

March 11, 1992

Docket No. 50-390  
and 50-391

Senior Vice President, Nuclear Power  
Tennessee Valley Authority  
3B Lookout Place  
1101 Market Street  
Chattanooga, Tennessee 37402-2801

Dear Sir:

SUBJECT: WATTS BAR NUCLEAR PLANT - CHANGES TO THE ECCS EVALUATION  
MODEL (TAC M81154 and M81155)

By letter dated July 22, 1991, Mr. E. G. Wallace of your staff reported changes, per 10 CFR 50.46, to the emergency core cooling system (ECCS) evaluation model (EM) for Watts Bar. The letter identifies changes in the large-break EM which would result in an estimated 28°F increase in calculated peak cladding temperature (PCT), and a resulting PCT of 2154°F. The increase is not significant per 10 CFR 50.46. We concur, therefore, that reanalysis is not required at this time.

The submittal also reported a 77°F increase on calculated PCT for small-break LOCAs with a resulting PCT of 1576°F, an increase of 130°F. This change is significant per 10 CFR 50.46 (greater than 50°F). By letter dated February 26, 1992, Mr. J. H. Garrity of your site staff stated that TVA will perform a small-break LOCA reanalysis to incorporate a revised auxiliary feedwater flow to the steam generators that is more representative of actual plant conditions. The reanalysis will be completed before fuel loading of Unit 1. This commitment resolves the staff's concern regarding the need to reanalyze the small-break LOCA. The staff's review of the reanalysis will be tracked by a new TAC number.

In conclusion, the TVA submittals satisfy the 10 CFR 50.46 requirement to report the changes and to assure that performance requirements continue to be met. This completes our efforts. This review was performed by Mr. Frank Orr of our Reactor Systems Branch.

Sincerely,

Original signed by  
Peter S. Tam, Senior Project Manager  
Project Directorate II-4  
Division of Reactor Projects I/II  
Office of Nuclear Reactor Regulation

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*mark*

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