



CENTRAL FILES

NIAGARA MOHAWK POWER CORPORATION/300 ERIE BOULEVARD WEST, SYRACUSE, N.Y. 13202/TELEPHONE (315) 474-1511

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November 3, 1980

Mr. Boyce H. Grier, Director
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Re: Docket No. 50-220
I.E. Bulletin 79-01B

Dear Mr. Grier:

The attached information is transmitted in response to an Order for Modification of License dated September 19, 1980, pertaining to environmental qualification of electrical equipment. This information supplements our letters of March 5, March 28 and April 17, 1980, previously transmitted in response to I.E. Bulletin 79-01B.

The attached report meets the requirements of I.E. Bulletin 79-01B with the following clarifications.

By February 1, 1981, we will update our plans to complete the qualification documentation for components identified as lacking documentation in Section 5.0 of the attached report. As required by Supplement No. 3 to the Bulletin, Niagara Mohawk will submit qualification information for installed TMI Action Plan equipment by February 1, 1981. Aging will be addressed by equipment material analysis to be completed by February 1, 1981, and replacement schedules developed from aging analysis will be finalized by June 30, 1981.

Niagara Mohawk is proceeding in an expedited manner to complete the environmental qualification requirements for electrical equipment and continued operation of Nine Mile Point Unit 1 in the interim is justified based on the following:

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1. The Nine Mile Point Unit 1 plant was originally licensed with loss of coolant accidents and high energy line breaks as a consideration, and accident environments were a factor in the design and evaluation of protective equipment. The method for achieving the goal of operability under accident conditions for safeguard equipment technically included accounting for the hostile environments by use of suitable design techniques, by selecting equipment known to perform satisfactorily in non-nuclear service and by writing instrument specifications in such a way as to promote quality in design in construction. Documentation of equipment selection and functional requirements was not extensive at that time.
2. The design basis loss of coolant accident and high energy line breaks are highly unlikely, particularly in view of the ongoing in-service inspection programs carried out at Nine Mile Point Unit 1. The period of continued operation during which the documentation required by I.E. Bulletin 79-01B is being gathered and/or equipment is tested to confirm operability is relatively short.
3. For inside containment there is not a substantial amount of electrical equipment required to mitigate accidents. Although not meeting the precise requirements of the Bulletin, a considerable amount of test data does exist for such equipment. When consideration is given to the time period in which the electrical equipment is required to operate, the conservatism inherent in the calculation of the in-containment environment and the results of regular testing and inspection of such equipment which has been subjected to 11 years of natural aging, it is reasonable to conclude with some certainty that electrical equipment will function acceptably during an accident.
4. For high energy line breaks outside containment, the environment is less severe in terms of temperature, pressure and radiation exposures. These temperatures and pressures are in the range that similar equipment is expected to withstand in non-nuclear power plant service due to conditions such as valve packing leaks, etc. As shown in Section 4.0 of the attached report, the durations of these postulated events are very brief, less than one minute in most instances. Even including the time required for the area to cool following a high energy line break, the total duration is reached in the one-hour range. Other important factors worth consideration are the separability, redundancy and diversity of equipment required to mitigate high energy line breaks outside containment. The equipment identified as required to mitigate the consequences of high energy line breaks has been tabulated in a conservative manner, due to a lack of more precise plant response analysis. When considering the areas affected by a postulated high energy line break, it is concluded that if certain equipment is made inoperable due to the environment caused by the break, such inoperable equipment will not jeopardize the capability of achieving a safe shutdown due to the above factors.

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The above and the attached report meet the requirements of I.E. Bulletin 79-01B.

Very truly yours,

NIAGARA MOHAWK POWER CORPORATION

A handwritten signature in cursive script, reading "Thomas E. Lempges".

Thomas E. Lempges

Vice President - Nuclear Generation

WRD/kmb
Attachment

STATE OF NEW YORK)
COUNTY OF ONONDAGA) ss:

THOMAS E. LEMPGES, being duly sworn, says:

I am Vice President, Nuclear Generation, of Niagara Mohawk Power Corporation. I have read the foregoing letter and the facts contained in the letter and attachment are true to the best of my knowledge, information and belief.

Thomas E. Lempges
Thomas E. Lempges

Sworn to before me on this
3rd day of November, 1980.

Cynthia A. Petta
NOTARY PUBLIC

CYNTHIA A. PETTA
Notary Public in the State of New York
Qualified in Onondaga Co. N.Y. 4682225
My Commission Expires March 30, 1982

