

GENERAL  ELECTRIC

NUCLEAR ENERGY  
ENGINEERING  
DIVISION

GENERAL ELECTRIC COMPANY, P.O. BOX 460, PLEASANTON, CALIFORNIA 94566



March 11, 1981

Mr. Darrell G. Eisenhut, Director  
Division of Operating Reactors  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

SUBJECT: Technical Specifications for the General Electric  
Test Reactor (GETR) - License TR-1, Docket 50-70

Dear Mr. Eisenhut:

The proposed Technical Specifications for the General Electric Test Reactor seismic modifications are enclosed for the review and approval by the NRC staff. Also enclosed are summaries of the Fuel Flooding System Acceptance Test Procedure and Triaxial Seismic Switches Acceptance Test for your information. More detailed test procedures will be available about mid-April and will be forwarded to you at that time.

Very truly yours,

R. W. Darmitzel, Manager  
Irradiation Processing Operation

Encls.

/jp

8108130442

P

AFFIRMATION

The General Electric Company hereby submits proposed Technical Specifications for the GETR seismic modifications and summaries of the Fuel Flooding System Acceptance Test Procedure and the Triaxial Seismic Switches Acceptance Test.

To the best of my knowledge and belief, the information contained herein is accurate.

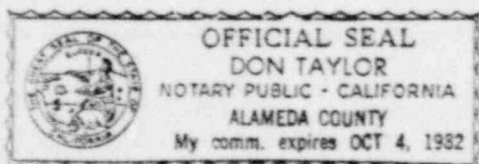
*R. W. Darmitzel*

\_\_\_\_\_  
R. W. Darmitzel, Manager  
Irradiation Processing Operation

Submitted and sworn before me this 11<sup>th</sup> day of March, 1981.

DON TAYLOR / Don Taylor, Notary Public in and for the  
County of ALAMEDA, State of California.

My commission expires OCT 4, 1982.



FUEL FLOODING SYSTEM  
ACCEPTANCE TEST PROCEDURE

The Fuel Flooding System (FFS) has been added at the General Electric Test Reactor to further assure the safe operation and shutdown of the facility for the design basis seismic event. The FFS is designed to automatically initiate water makeup to the reactor pressure vessel and the canal fuel storage tanks for an extended period following seismic events.

The acceptance test is a test which verifies and documents the readiness of a system. The FFS acceptance test procedure consists of a visual inspection of the system, proper valve positioning, reservoir filling, flow rate setting, water sampling, and system actuation and anti-siphon valve testing. The acceptance test procedure is summarized below.

I. Visual Inspection

System pipe and valves will be visually inspected from the water storage tanks to the reactor pool and the fuel storage canal. Inspections will be for proper valve lineup, tight connections and any anomolous conditions.

II. System Hydro

System pipe and valves will be hydro tested from the water storage tanks to the reactor pool and the fuel storage canal.

III. Level Gage Calibration

As the reservoirs are filled, the level gages will be calibrated.

IV. Flow Rate Setting

Flow control valves to the reactor pressure vessel and the fuel storage canal will be adjusted so that flow rates are within respective limits. After setting, the flow control valves will be locked in position.

V. Anti-Siphon Valve Test

Each anti-siphon valve will be functionally tested.

VI. Valve Lineup

After testing is complete, proper valve lineup will be verified and critical valves will be locked in position.

VII. Water Sample

A water sample will be taken of potable water used to fill the FFS tanks. The water will be analyzed for pH, total dissolved solids, bacteria and algicides. Results of the analysis will be used as a baseline in the evaluation of subsequent tank water samples.

TRIAxIAL SEISMIC SWITCHES

ACCEPTANCE TEST

The reactor seismic trip switches will be tested prior to reactor fueling as described below:

1. The seismic switches will be installed in accordance with recommendations of the manufacturer.
2. The seismic switch trip point will be set at  $0.01g + 5\%$  using a vendor-purchased field calibrator.
3. The seismic switch trip point will be checked for repeatability three times at weekly intervals.
4. The seismic switches will be trip tested with AC power off.
5. The seismic switches will be functionally tested to verify deenergization of their respective follower relays.