U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION V

Report No. 50-70/80-02

Docket No. 50-70 License No. TR-1 Safeguards Group

Licensee: General Electric Company
Vallecitos Nuclear Center
P. O. Box 460, Pleasanton, California 94566

Facility Name: General Electric Test Reactor (GETR)

Inspection at: GETR

Inspection conducted: September 18-19, 1980

Inspectors: G. B. Zwetzig, Reactor Inspector — October 10, 1980 Date Signed

Date Signed

Date Signed

Approved By: B. H. Faulkenberry, Chief, Reactor Projects Section 2, Reactor Operations and Nuclear Support Branch — 10/14/80 Date Signed

Summary:

Inspection on September 18-19, 1980 (Report No. 50-70/80-02)

Areas Inspected: Routine, unannounced inspection during long-term shutdown of facility activities and staffing, surveillance, review and audit, facilities modifications, and independent inspection effort. The inspection involved 13 inspector-hours by one inspector.

Results: No items of noncompliance or deviations were identified by the inspector.

RV Form 219 (2)

DETAILS

1. Persons Contacted

*D. Gilliland, Manager, Reactor Irradiations
*P. Kachel, Manager, GETR Operations
*E. Strain, Nuclear Safety Engineer
*D. Smith, Reactor Analyst
*P. Swartz, Manager, Plant Engineering and Maintenance

The inspector talked with other licensee personnel including reactor operators and shift supervisors.

*Denotes those attending the exit interview.

2. Facility Activities and Staffing

The inspector toured the facility and reviewed the following facility records on a sampling basis to determine if facility activities and staffing were in conformance with regulatory requirements:

a. Process Panel Logs (October 24, 1979 to September 17, 1980)

b. Nuclear Console Operator's Logs (September 27, 1979 to August 24, 1980)

c. Shift Supervisor's Logs (October 1, 1979 to August 28, 1980)

d. Material Transfer Records (October 25, 1979 to April 15, 1980)

e. Daily and Weekly Duty Check Lists (October 22, 1979 to September 14, 1980)

f. Routine Area Patrol Logs (October 24, 1979 to September 17, 1980)

g. Equipment Malfunction Reports (November 11, 1979 to September 5, 1980)

h. Stack Monitor Chart, R-24 (period ending September 18, 1980)

The inspector also reviewed the facility organization and staff levels for operations.

Based on observations made during the tour of the facility, review of the above records and discussions with licensee representatives, the inspector concluded that facility activities and staffing were in accordance with regulatory requirements.

No items of noncompliance or deviations were identified.

3. Surveillance

By letter dated January 16, 1978, the licensee requested amendment of the GETR Technical Specifications to permit deferral of certain surveillance operations while the reactor was in a cold shutdown condition for a period in excess of thirty days. At the time of this inspection, the licensee had submitted most, but not quite all of the information needed for the NRC to make a final determination with respect to this request. Accordingly, the licensee is still required to perform the surveillances identified in the facility Technical Specifications which are required and capable of being performed in the cold shutdown, defueled mode.

To verify performance of the required surveillances, the inspector examined Operations Request Forms covering the period between November 30, 1979, and September 16, 1980. On the basis of this examination, it appears that, except as noted below, all surveillances applicable to the current reactor condition were being performed in accordance with technical specification requirements.

The exceptions noted were in the case of the annual calibration of scram instrumentation as specified in Technical Specification 6.8 and the annual test of operability of the poison injection system as specified in Technical Specification 6.9.

Regarding the calibration of scram instrumentation, the licensee provided the inspector with a copy of an internal memorandum dated December 13, 1979, which states as follows:

> "Technical Specification 6.8 states, 'All instruments as required in Table II shall be...calibrated at least annually.' It has been determined that in the current defueled mode no instruments in Table II are required and, therefore, no calibrations are necessary."

The licensee thus interpreted Technical Specification 6.8 in a manner which allowed his determination of which instrumentation in Table II was required to be calibrated when the reactor was in a defueled mode. In the present defueled condition, the instrumentation in question is not being used and serves no purpose until fuel and control rods are replaced in the core.

Regarding operability testing of the poison injection system, the exception observed relates to the fact that although surveillance of this system had been conducted in the past, it appeared to be significantly overdue relative to the annual schedule. Specifically, at the time of the inspection, it had

been in excess of 16 months since the last operability test. In response to this observation the licensee's representative stated that the test (which had been requested April 7, 1980) had been delayed pending completion of modifications to the systems. When asked when they would be performing the test, the licensee's representative stated that they did not intend to perform the test until prior to resumption of operation. The licensee's basis for this position was that there is no need for a poison injection system when there is no fuel in the core, that to perform the test would incur radiation exposure to personnel which would be inconsistent with ALARA, that omission of this test had been requested in January 1978 and that approval of the requested change in the technical specifications was expected in the near future.

Following the inspection, the inspector contacted the cognizant NRR Project Manager and determined that the requested changes in the technical specifications, which will eliminate the requirement to perform the above discussed surveillance test, are being processed and will be approved within the next one or two months.

4. Review and Audit

At a previous inspection of this facility (see Inspection Report No. 50-70/79-02 dated November 21, 1979), the inspector identified an unresolved item relating to independent review and audit. This matter dealt with whether the technical specifications permitted the review and audit to be performed under the cognizance of the Manager, Nuclear Safety. The same question arose during the inspection of the General Electric Company Nuclear Test Reactor, Docket No. 50-73, conducted April 21 and 22, 1980. As a result of review of documents and dicussions held during that inspection, it was concluded that such review under the cognizance of the Manager, Nuclear Safety was acceptable (see Inspection Report No. 50-73/80-02). Accordingly, this matter is now considered resolved.

No items of noncompliance or deviations were identified.

5. Facilities Modifications

The inspector reviewed the following Change Authorizations (CA) for facility modifications reported in the facility annual report for calendar year 1979.

GETR-CA-671 - Diesel Fuel Day Tank Level Alarm
GETR-CA-674 - Removal of Reactor Head Switches
GETR-CA-679 - Auxiliary Hoist Overload Switch Insallation
GETR-CA-680 - HE 101 Shielding
GETR-CA-682 - Vacuum Relief System Maintenance Valves

The inspector verified that the above changes had been properly reviewed and approved and contained an appropriate safety evaluation. At the exit

interview, the inspector noted that removal of the reactor head switches invalidated the description of the scram system given in the revised FSAR (NEDO-12622) submitted in support of the requested renewal of the facility licensee. The licensee indicated that he considered his notification of the NRC of this change via the facility annual report fulfilled his regulatory obligations with regard to notification. In addition, he expected that there would be a number of amendments to the FSAR before the new license was issued.

No items of noncompliance or deviations were identified.

6. Independent Inspection Effort

The inspector toured the interior of the reactor containment building to observe the general state of cleanliness, housekeeping, and radiation and fire protection measures. No items were identified which were in conflict with regulatory requirements.

7. Exit Interview

The inspector met with the licensee representatives identified in Paragraph 1 at the conclusion of the inspection on September 19, 1980. The inspector summarized the purpose and scope of the inspection and the findings. The licensee acknowledged the inspectors findings.