Decket No. 50-440 Docket No. 50-441

The Cleveland Electric Illuminating Company ATTN: Mr. Dalwyn R. Davidson Vice President - Engineering P. O. Box 5000 Cleveland, OH 44101

Gentlemen:

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

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

Sincerely,

James G. Keppler Director

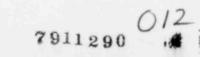
Enclosure: IE Bulletin No. 79-02, Revision No. 2

cc w/encl: Central Files Director, NRR/DPM Director, NRR/DOR PDR Local PDR NSIC TIC Harold W. Kohn, Power Siting Commission Mr. Daniel D. Wilt, Attorney

> RIII Fiorelli/ge Keppler

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

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November 8, 1979

IE Bulletin No. 79-02 (Revision 2)

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. R2

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 anchors. The current trends in the industry are toward more rigorous controls and verification of the installation of the bolts.

The data available on dynamic testing fatigue failures can occur at loads s	O'
	DUPLICATE DOCUMENT
R1 and R2 - Identifies those addition	Entire document previously entered into system under:
1424 236	ANO 7908220136
	No. of pages: