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

Subject: Annual Report for VBWR, 2011
Reference: License DRP-1, Docket 50-18
Enclosure: Annual Report No. 47

Enclosed is the Annual Report No. 47 for the deactivated Vallecitos Boiling Water Reactor (VBWR) 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,

Anthony E. McFadden
Manager, Vallecitos Nuclear Center

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

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GE Hitachi Nuclear Energy

Vallecitos Nuclear Center
Sunol, California

VALLECITOS BOILING WATER REACTOR
(DEACTIVATED)

ANNUAL REPORT NO. 47
FOR THE YEAR 2011

LICENSE DPR-1
DOCKET 50-18

MARCH 2012

Vallecitos Boiling Water Reactor
(Deactivated)

Annual Report No. 47

GE Hitachi Nuclear Energy has maintained the Vallecitos Boiling Water Reactor (VBWR) in a deactivated status under the authority of Amendment No. 21 to License DPR-1, Docket 50-18, issued Oct 22, 2007 In this annual report, a summary of the status of the facility for the period of January 1, 2011 to December 31, 2011 is presented, as required by paragraph 5.d.2 of the license.

1.0 SUMMARY

All reactor systems have been removed from the containment except for the reactor vessel. The water level within the reactor vessel was monitored and has remained essentially constant throughout the report period.

Radiation and contamination levels remain at acceptable levels.

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 in safe storage condition.

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.

4.0 ACTIVITIES

Routine inspections were conducted during this report period. No other significant activities occurred at VBWR.

5.0 ORGANIZATION

The organizational structure changed during 2011. The Site Manager is A. E. McFadden. The VBWR Facility Manager remains M. R. Schrag. The Manager, Regulatory Compliance and EHS is T. Dashiell.

6.0 CONCLUSION

GE Hitachi Nuclear Energy concludes that the deactivated VBWR 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

A. E. McFadden
Manager Vallecitos Nuclear Center

Table 1
Radiation and Contamination Level Data
Vallecitos Boiling Water Reactor (Deactivated)

			Contamination Levels			
	Radiation Levels (mR/h Gamma)		Surface Smears Beta-Gamma (dpm/ft²)**		Airborne Beta-Gamma* (µCi/cc x 10^{-10})	
Report Year:	**2010**	**2011**	**2010**	**2011**	**2010**	**2011**
Reactor Enclosure, Main Floor					0.42	0.07
General	<1.0	<1.0	5,000	800		
Top of Spent Fuel Pit Cover	1.0	<1.0	1,500	<100		
Reactor Basement					0.08	0.09
Upper Level	<1.0	<1.0				
Basement Sump	<1.0	15	16,000	4,000		
General area	<1.0	<1.0	2,000	2,000		
Deck/Reactor Vessel Head	<1.0	3.0				

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.

** - smear areas are not consistently 1 ft², some range to 15 ft²

Survey Dates:
2010 – 12/11/2010
2011 – 12/08/2011

Survey Point Changes:
West Ladder Removed – Replaced with Basement Sump survey point.
Between Recirc Pumps removed – Replaced with Deck/Reactor Vessel Head survey point.

* 24-hour decayed values