



**GE Nuclear Energy**

J. E. Quinn, Projects Manager  
LMR and SBWR Programs

General Electric Company  
175 Curtner Avenue, M/C 165 San Jose, CA 95125-1014  
408 925-1005 (phone) 408 925-3991 (facsimile)

March 29, 1996

MFN 009-96  
Docket 52-004

Document Control Desk  
U. S. Nuclear Regulatory Commission  
Washington DC 20555

Attention: Theodore R. Quay, Director  
Standardization Project Directorate

Subject: **TRACG - TRANSMITTAL OF GE NON PROPRIETARY LICENSING  
TOPICAL REPORT NEDO-32176, "TRACG Model Description",  
dated March 1996.**

This letter transmits GE Non Proprietary Licensing Topical Report (LTR) NEDO-32176, "TRACG Model Description", dated March 1996.

This document provides a description of the models in TRACG. TRACG is a computer code for the prediction of Boiling Water Reactor (BWR) transients ranging from simple operational transients to design basis Loss-Of-Coolant Accidents (LOCAs), stability and Anticipated Transients Without Scram (ATWS). TRACG incorporates a two-fluid thermal-hydraulic model for the reactor vessel, the primary coolant system and the containment and a three-dimensional kinetics model for the reactor core. The physical models and the numerical scheme are described in this report. The basic conservation equations and their solution are discussed, and the models needed for closure relationships are developed. This report is also intended to serve as a non proprietary Models and Correlations Report for TRACG as stated in NUREG 1230.

Should you have any questions concerning the Subject document, please contact Bharat Shiralkar of our staff on (408) 925-6889.

Sincerely,

  
James E. Quinn

Attachment: GE Non Proprietary TRACG Model LTR NEDO 32176, dated March 1996.

cc:	P. A. Boehnert	(NRC/ACRS)	(7 paper copies plus E-Mail w/o att.)
	I. Catton	(ACRS)	(1 paper copy plus E-Mail w/o att.)
	S. Q. Ninh	(NRC)	(21 paper copies plus E-Mail w/o att.)
	D. C. Scaletti	(NRC)	(1 paper copy. plus E-Mail w/o att.)

**190094**

9604220045 960329  
PDR ADOCK 05200004  
A PDR

DO40