



February 4, 2013

10 CFR 50.73

Docket No. 50-443
SBK-L-13023

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

Seabrook Station

Licensee Event Report (LER) 2012-005-00


Service Water Cooling Tower Low Water Level

Enclosed is Licensee Event Report (LER) 2012-005-00. This LER reports an event that occurred at Seabrook Station on December 7, 2012. This event is being reported pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B).

Should you require further information regarding this matter, please contact me at (603) 773-7745.

Sincerely,

NextEra Energy Seabrook, LLC



Michael O'Keefe
Licensing Manager

cc: NRC Region I Administrator
J. G. Lamb, NRC Project Manager
NRC Senior Resident Inspector

LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA/Privacy Section (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects.resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME Seabrook Station	2. DOCKET NUMBER 05000443	3. PAGE 1 OF 3
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4. TITLE
Service Water Cooling Tower Low Water Level

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
12	07	2012	2012	005	00	02	04	2013	N/A	N/A
									N/A	N/A

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)			
10. POWER LEVEL 100%	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER	
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A	

12. LICENSEE CONTACT FOR THIS LER

NAME Michael D. O'Keefe, Licensing Manager	TELEPHONE NUMBER (Include Area Code) (603) 773-7745
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
		N/A	N/A	N/A

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On 12/7/12, with the plant in Mode 1 at 100% power, Service Water Cooling Tower level was discovered to be below the Technical Specification (TS) limit of 42.15 feet. Following discovery, a fast fill of the cooling tower was performed to restore water level above the TS limit. It was subsequently determined that cooling tower water level was below the TS limit for approximately 17 days. No adverse consequences resulted from this event and no safety system functional failure occurred since there was sufficient water in the cooling tower to maintain the cooling tower functional at all times.

The cause of the event was failure to use diverse means to validate the accuracy of a potentially inaccurate cooling tower level indicator. Corrective actions included restoring level in the Service Water Cooling Tower and increasing the use of operator fundamentals.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Seabrook Station	05000443	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	Page 2 of 3
		2012	- 005	- 00	

NARRATIVE

Description of the Event

On 12/7/12, with the plant in Mode 1 at 100% power, Service Water Cooling Tower [BS] level was discovered to be below the Technical Specification (TS) limit of 42.15 feet. Following discovery, a fast fill of the cooling tower was performed to restore water level above the TS limit. It was subsequently determined that cooling tower water level was below the TS limit for approximately 17 days.

Cause of the Event

The cause of the event was failure to use diverse means to validate the accuracy of a potentially inaccurate cooling tower level indicator.

Analysis of the Event

The function of the station Service Water System is to transfer the heat loads from various sources in both the primary and secondary portions of the plant to the ultimate heat sink [BS]. The ultimate heat sink for all operating and accident heat loads is normally the Atlantic Ocean. In the unlikely event that seawater flow to the Service Water System is restricted due to seismically induced damage to the intake and discharge tunnels, a mechanical draft evaporative cooling tower is provided to dissipate shutdown and accident heat loads. At the time of the event, the cooling tower was not in service.

On 11/2/12, Control Room Operators noted one Service Water Cooling Tower water level instrument, SW-LI-6139, to be indicating approximately 1 foot below the second cooling tower water level instrument, SW-LI-6129. Both instruments monitor the same parameter, the water level in the cooling tower. A work order was initiated to determine the cause of the discrepancy. The crew reviewed the indications on the Service Water Cooling Tower water level chart recorder and related plant computer point and made a determination that SW-LI-6139 was deficient. Both of the alternate means utilized to validate Service Water Cooling Tower water level receive their signal from SW-LI-6129. As a result, no diverse indication was used to validate which cooling tower level instrument was inaccurate. It was later determined that the level instrument thought to be inaccurate was in fact reading correctly.

On 12/7/12, Service Water Cooling Tower level was discovered to be below the TS limit of 42.15 feet. Following discovery, a fast fill of the Service Water Cooling Tower was performed to restore water level above the TS limit. It was subsequently determined that cooling tower water level was below the TS limit for approximately 17 days.

Analysis of Safety Significance

No adverse consequences resulted from this event and no safety system functional failure occurred since the Service Water Cooling Tower remained functional at all times.

Although the Service Water Cooling Tower level was below the TS limit, there remained more than ten feet of water in excess of the amount required to satisfy the design basis seven-day tower actuation event. Therefore, it was determined that the cooling tower was capable of meeting its seven-day mission time while maintaining the required submergence for pump operation.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Seabrook Station	05000443	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	Page 3 of 3
		2012	- 005	- 00	

NARRATIVE

Corrective Actions

1. Initiated a fast fill of cooling tower and restored level above TS limit of 42.15 feet.
2. Increasing the use of operator fundamentals.

Similar Events

A review of the corrective action program and LERs identified no similar events in the past 5 years.

Failed Components

None.

Additional Information

The Energy Industry Identification System (EIIS) codes are included in this LER in the following format: [EIIS system identifier].