

# YANKEE ATOMIC ELECTRIC COMPANY

B.3.2.1  
WYR 80-88



20 Turnpike Road Westborough, Massachusetts 01581  
July 30, 1980

United States Nuclear Regulatory Commission  
Washington, D.C. 20555

Attention: Office of Nuclear Reactor Regulation

Reference: (a) License No. DPR-3 (Docket No. 50-29)  
(b) USNRC letter to YAEC dated June 26, 1980, Subject:  
Prediction Requirements of LOFT Small Break Test L3-6  
(c) RELAP5/MODO, R. J. Wagner et al, CDAP-TR-057, May 1979.

Dear Sir:

Subject: LOFT Small Break Test L3-6 Prediction Requirements

In response to your letter requiring our commitment to perform a LOFT L3-6 "blind" post-test prediction, Yankee Atomic Electric Company confirms the acceptability of the approach proposed in Reference b.

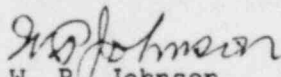
Since a principal reason for performing this test is the resolution of the pump trip criteria, it is our belief that the prediction be made using the best available "best estimate" code. Presently, YAEC is in the process of updating its current small break LOCA methodology. Based on extensive review work done in-house, it is concluded that the RELAP5 computer program (Reference c) contains the most appropriate physical models to predict small break LOCAs. Moreover, YAEC intends to use RELAP5 for small break-EM calculations after the Appendix K requirements have been incorporated and the code is licensed by the Staff in the near future. Therefore, it is our intention to use RELAP5-BE to perform the LOFTL 3-6 prediction.

Yankee currently uses WREM-based PWR ECCS Evaluation models to perform licensing for YR and MY. Therefore, in addition to the RELAP5-BE prediction noted above, two more calculations will be submitted. The first additional calculation will be performed by using the Yankee Evaluation Model methodology. The second calculation will be performed by utilizing our evaluation model code in a "BE" manner. Since our EM model is based on a homogeneous code (RELAP4/MOD3) and has seen limited best-estimate use, it is probable that using it in a BE mode may not give satisfactory results.

We trust this information is acceptable to you. However, should you have any questions, please contact us.

Very truly yours,

YANKEE ATOMIC ELECTRIC COMPANY

  
W. P. Johnson  
Vice President

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