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UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

JUL 2 1979

Docket No. 50-155
Docket No. 50-255

Consumers Power Company
ATTN: Mr. R. B. DeWitt
Manager of Nuclear
Plant Operations
212 West Michigan Avenue
Jackson, MI 49201

Gentlemen:

The enclosed IE Bulletin No. 79-14 is forwarded to you for action. Written responses are required. If you desire additional information regarding this matter, please contact this office.

Sincerely,

James G. Keppler
James G. Keppler
Director

Enclosure: IE Bulletin
No. 79-14

cc w/encl:
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Plant Superintendent
Mr. J. G. Lewis, Plant
Superintendent
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U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

July 2, 1979

IE Bulletin No. 79-14

SEISMIC ANALYSES FOR AS-BUILT SAFETY-RELATED PIPING SYSTEMS

Description of Circumstances:

Recenty two issues were identified which can cause seismic analysis of safety-related piping systems to yield nonconservative results. One issue involved algebraic summation of loads in some seismic analyses. This was addressed in show cause orders for Beaver Valley, Fitzpatrick, Maine Yankee and Surry. It was also addressed in IE Bulletin 79-07 which was sent to all power reactor licensees.

The other issue involves the accuracy of the information input for seismic analyses. In this regard, several potentially unconservative factors were discovered and subsequently addressed in IE Bulletin 79-02 (pipe supports) and 79-04 (valve weights). During resolution of these concerns, inspection by IE and by licensees of the as-built configuration of several piping systems revealed a number of nonconformances to design documents which could potentially affect the validity of seismic analyses. Nonconformances are identified in Appendix A to this bulletin. Because apparently significant nonconformances to design documents have occurred in a number of plants, this issue is generic.

The staff has determined, where design specifications and drawings are used to obtain input information for seismic analysis of safety-related piping systems, that it is essential for these documents to reflect as-built configurations. Where subsequent use, damage or modifications affect the condition or configuration of safety-related piping systems as described in documents from which seismic analysis input information was obtained, the licensee must consider the need to re-evaluate the seismic analyses to consider the as-built configuration.

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