



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

Docket No. 50-410

MAY 08 1986

DISTRIBUTION:

Docket Files
NRC PDR
Local PDR
PRC System

Mr. B. G. Hooten
Executive Director of Nuclear Operations
Niagara Mohawk Power Corporation
300 Erie Boulevard West
Syracuse, New York 13202

Dear Mr. Hooten:

Subject: Separation of Class 1E Equipment and Circuits for
Nine Mile Point Unit 2

On January 28, 1986, Niagara Mohawk submitted a report entitled, "Failure Modes and Effects Analysis (Regulatory Guide 1.75)" for Nine Mile Point Unit 2 (NMP-2). That report identified certain cases where non-Class 1E devices are connected to Class 1E power sources and provide non-Class 1E signals to Class 1E systems. Subsequently, the NRC staff had a number of conference calls with Niagara Mohawk staff to discuss concerns in this area. The NRC staff has identified additional information, identified in the enclosure, which is required for us to continue the review of this issue.

This information has been discussed with Mr. Norman Rademacher of your staff. In order to support a fuel load date of May 29, 1986, please provide a response to the request for additional information in the enclosure within ten days of the date of this letter.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Mary F. Haughey
Mary F. Haughey, Project Manager
BWR Project Directorate No. 3
Division of BWR Licensing

Enclosure:
As stated

cc: See next page

DESIGNATED ORIGINAL

Certified By *[Signature]*

8605160040 860508
PDR ADOCK 05000410
A PDR



10-10-10

10-10-10

10-10-10

10-10-10

10-10-10

10-10-10

Mr. B. G. Hooten
Niagara Mohawk Power Corporation

Nine Mile Point Nuclear Station
Unit 2

cc:

Mr. Troy B. Conner, Jr., Esq.
Conner & Wetterhahn
Suite 1050
1747 Pennsylvania Avenue, N.W.
Washington, D.C. 20006

Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Richard Goldsmith
Syracuse University
College of Law
E. I. White Hall Campus
Syracuse, New York 12223

Mr. Paul D. Eddy
New York State Public Service
Commission
Nine Mile Point Nuclear Station -
Unit II
Post Office Box 63
Lycoming, New York 13093

Ezra I. Bialik
Assistant Attorney General
Environmental Protection Bureau
New York State Department of Law
2 World Trade Center
New York, New York 10047

Don Hill
Niagara Mohawk Power Corporation
Suite 550
4520 East West Highway
Bethesda, Maryland 20814

Resident Inspector
Nine Mile Point Nuclear Power Station
P. O. Box 99
Lycoming, New York 13093

Mr. John W. Keib, Esq.
Niagara Mohawk Power Corporation
300 Erie Boulevard West
Syracuse, New York 13202

Mr. James Linville
U. S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Norman Rademacher,
Licensing
Niagara Mohawk Power Corporation
300 Erie Boulevard West
Syracuse, New York 13202

ENCLOSURE

Nine Mile Point - Unit 2

The information provided to date is insufficient to allow the staff to complete its review associated with the separation of Class 1E and non-Class 1E devices. This concern was originally identified in the NMP-2 SER, dated February 1985 (Section 7.2.2.10). Additional information should be provided on the NMP-2 use of (1) isolation devices and (2) non-Class 1E components that provide signals to Class 1E systems. As a minimum, the following should be provided:

- (1) Identify any Regulatory Guide (R.G.) 1.97 Category 1 variables (functions) that have non-Class 1E components. The staff position (R.G. 1.97) is that all Category 1 variables should be Class 1E.
- (2) Justify the use of non-Class 1E components for High Pressure Core Spray (HPCS) bypass valve position indication or provide Class 1E components for this position indication.
- (3) Justify the use of non-Class 1E signal resistor units (SRUs) for the service water heat exchanger flow indication (A&B) or provide Class 1E SRUs for this indication.
- (4) Justify the use of two non-Class 1E diodes for arc suppressions on the RHR Class 1E optical isolators. Discuss the design implications associated with upgrading these diodes to Class 1E. A similar concern exists for the non-Class 1E diodes utilized as arc suppression devices in the End-of-Cycle Recirculation Pump Trip Systems. Justify the use of these diodes.
- (5) Provide the maximum wattage that would be expended by each non-Class 1E device listed in the NMP-2 January 1986 report.
- (6) Discuss the differences (design, surveillance, and documentation) that distinguish Class 1E fuses from the non-Class 1E fuses. Provide new analyses (credit cannot be taken for non-Class 1E protection devices) for those instances where credit has been taken for non-Class 1E fuses, breakers, and resistance devices to protect Class 1E circuits from worst-case credible failures within the non-Class 1E circuits. If an analysis indicates that a Class 1E bus would be lost by these failures, then provide redundant Class 1E protection devices. Resistance devices cannot be used as isolation or protection devices (R.G. 1.97).

