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U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Subject: Annual Report for GETR, 2010
Reference: License TR-1, Docket 50-70
Enclosure: Annual Report No. 52

Enclosed is the Annual Report No. 52 for the deactivated General Electric Test Reactor (GETR) located at Vallecitos Nuclear Center near Sunol, California.

If there are any questions or additional information required, please contact me at the number above.

Sincerely Yours,

 Digitally signed by
David W. Turner
Date: 2011.03.31
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David W. Turner
Manager, Vallecitos Nuclear Center

cc: John Buckley, NRC (by e-mail)
Robert Evans, Region IV (by e-mail)

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HITACHI

GE Hitachi Nuclear Energy

*Vallecitos Nuclear Center
Sunol, California*

**GENERAL ELECTRIC TEST REACTOR
(DEACTIVATED)**

**ANNUAL REPORT NO. 52
FOR THE YEAR 2010**

**LICENSE TR-1
DOCKET 50-70**

MARCH 2011

**General Electric Test Reactor
(Deactivated)**

ANNUAL REPORT NO. 52

GE Hitachi (GEH) has maintained the General Electric Test Reactor (GETR) in a deactivated status under the authority of Amendment No. 17 to License TR-1, Docket 50-70, issued October 22, 2007. In this annual report, a summary of the status of the facility for the period of January 1, 2010 to December 31, 2010 is presented.

1.0 SUMMARY

The facility remains in essentially the same condition described in Annual Report No. 51. Entry into the reactor building was made for routine radiation surveys and a general examination of conditions throughout the building.

Radiation levels remain essentially unchanged.

2.0 STATUS OF FACILITY

In accordance with written procedures, the Facility Manager controls access to the containment building and general systems. The facility continues to be in deactivated status. There were no changes authorized by the Facility Manager pursuant to 10CFR50.59(a) in 2010.

3.0 RADIATION AND CONTAMINATION

Complete radiation and contamination surveys of the facility indicate that levels remain low. Results of the surveys are presented in Table 1. The radiation/contamination levels listed are representative but not necessarily maximum values.

The data below are from sample and dosimeter results accumulated during 2010. These data are for the entire VNC site and include the effects of operations other than GETR.

3.1 GETR Stack

Not operated.

3.2 Air Monitors (Yearly average of all meteorological stations.)

Four environmental air-monitoring stations are positioned approximately 90 degrees

apart around the operating facilities of the site. Each station is equipped with a membrane filter that is changed weekly and analyzed for gross alpha and gross beta-gamma.

Alpha Concentration:

Weekly Maximum,	$7.81 \times 10^{-14} \mu\text{Ci/cc}$
Weekly Average,	$3.26 \times 10^{-14} \mu\text{Ci/cc}$

Beta Concentration:

Weekly Maximum,	$1.30 \times 10^{-14} \mu\text{Ci/cc}$
Weekly Average,	$6.60 \times 10^{-15} \mu\text{Ci/cc}$

3.3 Gamma Radiation

The yearly dose results for the year 2010 as determined from evaluation of site perimeter environmental monitoring dosimeters showed no departure from normal stable backgrounds.

3.4 Vegetation

No alpha, beta or gamma activity attributable to activities at the GETR facility was found on or in vegetation in the vicinity of the site.

3.5 Off-Site

Samples taken off the site indicate normal background for the area.

4.0 ACTIVITIES

Routine inspections were conducted during this report period. There were no preventive or corrective maintenance activities performed having safety significance during the reporting period.

5.0 ORGANIZATION

The management and operations organization for the GETR did not change in 2010. The VNC Site Manager for 2010 was D. W. Turner. The GETR Facility Manager during 2010 was M. R. Schrag. The Regulatory Compliance and EHS Manager was D. R. Krause.

6.0 CONCLUSION

GE Hitachi Nuclear Energy concludes that the deactivated GETR is being maintained in a safe shutdown condition. The inspections, access control, and administratively controlled activities ensure maximum protection for the public health and safety. The procedures will be continued to maintain this high level of protection.

GE Hitachi Nuclear Energy
Vallecitos Operations

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by David W.

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D. W. Turner
Manager Vallecitos Nuclear Center

Table 1
Radiation and Contamination Level Data
General Electric Test Reactor (Deactivated)

Report Year	Contamination Levels					
	Radiation Levels (mR/h Gamma)		Surface Smears Beta-Gamma (dpm/ft ²)		Airborne Beta-Gamma ¹ ($\mu\text{Ci/cc} \times 10^{-12}$)	
	2009	2010	2009	2010	2009	2010
Reactor Enclosure						
Canal	<1	1.8	NA	NA		
3 rd Floor Zone	3	2	<100	1000		
3 rd Floor Clean Area	NA	NA	<100	<100		
Top of Missile Shield (Point A)	2	0.2	NA	NA	4.84	1.13
2 nd Floor	10	8	NA	NA		
2 nd Floor Clean Area	NA	NA	<100	100		
1 st Floor Zone	3	3	<100	250		
1 st Floor Clean Area	NA	NA	<100	150		
Basement, Rod Work Area	10	30	600	3750	1.19	0.67
Basement Clean Area			<100	200		

Note:
Radiation levels, surface smears, and air samples may vary from survey to survey as they are taken in general areas rather than at specific locations.

Survey Dates:
2009 – 01/12/2010
2010 – 12/09/2010

¹ 24-hour decayed values