



Docket No. 50-443  
April 19, 2018  
SBK-L-18077

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

Seabrook Station  
2017 Annual Environmental Operating Report

NextEra Energy Seabrook, LLC has enclosed the 2017 Annual Environmental Operating Report for Seabrook Station. The enclosed report is a summary of the implementation of the Environmental Protection Plan (EPP) for the period of January 1, 2017 to December 31, 2017. This report is submitted pursuant to the requirements of Section 5.4 of the Seabrook Station Environmental Protection Plan.

Should you have any questions concerning this response, please contact Ken Browne at (603) 773-7932.

Sincerely,  
NextEra Energy Seabrook, LLC

A handwritten signature in black ink, appearing to read "CD", written over a horizontal line.

Christopher Domingos  
Site Director

Enclosure

cc: NRC Region I Administrator  
NRC Project Manager  
NRC Senior Resident Inspector

**ENCLOSURE TO SBK-L-18077**

**Seabrook Station  
Annual Environmental Operating Report  
January 1, 2017 to December 31, 2017**

**Environmental Monitoring Program**

The following provides a summary of the reports related to Seabrook Station Aquatic Monitoring in accordance with Subsection 4.2 of the Environmental Protection Plan.

- NextEra Energy Seabrook Letter SBK-L-18015, “2017 Hydrological Monitoring Report” dated February 20, 2018. This letter was submitted to the EPA in accordance with the NPDES Permit and demonstrated compliance with the NPDES Permit limits on the thermal component of the cooling water system discharge from Seabrook Station in 2017. Seabrook Station’s NPDES Permit sets thermal discharge limits during station operation. Specifically, the thermal component of the discharge cannot increase the surface temperature in the near-field jet-mixing region by more than 5° F. The jet-mixing region is the ocean area within 300 feet of the submerged diffuser in the direction of discharge.
- NextEra Energy Seabrook Letter SBK-L-18014, “2017 Chlorine Minimization Report” dated February 20, 2018. This letter was submitted to the EPA in accordance with the NPDES Permit and demonstrated compliance with the NPDES Permit limits on the chlorine levels discharged by Seabrook Station’s cooling water system. During 2017, chlorine levels discharged from Seabrook Station, measured as the Total Residual Oxidant (chlorine), were below the NPDES Permit limits of 0.2 ppm daily maximum and 0.15 ppm monthly average.
- NextEra Energy Seabrook Letter SBK-L-17127, “2017 Environmental Monitoring Mid-Year Report” dated July 28, 2017. This letter was submitted to the EPA in accordance with the NPDES Permit and provided a status thru mid-year of the continuing 2017 Biological, Hydrological and Chlorination Monitoring Programs. The report concluded that Seabrook Station’s Environmental Monitoring Program continues to demonstrate that Seabrook Station has not had a significant impact on the balanced indigenous populations in the coastal waters of New Hampshire, and the Seabrook Station’s cooling water discharge is within the permitted thermal and total residual oxidant limits.
- NextEra Energy Seabrook Letter SBK-L-17141, “2016 Environmental Monitoring Report” dated August 31, 2017. This letter was submitted to the EPA in accordance with the NPDES Permit and describes the environmental monitoring program for Seabrook Station. The 2016 Environmental Monitoring Report provides a comparison of 2016 environmental monitoring data to previous years and continues to demonstrate that Seabrook Station has not had an adverse effect upon the balanced indigenous populations in the Hampton-Seabrook area.

### **Changes in Station Design or Operation, Tests and Experiments Involving a Potentially Unreviewed Environmental Question**

During 2017, there were no changes in Station design or operation, tests or experiments that involved a potentially unreviewed environmental question. Environmental screenings of the changes were performed as required by the Seabrook Station Environmental Compliance Manual.

### **Environmental Protection Plan Noncompliances**

During 2017 there were no instances of noncompliance with the Environmental Protection Plan.

### **Nonroutine Reports**

There were no non-routine reports submitted during 2017 per Section 5.4.2 of the Environmental Protection Plan.