

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I

631 PARK AVENUE KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 50-271

Vermont Yankee Nuclear Power Corporation ATTN: Mr. Robert H. Groce Licensing Engineer 20 Turnpike Road Westborough, Massachusetts 01581 MOV 0 8 1979

Gentlemen:

Enclosed is IE Bulletin No. 79-02, Revision 2, which requires action by you with regard to your power reactor facility(ies) with an operating license or a construction permit.

Should you have questions regarding this Bulletin or the actions required of you, please contact this office.

Sincerely

Boyce H. Grier

Director

Enclosures:

IE Bulletin No. 79-02, Revision 2

2. List of IE Bulletins Issued in the Last Six Months

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cc w/encls:

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PIPE SUPPORT BASE PLATE DESIGNS USING CONCRETE EXPANSION ANCHOR BOLTS

Description of Circumstances:

Inspection experiences and the review of licensee response have identified several R2 areas where the Bulletin intent has not been adequately addressed by licensees. R2 Revision No. 2 of the Bulletin is intended to clarify the intent of the Bulletin R2 and establish the NRC positions on minimum factors of safety, anchor bolt preload, R2 and the expected date of completion for certain Bulletin actions.

Since the issuance of IE Bulletin No. 79-02 on March 8, 1979, IE inspection R1 experience and many inquiries from licensees indicate that additional informa-R1 tion and clarification is needed. This revision is intended to serve that R1 purpose. None of the requirements of the original Bulletin have been deleted, R1 and the due date for completion of the requested actions (July 6, 1979) has R1 not been changed. The following text supersedes the text of Bulletin No. 79-02. R1 Changes from the original text are identified by R1, R2 in the margin. The purpose R1 of this revision is to identify acceptable ways of satisfying the Bulletin R1 requirements. R1

While performing inservice inspections during a March-April 1978 refueling outage at Millstone Unit 1, structural failures of piping supports for safety equipment were observed by the licensee. Subsequent licensee inspections of undamaged supports showed a large percentage of the concrete anchor bolts were not tightened properly.

Deficiency reports, in accordance with 10 CFR 50.55(e), filed by Long Island Lighting Company on Shoreham Unit 1, indicate that design of base plates using rigid plate assumptions has resulted in underestimation of loads on some anchor bolts. Initial investigation indicated that nearly fifty percent of the base plates could not be assumed to behave as rigid plates. In addition, licensee inspection of anchor bolt installations at Shoreham has shown over fifty percent of the bolt installations to be deficient.

Vendor Inspection Audits by NRC at Architect Engineering firms have shown a wide range of design practices and installation procedures which have been employed

for the use of concrete expansion are toward more rigorous controls bolts.

The data available on dynamic tes fatigue failures can occur at loa

R1 and R2 - Identifies those addi

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