

March 31, 1981



Mr. Paul S. Check  
Assistant Director for Plant Systems  
Division of Systems Integration  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Combustion Engineering Analyses of LOFT Test L3-6

- References:
1. Letter of June 25, 1980, P. S. Check, USNRC, to G. Liebler, C-E Owners' Group, "Prediction Requirements for LOFT Small Break Test L3-6".
  2. Letter of December 1, 1980, K. P. Baskin, C-E Owners' Group, to B. Sheron, USNRC, "Calculational Model and Input for L3-6 Analysis".

Dear Mr. Check:

At your request (reference 1), we are providing a package containing combustion engineering's (C-E) analyses of the LOFT Small Break Test L3-6.

The package consists of two analyses. One is a blind analysis of the test. For this analysis, the actual initial test conditions were used as well as the computer model which was set up before the test was run. Documentation of this computer model was submitted to you earlier (reference 2). The second calculation is a post-test analysis. It incorporates several modifications of the computer model, primarily in the computation of the break flow, which are based on an evaluation of the experimental data. This resulted in better agreement between the analysis results and the test data than was achieved with the blind analysis. In both analyses a Best Estimate (BE) approach was used. This BE model has been derived from the C-E Small Break Evaluation Model and modified for analysis of a small break with main coolant pumps running.

Should questions arise concerning the attached material, please feel free to contact Mr. J. Longo of C-E at (203-688-1911, Ext. 4414) or Mr. G. Menzel of C-E at (203-688-1911, Ext. 3814).

Sincerely,

*K. P. Baskin*

K. P. Baskin  
Chairman  
C-E Owners' Group

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cc: Dr. B. Sheron, NRC  
Dr. J. Gasper, OPPD  
Dr. W. Burchill, C-E  
Mr. J. Longo, C-E  
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