

December 15, 1992

Docket No. 52-004  
(previously Project No. 681)

Mr. Patrick W. Marriott, Manager  
Licensing & Consulting Services  
GE Nuclear Energy  
175 Curtner Avenue  
San Jose, California 95125

Dear Mr. Marriott:

SUBJECT: TRACG REVIEW FOR THE SIMPLIFIED BOILING WATER REACTOR (SBWR)

In support of its application for design certification of the SBWR, GE Nuclear Energy (GE) is using the TRACG computer code for thermal-hydraulic analyses. TRACG is a variant of the IRAC computer code which was developed by the Office of Nuclear Regulatory Research. GE has made significant modifications to the code. However, before the staff can accept the analyses performed by GE in support of their application, we will have to review the modified code itself.

In order to understand this code, it will be necessary for the staff and its contractors to conduct detailed discussions of the design, operation, and use of the code with GE. These discussions will include presentations by the responsible GE engineers of the theoretical bases for the code models, as well as actual demonstrations of the application of the code in modeling SBWR performance. In addition, as part of the review of TRACG and SBWR, we intend to perform independent calculations of the SBWR transients using TRACG, as well as other codes. We understand that TRACG is written for a particular model of computer that the Nuclear Regulatory Commission does not use, so it is likely that staff calculations will have to be run on GE computers remotely from One White Flint North.

This level of interaction between the staff and GE is an extension of existing staff requests for additional information to review the SBWR application. Inasmuch as the TRACG review process may be lengthy, it is important that we arrange for an initial survey of TRACG in January 1993. The acting SBWR project manager, Chet Poslusny (301) 504-1132, and the technical lead, Ralph Caruso (301) 504-1813, will be coordinating this survey meeting with the GE staff.

Sincerely,

Original Signed By:

Chester Poslusny, Project Manager  
Standardization Project Directorate  
Associate Directorate for Advanced Reactors  
and License Renewal  
Office of Nuclear Reactor Regulation

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Mr. Patrick W. Marriott  
General Electric Company

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