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OCT 22 1984

Mr. Thomas T. Martin, Director, Region I
United States Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Subject: NRC Region I Letter dated April 14, 1979
Re: I.E. Bulletin No. 79-07
Seismic Stress Analysis of Safety-Related Piping
Limerick Generating Station - Units 1 and 2
Docket Nos. 50-352 and 50-353

File: GOVT 1-1 (I.E. Bulletin 79-07)

Dear Mr. Martin:

In a May 25, 1979 Philadelphia Electric Co. letter to Mr. Boyce M. Grier we presented our partial response to I.E. Bulletin 79-07 for the Limerick Generating Station - Units 1 and 2. This letter will complete our response to the I.E. Bulletin.

As in the original letter, our responses are numbered to correspond to the item numbering in the Bulletin.

1. None of the computer codes used for the seismic stress analysis of the Nuclear Steam Supply System (NSSS) piping, the Diesel Generator piping or the Recombiner Skid piping employ the algebraic summation techniques as identified in item one (1) of the I.E. Bulletin.
2. Based on the above response to item 1, no response is required for item 2 of the I.E. Bulletin.
3. Computer program verification for the piping systems identified in 1 (above):
 - a. Programs used by the General Electric Company for the seismic stress analysis of the NSSS piping:

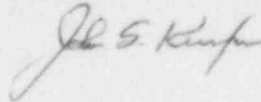
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- (1) SAP4G (F. A. Peterson and K. J. Bathe of the Engineering and Analysis Corporation at Berkeley) - Verified with ANSYS.
 - (2) PISYS (a specialized piping analysis program) - Verified by analysis of the five (5) NRC piping benchmark problems which were submitted to the NRC in GE generic report #NEDO-24210 (PISYS Analysis of NRC Benchmark Problems) dated August, 1979. NRC approval of the generic report was given in October, 1979.
- b. Programs used by Colt Industries for the seismic stress analysis of the Diesel Generator piping:
- (1) DAGS (Structural Dynamics Research Corporation) - Verified with SAP and ANSYS.
 - (2) DAGSMIC (SDRC) - Verified with ANSYS.
- c. Programs used by the Atomic International Division of Rockwell International for the seismic analysis of the Recombiner Skid piping:
- (1) SAPV (F. A. Peterson and K. J. Bathe) - Verified with ADLPIPE and PIPEDYN.
4. Based on the above response to item 1, no response is required for item 4 of the I.E. Bulletin.

If you should have any questions on the above please contact this office.

Sincerely,



AJT/pd10058411

cc: Judge Helen F. Hoyt
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Judge Richard F. Cole
Judge Christine N. Kohl
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