



June 26, 2013

Docket No. 50-443  
SBK-L-13125

United States Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

Seabrook Station  
Annual Reporting of Changes to, or Errors in  
Emergency Core Cooling System Models or Applications

In accordance with the requirements of 10 CFR 50.46(a)(3)(ii), NextEra Energy Seabrook, LLC submits a tabulation of the current Large Break and Small Break LOCA PCT margin utilization tables applicable to Seabrook Station. Compliance with 10 CFR 50.46 requirements is demonstrated by the current composite Large Break LOCA PCT of 1914 °F remaining well below the limit of 2200 °F. The cumulative change in the Large Break LOCA PCT is +130°F from the analysis of record value. The current Small Break LOCA PCT of 1373 °F also remains well below the limit of 2200 °F. There is currently no Small Break LOCA PCT cumulative change.

Should you have any questions regarding this report, please contact Mr. Kevin J. Randall, Reactor Engineering, at (603) 773-7992.

Sincerely,

NextEra Energy Seabrook, LLC

A handwritten signature in black ink, appearing to read "Michael O'Keefe". The signature is written over a horizontal line.

Michael O'Keefe  
Licensing Manager

cc: NRC Region I Administrator  
J. Lamb, NRC Project Manager, Project Directorate I-2  
P. Cataldo, NRC Senior Resident Inspector

4002  
MLR

**ENCLOSURE TO SBK-L-13125**

## Seabrook SBLOCA and LBLOCA PCTs

	<u>Peak Clad Temperature</u>	<u>Cumulative Change</u>
<b><u>SBLOCA</u></b>		
2011 10 CFR 50.46 Annual Report <sup>(1)</sup>	1373 °F	-----
<u>No Errors in 2012</u> <sup>(3)</sup>		
<b>2012 10 CFR 50.46 Annual Report</b>	<b>1373 °F</b>	<b>0 °F</b>
<b><u>LBLOCA</u></b>		
2011 10 CFR 50.46 Annual Report <sup>(1)</sup>	1789 °F	5 °F
<u>Errors in 2012</u> <sup>(2,3)</sup>		
- Thermal Conductivity Degradation <sup>(2)(3)</sup>	125 °F	125 °F
- HOTSPOT Burst Temperature ZIRLO Cladding <sup>(3)</sup>	0 °F	0 °F
- HOTSPOT Calculation of Initial Pellet Temperature <sup>(3)</sup>	0 °F	0 °F
- WCOBRA/TRAC Automated Restart Logic Error <sup>(3)</sup>	0 °F	0 °F
- Rod Internal Pressure Calculation <sup>(3)</sup>	0 °F	0 °F
<b>2012 10 CFR 50.46 Annual Report</b>	<b>1914 °F</b>	<b>130 °F</b>

### References

1. Letter from M. O'Keefe to U. S. Nuclear Regulatory Commission, "Seabrook Station Annual Reporting of Changes to, or Errors in Emergency Core Cooling System Models or Applications," SBK-L-12126, Accession No. ML12201A067, July 16, 2012.
2. Letter from M. O'Keefe to U. S. Nuclear Regulatory Commission, "Seabrook Station Nuclear Fuel Pellet Thermal Conductivity Degradation Impact On Current Seabrook BE LOCA Analysis Using the 1996 CQD Methodology 10 CFR 50.46 30-day Report," SBK-L-12264, Accession No. ML12362A371, December 21, 2012.
3. R. W. Kerr (Westinghouse) to J. Perryman (NEE), "Seabrook 2012 Annual 10CFR50.46 Report," NF-NA-13-38, March 5, 2013.