



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION I

631 PARK AVENUE  
KING OF PRUSSIA, PENNSYLVANIA 19406

September 30, 1980

Docket No. 50-29

Yankee Atomic Electric Company  
ATTN: Mr. James A. Kay  
Senior Engineer - Licensing  
25 Research Drive  
Westborough, Massachusetts 01581

Gentlemen:

The enclosed Supplement No. 2 to IE Bulletin No. 79-01B, "Environmental Qualification of Class IE Equipment," is forwarded to you for information. No written response is required.

Also enclosed for information are IEB 79-01B dated January 14, 1980 and Supplemental Information to IEB 79-01B dated February 29, 1980, both of which were not previously transmitted to you.

If you desire additional information regarding this matter, please contact this office.

Sincerely,

Boyce H. Grier  
Director

Enclosures:

- A. Supplement No. 2 to IE Bulletin No. 79-01B, dated September 30, 1980 with one attachment
  - 1. Generic Questions and Answers to IEB No. 79-01B and Memorandum and Order (CLI-80-21) dated May 23, 1980
- B. IEB No. 79-01B, dated January 14, 1980 with four attachments
  - 1. SEP Plants
  - 2. Master List (Typical)
  - 3. System Component Evaluation Work Sheet
  - 4. Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment
- C. Supplemental Information to IEB No. 79-01B, dated February 29, 1980 with one attachment
  - 1. Generic Questions and Answers to IE Bulletin No. 79-01B
- D. List of Recently Issued IE Bulletins

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cc w/encls:

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J. E. Tribble, President

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

DUPLICATE

September 30, 1980

IE Supplement No. 2 to Bulletin 79-01B: ENVIRONMENTAL QUALIFICATION OF CLASS  
IE EQUIPMENT

Enclosed are the generic questions and answers which resulted from NRC/Licensee meetings in NRC Regional Offices during the week of July 14, 1980 regarding environmental qualification of Class IE equipment in use at power reactor facilities. These answers address specific questions asked during the meetings. Due to the generic nature of some of these questions, the staff is issuing them as a bulletin supplement. The regional meetings highlighted the fact that in some cases, the scope and depth of the 79-01B review was not clear to licensees. Therefore, these answers may affect your 79-01B submittal. These submittals are required by a separate order to be completed by November 1, 1980.

Some answers given in Supplement No. 1 to IEB-79-01B are superseded by these answers. For example, in Bulletin Supplement No. 1, issued on February 20, 1980, the answer to question No. 5 specified that TMI lessons learned equipment was not included in the review. However, due to the extension of the response date from April 14, 1980 to November 1, 1980, this equipment is now being addressed since its installation is either complete or required before the issuance of the February 1, 1981 SER. (See Question No. 21 of this Supplement.)

No specific response is requested by this Supplement; however, all answers contained in the enclosure to this Supplement should be carefully reviewed and considered for applicability in your response to IEB 79-01B.

IE Bulletin No. 79-01B was issued under a blanket GAO clearance (B180225 (R0072); clearance expired July 31, 1980) specifically for identified generic problems. Supplement No. 2 to Bulletin 79-01B is for information, hence no GAO clearance is required.

Attachment:

1. Generic Questions and Answers  
to IEB-79-01B and Memorandum  
and Order (CLI-80-21) dated  
May 23, 1980

ENCLOSURE 1

DUPLICATE

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT  
WASHINGTON, D.C. 20555

SSINS No.: 6820  
Accessions No.:  
7910250528

IE Bulletin No. 79-01B  
Date: January 14, 1980  
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ENVIRONMENTAL QUALIFICATION OF CLASS IE EQUIPMENT

Description of Circumstances:

IE Bulletin No. 79-01 required the licensee to perform a detailed review of the environmental qualification of Class IE electrical equipment to ensure that the equipment will function under (i.e. during and following) postulated accident conditions.

The NRC staff has completed the initial review of licensees' responses to Bulletin No. 79-01. Based on this review, additional information is needed to facilitate completion of the NRC evaluation of the adequacy of environmental qualification of Class IE electrical equipment in the operating facilities. In addition to requesting more detailed information, the scope of this Bulletin is expanded to resolve safety concerns relating to design basis environments and current qualification criteria not addressed in the facilities' FSARS. These include high energy line breaks (HELB) inside and outside primary containment, aging, and submergence.

Attachment 4, "GUIDELINES FOR EVALUATING ENVIRONMENTAL QUALIFICATION OF CLASS IE ELECTRICAL EQUIPMENT IN OPERATING REACTORS", provides the guidelines and criteria the staff will use in evaluating the adequacy of the licensee's Class IE equipment evaluation in response to this Bulletin.

In general, the reporting problems encountered in the original responses and the additional information needed can be grouped into the following areas:

1. All Class IE electrical equipment required to function under the postulated accident conditions, both inside and outside primary containment, was not included in the responses.
2. In many cases, the specific information requested by the Bulletin for each component of Class IE equipment was not reported.
3. Different methods and/or formats were used in providing the written evidence of Class IE electrical equipment qualifications. Some licensees used the System Analysis Method which proved to be the most effective approach. This method includes the following information:
  - a. Identification of the protective plant systems required to function under postulated accident conditions. The postulated accident conditions are defined as those environmental conditions resulting from both LOCA and/or HELB inside primary containment and HELB outside the primary containment.

DUPLICATE

ENCLOSURE 1

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SSINS No: 6820  
Accessions No:  
7912190696

IE Bulletin No. 79-01B  
Supplemental Information  
Date: February 29, 1980  
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ENVIRONMENTAL QUALIFICATION OF CLASS IE EQUIPMENT

Enclosed are the generic questions and answers which resulted from NRC Task Group/Licensee "workshop" meetings held recently in NRC Regional Offices regarding IE Bulletin No. 79-01B. This information is intended to further the understanding of the qualification review process and reporting requirements of the Bulletin.

The further intent of this information is to assist the licensees in providing a method of approach acceptable to the assigned NRC Task Review Group in determining adequacy of the environmental qualification of Class IE Electrical Equipment installed at their respective facilities.

It should be recognized that the review of the licensee's responses may generate additional need for guidance of finalized resolution of the environmental qualification issue.

Attachment:  
Generic Questions and Answers  
to IE Bulletin No. 79-01B