizer heater current. However, the licensee does monitor pressurizer heater circuit breaker position. Circuit breaker position alone would not provide an indication of pressurizer heater failure. The licensee was asked if bus current or bus KW are monitored. The licensee indicated that they will investigate if these parameters are monitored.

Quench Tank Temperature:

The licensee has provided quench tank temperature instrumentation with a range of 0°F to 300°F. The upper end of this range is below 328°F, which corresponds to the tank rupture disk relief pressure. The range should be increased to include the saturation temperature corresponding to the rupture disk relief pressure.

Steam Generator Level (Wide Range):

The licensee has provided wide range steam generator level instrumentation. However, this instrumentation is not redundant. The licensee should provide independent wide range level instrumentation for each of the steam generators in accordance with the regulatory guide.

Containment Spray Flow:

The licensee does not monitor containment spray flow directly, but monitors residual heat removal (RHR) discharge flow to the containment spray and safety injection pumps. In addition, the licensee monitors the sodium hydroxide tank level, safety injection flow, and containment pressure. The licensee needs to verify that this alternate instrumentation as a minimum meets the Category 2 criteria of R.G. 1.97.

Component Cooling Water Flow to ESF Systems:

The licensee does not monitor component cooling water flow to ESF system. However, the licensee monitors component cooling water pump status and component cooling water surge tank level. In addition, the licensee monitors alarm status of low surge tank level, low system flow, low system pressure, and low component cooling water discharge flow from RHR pumps, containment spray pumps, and safety injection pumps. The licensee needs to verify that this alternate instrumentation as a minimum meets the Category 2 criteria of R.G. 1.97.

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