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ARTHUR E. LUNDVALL, JR.
VICE PRESIDENT
SUPPLY

April 19, 1985

Director of Nuclear Reactor Regulation
Attention: Mr. J. R. Miller, Chief
Operating Reactors Branch #3
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Calvert Cliffs Nuclear Power Plant
Units Nos. 1 & 2; Dockets Nos. 50-317 and 50-318
Damping Factors for Seismic Stress Analysis

Reference: American Society of Mechanical Engineers
ASME Code Case N-411

Gentlemen:

Baltimore Gas and Electric hereby requests permission to use the damping values given in the referenced code case. This code case applies to stress analysis for both operating basis and safe shutdown earthquakes, and approves the use of damping factors of five percent of critical damping up to 10 hertz, a linear decrease to two percent of critical damping at 20 hertz, and a constant two percent damping above 20 hertz.

This change would apply to all reanalyses and to the analyses of additional piping systems. It would result in a reduced number of supports, thus increasing piping flexibility and, usually, reducing thermal stresses. It is expected that the reduction in the number of supports will reduce the exposure accumulated by maintenance workers over the remaining operating life of the plant. We recognize that the elimination of some supports may increase the calculated movement of pipes, and we will ensure that such displacements do not cause adverse interaction with adjacent structures, components, and equipment.

Very truly yours,

AEL/DTW/vf

cc: D. A. Brune, Esq.
G. F. Trowbridge, Esq.
Mr. D. H. Jaffe, NRC
Mr. T. Foley, NRC

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