

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

Docket No. 50-443-LA-2

NEXTERA ENERGY SEABROOK, LLC

(Seabrook Station, Unit 1)

ASLBP No. 17-953-02-LA-BD01

Hearing Exhibit

Exhibit Number:

Exhibit Title:



UNITED STATES NUCLEAR REGULATORY COMMISSION REGION I 2100 RENAISSANCE BOULEVARD, SUITE 100 KING OF PRUSSIA, PA 19406-2713

November 13, 2018

Mr. Mano Nazar President and Chief Nuclear Officer Nuclear Division NextEra Energy Seabrook, LLC Mail Stop: EX/JB 700 Universe Blvd. Juno Beach, FL 33408

SUBJECT: SEABROOK STATION, UNIT NO. 1 – INTEGRATED INSPECTION REPORT 05000443/2018003

Dear Mr. Nazar:

On September 30, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Seabrook Station, Unit No. 1 (Seabrook). On October 25, 2018, the NRC inspectors discussed the results of this inspection with Mr. Eric McCartney, Vice President – Northern Region and other members of your staff. The results of this inspection are documented in the enclosed report.

NRC inspectors documented one Severity Level IV violation with no associated finding in this report. The NRC is treating the violation as a non-cited violation (NCV) consistent with Section 2.3.2.a of the Enforcement Policy.

If you contest the violation or significance of the NCV, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement; and the NRC Resident Inspector at Seabrook.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <u>http://www.nrc.gov/reading-rm/adams.html</u> and the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

/**RA**/

Fred L. Bower, Chief Reactor Projects Branch 3 Division of Reactor Projects

Docket No. 50-443 License No. NPF-86

Enclosure: Inspection Report 05000443/2008003

cc w/encl: Distribution via ListServ

SUBJECT: SEABROOK STATION, UNIT NO. 1 – INTEGRATED INSPECTION REPORT 05000443/2018003 DATED NOVEMBER 13, 2018

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OFFICE	RI/DRP	RI/DRP	RI/DRP			
NAME	PCataldo/SE	SElkhiamy	FBower			
DATE	11/13/2018	11/13/2018	11/13/2018			

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U.S. NUCLEAR REGULATORY COMMISSION Inspection Report

Docket Number:	50-443
License Number:	NPF-86
Report Number:	05000443/2018003
Enterprise Identifier:	I-2018-003-0067
Licensee:	NextEra Energy Seabrook, LLC (NextEra)
Facility:	Seabrook Station, Unit No. 1 (Seabrook)
Location:	Seabrook, NH
Inspection Dates:	July 1, 2018 to September 30, 2018
Inspectors:	 P. Cataldo, Senior Resident Inspector P. Meier, Resident Inspector E. Burket, Reactor Inspector J. Furia, Senior Health Physicist N. Floyd, Senior Reactor Inspector
Approved By:	Fred Bower, Chief Reactor Projects Branch 3 Division of Reactor Projects

SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring NextEra's performance at Seabrook by conducting the baseline inspections described in this report in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to https://www.nrc.gov/reactors/operating/oversight.html for more information. A self-revealing finding is summarized in the table below.

List of Findings and Violations

Pressurizer Safety Valve Outside of Technical Specification Limits				
Cornerstone	Severity	Cross-Cutting	Inspection	
		Aspect	Results	
			Section	
Not Applicable	Severity Level (SL) IV	Not Applicable	71153	
	NCV 05000443/2018003-01		Follow-up of	
	Opened/Closed		Events and	
			Notices of	
			Enforcement	
			Discretion	
A self-revealing SL IV non-cited violation of Technical Specification (TS) 3.4.2.2, "All				
pressurizer code safety valves shall be OPERABLE with a lift setting of 2485 psig +/- 3%," was				
identified when one of the pressurizer code safety valves failed as-found set point testing.				
Specifically, it was determined that the safety valve had a high as-found set point pressure				
after the valve was removed from service during the previous refueling outage in April, 2017				
(OR18) and the inoperable condition existed for a period of time longer than the allowed TS				
ACTION time.				

Additional Tracking Items

Туре	Issue number	Title	Inspection Report Section	Status
LER	05000443/2018-001-00	Pressurizer Safety Valve Outside of Technical Specification Limits Discovered During As-Found Set Point Testing	71153	Closed

PLANT STATUS

Seabrook Station began the inspection period operating at 100 percent rated thermal power and on September 30, 2018, operators commenced a shutdown, from 93 percent power, for planned refueling and maintenance outage 19 (RFO19) that commenced on October 1, 2018.

INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures in effect at the beginning of the inspection unless otherwise noted. Currently approved inspection procedures with their attached revision histories are located on the public website at http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html. Samples were declared complete when the inspection procedure requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors performed plant status activities described in IMC 2515 Appendix D, "Plant Status" and conducted routine reviews using IP 71152, "Problem Identification and Resolution." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess NextEra's performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

REACTOR SAFETY

71111.01 - Adverse Weather Protection

<u>Seasonal Extreme Weather</u> (1 Sample)

The inspectors evaluated readiness for seasonal extreme weather conditions prior to the sustained high temperatures during the week of July 2nd.

71111.04 - Equipment Alignment

Partial Walkdown (4 Samples)

The inspectors evaluated system configurations during partial walkdowns of the following systems/trains:

- (1) 'A' emergency diesel generator return-to-service on July 9
- (2) 'B' service water system during planned maintenance on the 'A' service water system on August 16
- (3) 'A' residual heat removal system before a 'B' residual heat removal pump and valve surveillance on August 28
- (4) 'A' service water and cooling water systems before a 'B' cooling water tower pump surveillance on August 30

71111.05AQ - Fire Protection Annual/Quarterly

Quarterly Inspection (5 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas:

- (1) 'A' essential switchgear (CB-F-1A-A) on September 13
- (2) Turbine building ground floor (TB-F-1A-Z, TB-F-1-0) on September 13
- (3) 'B' residual heat removal vault, all levels (RHR-F-4A-Z) on September 17
- (4) 'B' residual heat removal vault, all levels (RHR-F-1A-Z, RHR-F-2A-Z, RHR-F-3A-Z, RHR-F-1C-Z) on September 17
- (5) Fire pump rooms (FPH-F-1A-A, FPH-F-1B-A, FPH-F-1C-A) on September 19

71111.06 - Flood Protection Measures

Internal Flooding (1 Sample)

The inspectors evaluated internal flooding mitigation protections in the primary auxiliary building, 25' elevation, on September 13.

<u>71111.07 - Heat Sink Performance</u> (1 Sample)

The inspectors evaluated NextEra's monitoring and maintenance of 'B' emergency diesel generator heat exchanger thermal performance test.

71111.11 - Licensed Operator Regualification Program and Licensed Operator Performance

Operator Regualification (1 Sample)

The inspectors observed and evaluated requalification training in the simulator on August 27. This training involved lessons learned from previous steam generator level control issues, most notably the level control issues that resulted in the April 2017 reactor trip.

Operator Performance (1 Sample)

The inspectors observed and evaluated activities associated with the following licensed operator performance in the control room:

- (1) Alarm response and various instrumentation and control maintenance activities on July 19
- (2) Various alarm response to ongoing maintenance, and coordination with fire protection for entry into technical requirements manual due to fire door inoperability on August 29
- (3) Alarm response and the swap from ocean service water to the cooling water tower in preparation for the cooling water tower pump surveillance on August 30
- (4) Fast start surveillance of the 'A' emergency diesel generator, deboration of reactor coolant system to maintain power, and control room maintenance activities associated with instrumentation and control equipment on September 10
- (5) Shutdown activities and entry into refueling outage 19 on September 30

71111.12 - Maintenance Effectiveness

Routine Maintenance Effectiveness (2 Samples)

The inspectors evaluated the effectiveness of routine maintenance activities associated with the following equipment and/or safety significant functions:

- (1) Atmospheric steam dump valve maintenance to address nitrogen leaks, in August and September 2018.
- (2) Troubleshooting activities associated with recurrent electrical grounds on the electrical distribution system, which have occurred throughout the operating cycle.

71111.13 - Maintenance Risk Assessments and Emergent Work Control (5 Samples)

The inspectors evaluated the risk assessments for the following planned and emergent work activities:

- (1) Risk associated with battery charger 'C' testing, vital inverter 1E issues, and 'A' cooling water tower valve maintenance and surveillance from July 10-17
- (2) Emergent work and risk associated with ground on busses supplied by vital inverter 1E ('A' train) during a 'B' train work week from August 6-9
- (3) Risk associated with 'A' service water system inoperability for planned valve maintenance on August 16
- (4) Risk associated with the supplemental emergency power supply planned maintenance outage from August 20-23
- (5) Risk associated with aligning for the 'B' cooling water tower system from the 'B' service water system on August 30

71111.15 - Operability Determinations and Functionality Assessments (4 Samples)

The inspectors evaluated the following operability determinations and functionality assessments:

- (1) Unit auxiliary transformer 2A liquid flow loss (AR2272500) on July 5
- (2) Vital inverter 1E issues (AR2281601) on July 10
- (3) Containment enclosure emergency exhaust switch low flow alarm (AR2272500) on July 18
- (4) Structural evaluation of the mechanical penetration area north and south wall on September 13

71111.17T - Evaluations of Changes, Tests and Experiments (25 Samples)

The inspectors evaluated the following from June 18, 2018 to August 17, 2018:

10 CFR 50.59 Evaluations

- (1) Eval 15-002, SSPS Circuit Board Replacement, dated 3/9/15
- (2) Eval 15-003, EC 282582, New Service Water Pump House Barrier 1 Missile Barrier, Revision 1
- (3) Eval 15-004, Seabrook Cycle 18 Reload, dated 9/18/15

- (4) Eval 16-002, Temporary Jumper Across 1-EDE-B-1-A Cell #43, dated 11/4/16
- (5) Eval 16-004, Change to OS1023.10, Service Water Pump House Ventilation System Operation, to Allow Manual Control of the Pump House Ventilation System, Revision 0
- (6) Eval 18-001, Containment Model Update for NSAL-11-5 and NSAL-14-2, dated 3/12/18

10 CFR 50.59 Screening/Applicability Determinations

- (1) BC16-01, Correct DNBR Value in TS 3/4.4.1 RCS Bases Section, dated 1/17/17
- (2) EC 283978, Risk Informed Frequency Change for DG-ESFAS Integrated Test, dated 8/20/15
- (3) EC 284280, Increase in RCS Loop Tavg to Average Tavg Deviation Alarm Setpoint, dated 9/15/15
- (4) EC 287106, Condensate Storage Tank Approaching Level Low, dated 10/20/16
- (5) EC 287319, 345 kV SF6 Bus 1 Upgrade and GS11 Removal, dated 9/18/16
- (6) EC 288116, Replace SW-P-41-A Motor with Rewound Motor, dated 5/18/17
- (7) EC 288964, SW Pump Motor Current Instantaneous Trip Setpoint Increase, dated 10/17/17
- (8) EC 289531, Permanent Installation of Seismic Temporary Structures, dated 10/19/17
- (9) EC 289886, Update UFSAR Section 9.4 for CBA Heat Load, dated 10/5/17
- (10) EC 290437, RC-V-23 MOV Motor Replacement, dated 2/20/18
- (11) EC 290933, P-9 Setpoint Revision in Support of EOC Cycle 19 Coastdown, dated 4/6/18
- (12) PCR 1903625, Reserve Auxiliary Transformer Auxiliaries Operation, dated 5/26/16
- (13) PCR 2036771, Operability Testing of IST Valves, dated 4/1/15
- (14) PCR 2053030, Diesel Generator 1B 18 Month Operability Surveillance, dated 6/9/15
- (15) PCR 2072219, Loop 1 Delta T/Tavg 7300 NTC Card Relay Testing, dated 2/18/16
- (16) PCR 2075330, Power Increase, dated 9/24/15
- (17) PCR 2178140, Operation at Power, dated 1/5/17
- (18) PCR 2208297, SW-P-110 Pump Head Curve Verification, dated 7/12/17
- (19) PCR 2252508, Response to Natural Phenomena Affecting Plant Operations, dated 3/6/18

71111.18 - Plant Modifications (1 Sample)

The inspectors evaluated the following temporary or permanent modifications:

(1) Modification of service water pipe support (EC 286395) in July

71111.19 - Post Maintenance Testing (5 Samples)

The inspectors evaluated post maintenance testing for the following maintenance/repair activities:

- (1) Cooling water tower spray bypass valve SW-V-139 maintenance on July 12
- (2) 'B' vital DC battery replacement from July 22 through August 7
- (3) Leading edge flow meter calibration and repair on August 10
- (4) Supplemental emergency power supply maintenance from August 20-23
- (5) 'A' atmospheric steam dump valve maintenance on August 31

71111.22 - Surveillance Testing

The inspectors evaluated the following surveillance tests:

Routine (3 Samples)

- (1) 'C' vital battery charger capacity test from July 10-16
- (2) Refueling water storage tank trip actuating device operability test on July 16
- (3) Moderator temperature coefficient surveillance on July 17

In-service (1 Sample)

(1) 'A' service water isolation valve to secondary loads, SW-V-4, following thermal overload replacement on August 16

RADIATION SAFETY

71124.08 - Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation

Radioactive Material Storage (1 sample)

The inspectors observed radioactive waste container storage areas and verified the postings and controls and that NextEra had established a process for monitoring the impact of long-term storage of the waste.

Radioactive Waste System Walkdown (1 sample)

The inspectors walked down: accessible portions of liquid and solid radioactive waste processing systems; abandoned-in-place radioactive waste processing equipment; and, current methods and procedures for dewatering waste.

Waste Characterization and Classification (1 sample)

The inspectors identified radioactive waste streams and reviewed radio-chemical sample analysis results to support radioactive waste characterization. The inspectors reviewed the use of scaling factors and calculations to account for difficult-to-measure radionuclides.

Shipment Preparation (1 sample)

The inspectors reviewed the records of shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and NextEra verification of shipment readiness.

Shipping Records (1 sample)

The inspectors reviewed selected non-excepted package shipment records.

OTHER ACTIVITIES – BASELINE

71151 - Performance Indicator Verification (3 Samples)

The inspectors verified NextEra's performance indicators submittals listed below for the period from July 1, 2017 through June 30, 2018:

- (1) Emergency AC power systems
- (2) High pressure injection systems
- (3) Heat removal systems

71152 - Problem Identification and Resolution

Annual Follow-up of Selected Issues (2 Samples)

The inspectors reviewed the NextEra's implementation of its corrective action program related to the following issues:

- (1) Various issues related to the meteorological tower
- (2) Review of alkali-silica reaction impact on concrete structures

71153 - Follow-up of Events and Notices of Enforcement Discretion

Licensee Event Reports (1 Sample)

The inspectors evaluated the following licensee event reports (LERs):

 LER 05000443/2018-001-00, Pressurizer Safety Valve Outside of Technical Specification Limits Discovered During As-Found Set Point Testing (ADAMS accession: ML18095A683). The circumstances surrounding this licensee event report are documented in report section Inspection Results.

INSPECTION RESULTS

Observation	71152(1) Annual Follow-		
	up of Selected Issues		
The inspectors selected for follow-up, a negative trend of issues rel	ated to the meteorological		
tower (MET Tower) since it is important for emergency planning dose assessment and used to			
implement protective action recommendations. Specifically, NextEra identified decreasing			
availability and reliability of the MET tower at the beginning of 2018. Despite the negative			
trend, the redundancy incorporated into the design and the availability of the back-up MET			
tower ensured that the emergency plan could be implemented throughout the time it took to			
address the concerns.			

The inspectors noted that the decreasing trend began following upgrades to the MET tower components in 2014. The most evident recurring issues were related to temperature fluctuations and reliability. Upon further investigation, NextEra determined loose junction box connections were a significant contributor. In addition, based on vendor recommendations, certain preventative maintenance practices were improved. These two corrective actions increased the tower's reliability with respect to temperature indications.

In the winter of 2017 and 2018, NextEra noted that the wind vane, which is used to determine the wind direction, stopped working following significant storms. The wind speed indicator also stopped working following a more recent winter storm in 2018. Each time NextEra promptly repaired the components, however, NextEra recognized this negative trend, as these components are designed for significant winter storms. The inspectors noted that measures to investigate and to prevent the issues from recurring are ongoing. Although the exact causes remain to be determined, NextEra is working with the MET tower vendor to ensure the quality control of the replacement parts are as expected.

Preventive maintenance is performed every 6 months and includes calibrations, inspections, and parts' replacement as required. In addition, routine checks and calibrations are performed on a bi-weekly and the control room operators monitor the MET tower indications each shift. The inspectors concluded that NextEra properly identified and evaluated issues found by these regular checks in accordance with the stations corrective action program. The inspectors assessed that corrective actions to fix issues with the MET tower are performed in a timely manner commensurate with the safety significance of the issue and no issues of concern with problem identification and resolution were identified.

Observation	71152(2) Annual Follow-up
	of Selected Issues
The NRC performed a periodic site visit to Seabrook Station to rev alkali-silica reaction (ASR) on affected reinforced concrete structur "Maintenance Rule" Structures Monitoring Program and corrective inspectors verified on a sampling basis that significant changes, if presentations of ASR on the affected structures were appropriately the applicable Seabrook prompt operability determinations. In ado performed independent walkdowns of ASR-affected areas and rev	iew NextEra's monitoring of res, per their 10 CFR 50.65 action program. The any or different / considered for impact on lition, the inspectors iewed reports of recently
collected measurement data, including combined crack index, in-p wall expansion, and building deformation monitoring elements, to v	lane expansion, through- verify that the structures
were within the established, acceptable monitoring parameters.	

NextEra staff continued to complete structural calculations to evaluate the future impact of ASR on the reinforced concrete structures in accordance with the structures monitoring program. The Mechanical Penetration Area North and South exterior walls were identified to not qualify in accordance with ACI 318-71 structural design code when predicted ASR loading was applied using NextEra's methodology document. The methodology for evaluating ASR-affected concrete is currently under review by the NRC staff, as part of the August 1, 2016, License Amendment Request (16-03). The remainder of the structure met the structural design code with predicted ASR loading applied. The Mechanical Penetration Area houses various safety-related systems and components, including piping and valves between the containment structure and surrounding buildings. NextEra staff wrote a condition report to address the non-conformance of the Mechanical Penetration Area, which included a separate prompt operability determination.

The inspectors performed a review of the prompt operability determination and corrective actions for the Mechanical Penetration Area. The inspectors also performed an independent walkdown of the structure and did not observe any indications of loading distress or other structural integrity issues as evident by the absence of structural flexure cracks. The inspectors noted areas where lateral displacement of the North and South exterior walls, due to ASR expansion in the concrete backfill, caused some distortion of platform and steel

walkways and verified that adjacent equipment was not impacted. NextEra staff planned to perform more frequent inspections of the Mechanical Penetration Area North and South walls to monitor lateral displacement. Based on discussions with NextEra staff, the inspectors noted that a planned modification is being developed as a long-term corrective action to restore compliance with the design code and Seabrook's methodology document. The inspectors determined that NextEra's conclusions that the structure is capable of performing its intended functions was technically supported.

During review of the prompt operability determination for the Mechanical Penetration North and South exterior walls, the NRC inspectors identified that the document contained incorrect information for maintaining the operability of the structure. Specifically, the established threshold monitoring limits for lateral displacement of the north and south walls was incorrect. The operability determination stated an increase of 50 percent above baseline measurements was acceptable; however, the associated structural evaluation supported a limit of 20 percent increase above baseline. NextEra staff generated a condition report, AR 02280269, to revise the prompt operability determination with the correct value. The documentation error was determined to be minor because the current deformation remains well below the acceptable limit with margin, and the walls are being monitoring on a two-month frequency. In addition, the inspectors noted that the contractor performing the measurements uses the limits from the structural evaluation (i.e., 20 percent) when reporting the monitoring results, such that this criteria would have been highlighted for evaluation.

The inspectors discussed the status of the Containment Enclosure Ventilation Area (CEVA) modification with NextEra staff. This structure was previously identified as not conforming with the structural design code utilizing the Seabrook methodology document (discussed in NRC Inspection Report 05000443/2017004; ADAMS Accession Number ML18043A821). The inspectors noted that NextEra staff completed the engineering change package that described the planned repairs to the wall, but had not started physical implementation of the structural modification. The inspectors reviewed the lateral displacement measurements from March and June 2018 to verify the structure maintained its structural stability and noted there had been no apparent changes in the displacement since the previous measurements, in October 2017.

NextEra staff completed its delamination validation study as part of preparations for the CEVA North wall modification. The study was in response to NRC inspector questions during a previous inspection in November 2017, to verify that delamination was only occurring in the cover concrete (discussed in NRC Inspection Report 05000443/2017004; ADAMS Accession Number ML18043A821). NextEra conducted a sample of concrete bore holes, exposed a local area of rebar, and performed impact-echo testing, a non-destructive test method that uses sound waves to detect flaws within the concrete. NextEra staff confirmed that the delaminations on the CEVA North wall were limited to the cover concrete layer ("near surface") and were a result of loading on the wall. The inspectors discussed the results with NextEra staff and independently observed the conditions of the core bores and rebar with no anomalies identified.

The inspectors concluded that NextEra staff monitored reinforced concrete structures in accordance with Seabrook procedures, the structures remained capable of performing their safety function by meeting the established monitoring limits, and issues were appropriately identified and evaluated in accordance with the corrective action program; therefore, no issues of concern were identified.

Pressurizer Safety Valve Outside of Technical Specification Limits Cornerstone Severitv Cross-cutting Aspect Report Section Severity Level IV 71153 Not Applicable Not Applicable NCV 05000443/2018-003-01 Follow-up of Closed Events and Notices of Enforcement Discretion A self-revealing Severity Level IV NCV of Technical Specifications 3.4.2.2, "All pressurizer code safety valves shall be OPERABLE with a lift setting of 2485 psig +/- 3%," was identified when one of the pressurizer code safety valves failed as-found set point testing. Specifically, it was determined that the safety valve had a high as-found set point pressure after the valve was removed from service during the previous refueling outage in April, 2017 (OR18) and the inoperable condition existed for a period of time longer than the allowed T.S. ACTION time. Description: Seabrook Station reported the failure of a pressurizer code safety valve on April 5, 2018 in LER 2018-001-01 (ML18095A683). The valve was tested and failed the applicable acceptance criteria on February 6, 2018. It was installed in the plant from October 17, 2015 until April 8, 2017. The as-found set point pressure was 6.1 percent, which is greater than the technical specifications limiting condition for operation of 3 percent. Pressurizer code safety valves cannot be tested on line. Therefore, they are normally removed from service during a refueling outage and replaced with a different set of valves that were previously tested, inspected, and adjusted in accordance with established maintenance procedures. The removed valves are sent to a qualified offsite vendor for completion of the technical specification surveillance testing at a later date. Although the identical pressurizer code safety valve failed testing after removal, it is assumed the condition existed prior to the as-found testing. Since it was installed and in service on a fully operational plant for over a year (October 17, 2015, through April 8, 2017) it is assumed the valve was inoperable for greater than the allowed action statement time of 15 minutes for one inoperable pressurizer code safety valve, after which the plant must be in HOT STANDBY within 6 hours, and in at least HOT SHUTDOWN within the following 6 hours. Therefore, TS 3.4.2.2 was violated since these actions were not completed. Corrective Actions: NextEra performed an investigation to determine the cause of the failed pressurizer code safety valve and excessive set point drift, however, nothing conclusive was determined. NextEra found some spring characteristics had changed, but were still within specifications. However, the spring was replaced with a new one. Additionally, the corresponding valve maintenance procedure was revised to add more conservative thresholds and evaluation criteria to determine if subsequent springs are suitable for future service. The resident inspectors validated the procedure changes. Corrective Action References: AR 2248447 Performance Assessment: The inspectors determined the violation was not reasonably foreseeable and preventable by NextEra and therefore is not a performance deficiency. Enforcement:

This is a violation of technical specifications and, therefore, must be evaluated using traditional enforcement.

Violation: Technical Specification 3.4.2.2 requires that all pressurizer code safety valves shall be OPERABLE with a lift setting of 2485 psig +/- 3 percent in Modes 1, 2, and 3. With one pressurizer code safety valve inoperable, either restore the inoperable valve to OPERABLE status within 15 minutes or be in at least HOT STANDBY within 6 hours and in at least HOT SHUTDOWN within the following 6 hours.

Contrary to the above, from October 17, 2015, to April 8, 2017, NextEra operated in mode 1 with an inoperable pressurizer code safety valve greater than the allowed action time.

Severity: Severity Level IV

Disposition: This violation is being treated as a Non-Cited Violation, consistent with Section 2.3.2 of the Enforcement Policy.

The disposition of this violation closes LER 05000293/2018-001-00.

EXIT MEETINGS AND DEBRIEFS

The inspectors verified no proprietary information was retained or documented in this report.

- On June 21, 2018, the inspectors presented the initial results of the IP 71111.17T inspection to Mr. Chris Domingos, Site Director, and other members of NextEra staff.
- On July 25, 2018, the inspectors presented the updated results of the IP 71111.17T inspection to Mr. Kenneth Brown, Licensing Manager, and other members of NextEra staff.
- On August 24, 2018, the inspectors presented the radiation safety inspection results to Mr. Dennis Hickey, Radiation Protection Operations Supervisor, and other members of NextEra staff.
- On September 6, 2018, the inspectors presented the final IP 71111.17T inspection results to Mr. Kenneth Brown, Licensing Manager, and other members of NextEra staff.
- On September 13, 2018, the inspectors presented the Problem Identification and Resolution annual sample inspection results to Mr. Eric McCartney, Vice President Northern Region, and other members of NextEra staff.
- On October 25, 2018, the inspectors presented the quarterly resident inspector inspection results to Mr. Eric McCartney, Vice President – Northern Region, and other members of the NextEra staff.

DOCUMENTS REVIEWED

<u>71111.17T</u>

Procedures

EN-AA-203-1201, 10 CFR Applicability and 10 CFR 50.59 Screening Reviews, Revision 12 EN-AA-203-1202, 10 CFR 50.59 Evaluation, Revision 1

Condition Reports

2065342	2164482	2172149	2175451	2181667	2209312
2218253	2227537	2257560	2257562	2257565	2257571
2261721	2262171				

Calculations

9763-3-ED-00-14-F, Calculation of 2 Hour Loss of AC Load Profile for 58 Cell Configuration for Battery 1-EDE-B-1-A, Revision 18

C-S-1-5003, I&C Heat Load Calculation, Revision 6

SBK-1FJF-18-150, Seabrook High Burnup AST Verification – Cycle 18 NDR and Cycle 19 NDR, Revision 0

Engineering Evaluation

Probabilistic Evaluation of Barrier 1 Tornado Missile Barrier Gap Area at Service Water Pump House Southeast Alcove, dated 4/18/16

Miscellaneous

MTF 17-006, Material Transfer Form for Cycle 18 Offload, dated 3/22/17 ML18158A220, Interim Guidance for Dispositioning Severity Level IV Violations with No Associated Performance Deficiency, dated 6/15/18