



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

January 4, 1980

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Docket Nos. 50-155/255

Mr. David P. Hoffman
Nuclear Licensing Administrator
Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Dear Mr. Bixel:

RE: SYSTEMATIC EVALUATION PROGRAM TOPICS III-5.A (EFFECTS OF PIPE BREAK ON STRUCTURE, SYSTEMS AND COMPONENTS INSIDE CONTAINMENT) AND III-5.B (PIPE BREAK OUTSIDE CONTAINMENT)

On September 12, 1979, representatives of the Systematic Evaluation Program (SEP) licensees met with the staff and indicated their concern over uncertainty related to:

1. The intent of footnote 14 to Regulatory Guide 1.46 and Section 3.2.b.(2) of Branch Technical Position APCSB 3-1 (attached to Standard Review Plan Section 3.6.1) with respect to when pipe whip loads are to be evaluated in impacted pipes of nominal sizes equal to or greater than that of the postulated broken pipe; and
2. The criteria with respect to when jet impingement loads are to be evaluated in impinged pipes.

The above points are essential elements of the referenced SEP Topics. As a result, the SEP Branch, Division of Operating Reactors, has had frequent meetings with the Mechanical Engineering Branch (MEB), Division of Systems Safety, to ensure that the position given below is in agreement with current criteria used in evaluating plants under review for both Construction Permits and Operating Licenses.

It is the staff's position that when evaluating the pipe whip impact and jet impingement effects of postulated pipe breaks for SEP Topics III-5.A and III-5.B, the following criteria shall apply:

1. A whipping pipe should be considered capable of rupturing impacted pipes of smaller nominal size.
2. A whipping pipe should be considered capable of developing through wall leakage cracks in impacted pipes of equal or larger nominal sizes with thinner wall thicknesses.

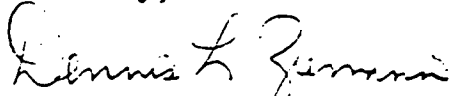
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3. A whipping pipe may be considered incapable of rupturing or cracking impacted pipes of equal or larger nominal sizes with equal or larger wall thicknesses. Confirmatory analysis is not required.
4. The effects of jet impingement loads should be considered and evaluated regardless of the ratio of impinged and postulated broken pipe sizes, even if evaluation for pipe whip impact is not required by criterion 3 above.

The staff will consider analytical and experimental justification for the use of less conservative criteria by the licensees on either a generic or case-by-case basis.

Sincerely,



Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Division of Operating Reactors

cc: See next page

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