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**Robert J. Wanczyk**  
Licensing Manager

BVY 13-002

January 14, 2013

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

SUBJECT: 10CFR50.46(a)(3)(ii) Annual Report for 2012  
Vermont Yankee Nuclear Power Station  
Docket No. 50-271  
License No. DPR-28

- REFERENCES:
- (1) Global Nuclear Fuel Report, 0000-0128-3575-SRLR, Revision 0, Supplemental Reload Licensing Report for Vermont Yankee Nuclear Power Station Reload 28 Cycle 29, dated August 2011
  - (2) Global Nuclear Fuel Report, 0000-0146-9245-SRLR, Revision 0, Supplemental Reload Licensing Report for Vermont Yankee Nuclear Power Station Reload 29 Cycle 30, dated December 2012
  - (3) Letter, Entergy to USNRC, Vermont Yankee Nuclear Power Station 10CFR50.46(a)(3)(ii) Report, BVY 12-003, dated January 6, 2012

Dear Sir or Madam:

This letter is to report, in accordance with 10CFR50.46(a)(3)(ii), changes in peak cladding temperature (PCT) for the Vermont Yankee (VY) Emergency Core Cooling System (ECCS) Loss of Coolant Accident (LOCA) analysis. This annual report covers VY Cycle 29 from January 2012 to December 2012.

For Cycle 29, VY used the General Electric (GE) SAFER/GESTR methodology for the evaluation of the ECCS/LOCA. The results are summarized and reported in Reference (1).

The licensing basis PCT, calculated for the GE14 and GNF2 fuel types VY currently has loaded in its core, including corrections through December 2011, is documented in Reference (3).

There was one error notification identified for VY fuel in 2012 as reported in the following table and listed in Reference (2).

ADD  
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**Summary of 10CFR50.46 Changes/Errors for Vermont Yankee (2012)**

10CFR50.46 Change/Error Identification	10CFR50.46 Change/Error Description	Licensing Basis Delta PCT (degF) for:	
		GE14	GNF2
2012-01	PRIME Implementation	+35	+35
	Total Delta PCT	+35	+35
	Previous Licensing Basis PCT from Reference (3)	2005	2105
	Adjusted Licensing Basis PCT	2040	2140

Since the PCT for the GE14 and GNF2 fuel types are within the acceptance criterion of 10CFR50.46(b)(1), there is no need for re-analysis or other action per 10CFR50.46(a)(3)(ii).

There are no new regulatory commitments being made in this submittal.

If you have any questions with this submittal, please contact me at (802) 451-3166.

Sincerely,



[RJW/JTM]

cc: Mr. William M. Dean, Region 1 Administrator  
U.S. Nuclear Regulatory Commission  
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Mr. Richard Guzman, Project Manager  
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U.S. Nuclear Regulatory Commission  
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USNRC Resident Inspector  
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Mr. Christopher Recchia, Commissioner  
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