



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

May 6, 2014

Mr. Kevin Walsh
Site Vice President
Seabrook Nuclear Power Plant
NextEra Energy Seabrook, LLC
c/o Mr. Michael Ossing
P.O. Box 300
Seabrook, NH 03874

**SUBJECT: SEABROOK STATION, UNIT NO. 1 - NRC INTEGRATED INSPECTION
REPORT 05000443/2014002**

Dear Mr. Walsh:

On March 31, 2014, the U. S. Nuclear Regulatory Commission (NRC) completed an inspection at Seabrook Station, Unit No. 1. The enclosed inspection report documents the inspection results, which were discussed on April 10, 2014, with you and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

This report documents one NRC-identified finding of very low safety significance (Green). This finding was determined to involve a violation of NRC requirements. However, because of the very low safety significance, and because it was entered into your corrective action program (CAP), the NRC is treating the finding as a non-cited violation (NCV), consistent with Section 2.3.2.a of the NRC Enforcement Policy. If you contest the subject or severity of any NCV in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN.: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region I; the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001; and the NRC Resident Inspector at Seabrook Station. In addition, if you disagree with the cross-cutting aspect assigned to the finding in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at Seabrook Station.

Additionally, as we informed you in the most recent NRC integrated inspection report, cross-cutting aspects identified in the last six months of 2013 using the previous terminology were being converted in accordance with the cross-reference in Inspection Manual Chapter (IMC) 0310. Section 40A5 of the enclosed report documents the conversion of these cross-cutting

aspects which will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review. If you disagree with the cross-cutting aspect assigned, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at Seabrook Station.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRCs "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Glenn T. Dentel, Chief
Reactor Projects Branch 3
Division of Reactor Projects

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

Enclosure: Inspection Report No. 05000443/2014002
w/ Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

aspects which will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review. If you disagree with the cross-cutting aspect assigned, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the Regional Administrator, Region I, and the NRC Resident Inspector at Seabrook Station.

In accordance with Title 10 of the *Code of Federal Regulations* (CFR) 2.390 of the NRCs "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records component of the NRC's Agencywide Documents Access Management System (ADAMS). ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Glenn T. Dentel, Chief
Reactor Projects Branch 3
Division of Reactor Projects

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

Enclosure: Inspection Report No. 05000443/2014002
w/ Attachment: Supplemental Information

cc w/encl: Distribution via ListServ

Distribution w/encl:

W. Dean, RA
D. Lew, DRA
H. Nieh, DRP
M. Scott, DRP
R. Lorson, DRS

J. Trapp, DRS
G. Dentel, DRP
R. Barkley, DRP
M. Draxton, DRP
B. Reyes, DRP
P. Cataldo SRI, DRP

C. Newport, RI, DRP
A. Cass, DRP, Resident AA
J. Nick, RI OEDO
RidsNrrPMSeabrook Res
RidsNrrDorlLpl1-2 Res
ROPreports Resource

DOCUMENT NAME: G:\DRP\BRANCH3\Inspection\Reports\Issued\2014 (ROP 15)\SB IR14002 final.docx
ADAMS Accession No.: **ML14127A376**

<input checked="" type="checkbox"/> SUNSI Review		<input checked="" type="checkbox"/> Non-Sensitive <input type="checkbox"/> Sensitive		<input checked="" type="checkbox"/> Publicly Available <input type="checkbox"/> Non-Publicly Available	
OFFICE	RI/DRP	RI/DRP	RI/DRP		
NAME	PCataldo/GTD for per email	RBarkley/GTD for per email	GDentel/GTD		
DATE	05/05/14	05/06/14	05/06/14		

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.: 50-443

License No.: NPF-86

Report No.: 05000443/2014002

Licensee: NextEra Energy Seabrook, LLC

Facility: Seabrook Station, Unit No.1

Location: Seabrook, New Hampshire 03874

Dates: January 1, 2014 through March 31, 2014

Inspectors: P. Cataldo, Senior Resident Inspector
C. Newport, Resident Inspector
E. Burket, Emergency Preparedness Inspector
T. Burns, Reactor Inspector
B. Dionne, Health Physicist
W. Cook, Senior Reactor Analyst

Approved by: Glenn T. Dentel, Chief
Reactor Projects Branch 3
Division of Reactor Projects

TABLE OF CONTENTS

SUMMARY	3
REPORT DETAILS	4
1. REACTOR SAFETY	4
1R01 Adverse Weather Protection	4
1R04 Equipment Alignment	4
1R05 Fire Protection	5
1R06 Flood Protection Measures	6
1R11 Licensed Operator Requalification Program	6
1R12 Maintenance Effectiveness	7
1R13 Maintenance Risk Assessments and Emergent Work Control	7
1R15 Operability Determinations and Functionality Assessments	8
1R18 Plant Modifications	10
1R19 Post-Maintenance Testing	11
1R22 Surveillance Testing	11
1EP4 Emergency Action Level and Emergency Plan Changes	12
1EP6 Drill Evaluation	12
2. RADIATION SAFETY	13
2RS1 Radiological Hazard Assessment and Exposure Controls	13
2RS2 Occupational ALARA Planning and Controls	16
4. OTHER ACTIVITIES	17
4OA1 Performance Indicator Verification	17
4OA2 Problem Identification and Resolution	18
4OA3 Follow-Up of Events and Notices of Enforcement Discretion	22
4OA5 Other Activities	23
4OA6 Meetings, Including Exit	24
ATTACHMENT: SUPPLEMENTARY INFORMATION	24
SUPPLEMENTARY INFORMATION	A-1
KEY POINTS OF CONTACT	A-1
LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED	A-1
LIST OF DOCUMENTS REVIEWED	A-1
LIST OF ACRONYMS	A-10

SUMMARY

IR 05000443/2014002; 01/01/2014-03/31/2014; Seabrook Station, Unit No. 1; Operability Determinations and Functionality Assessments.

This report covered a three-month period of inspection by resident inspectors and announced inspections performed by regional inspectors. Inspectors identified one finding of very low safety significance (Green), which was an NCV. The significance of most findings is indicated by their color (i.e., greater than Green, or Green, White, Yellow, Red) and determined using IMC 0609, "Significance Determination Process" (SDP), dated June 2, 2011. Cross-cutting aspects are determined using IMC 0310, "Components Within Cross-Cutting Areas," dated December 19, 2013. All violations of NRC requirements are dispositioned in accordance with the NRC's Enforcement Policy, dated June 7, 2012. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4.

Cornerstone: Mitigating Systems

- Green. The inspectors identified an NCV of 10 CFR Part 50, Appendix B, Criterion V, "Procedures," because NextEra did not ensure adequate separation was maintained between temporary scaffolding and safety-related equipment. Specifically, six instances of scaffolding installed in the plant were identified with less than the minimum standoff distance to safety-related equipment specified in NextEra procedures and no corresponding engineering evaluation to support these deviations. NextEra entered this NCV into their CAP as AR 01933827 and assessed the six deviations for any impact on the associated safety-related systems.

This performance deficiency was considered more than minor because it affected the protection against external factors attribute of the Mitigating Systems cornerstone and its objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, NextEra did not evaluate scaffolding installations when insufficient separation to safety-related equipment existed after procedural requirements were revised to a more restrictive value. Additionally, it was similar to example 4.a in IMC 0612, Appendix E, "Examples of Minor Issues," which states that the issue of failing to appropriately evaluate scaffold installation as required by procedures is more than minor if the licensee routinely failed to perform engineering evaluations. The issue was evaluated in accordance with IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power" and determined to be of very low safety significance (Green), because it did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic event. This finding has a cross-cutting aspect in the area of Problem Identification and Resolution, Evaluation, because NextEra personnel did not perform an adequate extent of condition review after revision of their erection of scaffold procedure. This performance deficiency directly contributed to multiple instances of scaffold members erected within two inches of safety-related equipment without an engineering evaluation [P.2]. (Section 1R15)

REPORT DETAILS

Summary of Plant Status

Seabrook operated essentially at full power for the entire assessment period, with the exception of minor downpowers for turbine control valve testing. However, on March 31, 2014, plant load was reduced to approximately 15% for turbine generator testing prior to a shutdown and entry into refueling outage No. 16 at midnight, March 31, 2014. Documents reviewed for each section of this inspection report are listed in the Attachment.

1. REACTOR SAFETY

Cornerstones: Initiating Events, Mitigating Systems, and Barrier Integrity

1R01 Adverse Weather Protection (71111.01 – 1 sample)

Readiness for Impending Adverse Weather Conditions

a. Inspection Scope

The inspectors reviewed NextEra's preparations for the onset of cold weather and snow on February 5, 2014. The inspectors reviewed the implementation of adverse weather preparation procedures before the onset of and during this adverse weather condition. The inspectors verified that operator actions defined in NextEra's adverse weather procedure maintained the readiness of essential systems. The inspectors discussed readiness and staff availability for adverse weather response with operations and work control personnel.

b. Findings

No findings were identified.

1R04 Equipment Alignment

Partial System Walkdowns (71111.04Q – 3 samples)

a. Inspection Scope

The inspectors performed partial walkdowns of the following systems:

- 'A' emergency diesel generator (EDG) while 'B' EDG was out of service (OOS) for annual maintenance on January 27, 2014
- Supplemental emergency power system (SEPS) while 'A' EDG was OOS for annual maintenance on February 12, 2014
- 'A' emergency feedwater (EFW) pump return to service on March 26, 2014

The inspectors selected these systems based on their risk-significance relative to the reactor safety cornerstones at the time they were inspected. The inspectors reviewed applicable operating procedures, system diagrams, the Updated Final Safety Analysis

Report (UFSAR), technical specifications (TSs), work orders (WOs), condition reports, and the impact of ongoing work activities on redundant trains of equipment in order to identify conditions that could have impacted system performance of their intended safety functions. The inspectors also performed field walkdowns of accessible portions of the systems to verify system components and support equipment were aligned correctly and were operable. The inspectors examined the material condition of the components and observed operating parameters of equipment to verify that there were no deficiencies. The inspectors also reviewed whether NextEra staff had properly identified equipment issues and entered them into the CAP for resolution with the appropriate significance characterization.

b. Findings

No findings were identified.

1R05 Fire Protection

Resident Inspector Quarterly Walkdowns (71111.05Q – 5 samples)

a. Inspection Scope

The inspectors conducted tours of the areas listed below to assess the material condition and operational status of fire protection features. The inspectors verified that NextEra controlled combustible materials and ignition sources in accordance with administrative procedures. The inspectors verified that fire protection and suppression equipment was available for use as specified in the area pre-fire plan, and passive fire barriers were maintained in good material condition. The inspectors also verified that station personnel implemented compensatory measures for OOS, degraded, or inoperable fire protection equipment, as applicable, in accordance with procedures.

- Residual heat removal (RHR) containment spray safety injection (CSSI) equipment vault train 'A' RHR-F-1B-Z, RHR-F-2B-Z, RHR-3B-Z, RHR-F-4B-Z, RHR-F-4B-Z1, RHR-F-4B-Z2 on January 15, 2014
- RHR CSSI equipment vault train 'B' RHR-F-1A-Z, RHR-F-2A-Z, RHR-3A-Z, RHR-F-4A-Z, RHR-F-4A-Z1, RHR-F-4A-Z2 on January 16, 2014
- SEPS-F-1-0 on January 21, 2014
- Circulating water pump room SW-F-1A-Z on March 11, 2014
- Primary auxiliary building (PAB) piping penetration area PAB-F-1A-Z, PAB-F-1J-Z on March 17, 2014

b. Findings

No findings were identified.

1R06 Flood Protection Measures (71111.06 – 1 sample)Internal Flooding Reviewa. Inspection Scope

The inspectors reviewed the UFSAR, the site flooding analysis, and plant procedures to assess susceptibilities involving internal flooding. The inspectors also reviewed the CAP to determine if NextEra identified and corrected flooding problems and whether operator actions for coping with flooding were adequate. The inspectors also focused on the 'B' EDG building to verify the adequacy of equipment seals located below the flood line, floor and water penetration seals, watertight door seals, common drain lines and sumps, sump pumps, level alarms, control circuits, and temporary or removable flood barriers.

b. Findings

No findings were identified.

1R11 Licensed Operator Requalification Program (71111.11 – 2 samples).1 Quarterly Review of Licensed Operator Requalification Testing and Traininga. Inspection Scope

The inspectors observed licensed operator simulator training on January 23, 2014, which included simulated degraded equipment and subsequent equipment failures and initiators, which resulted in escalating degraded plant conditions that ensured implementation of emergency operating procedures by the operating crew, as well as implementation of the emergency plan. This emergency plan implementation included classification of specific events that warranted an Alert Event Declaration. The inspectors evaluated operator performance during the simulated event and verified completion of risk significant operator actions, including the use of abnormal and emergency operating procedures. The inspectors assessed the clarity and effectiveness of communications, implementation of actions in response to alarms and degrading plant conditions, and the oversight and direction provided by the control room supervisor. The inspectors verified the accuracy and timeliness of the emergency classification made by the shift manager and the TS action statements entered by the control room supervisor. Additionally, the inspectors assessed the ability of the crew and training staff to identify and document crew performance problems.

b. Findings

No findings were identified.

.2 Quarterly Review of Licensed Operator Performance in the Main Control Rooma. Inspection Scope

The inspectors observed general control room activities, including alarm response and control room shift turnovers, conducted on January 13, 2014, March 14, 2014 and

March 27, 2014. Additionally the inspectors observed turbine control valve testing on January 17, 2014, engineered safety features actuation system (ESFAS) relay testing on January 27, 2014, operator response to a failed open 'B' steam generator feed regulating bypass valve on March 14, 2014, and restoration from enclosure building exhaust fan EAH-FN-4A testing on March 19, 2014. The inspectors observed test performance to verify that procedure use, crew communications, and coordination of activities between work groups similarly met established expectations and standards.

b. Findings

No findings were identified.

1R12 Maintenance Effectiveness (71111.12 – 2 samples)

a. Inspection Scope

The inspectors reviewed the samples listed below to assess the effectiveness of maintenance activities on structure, system, or component (SSC) performance and reliability. The inspectors reviewed system health reports, CAP documents, maintenance WOs, and maintenance rule (MR) basis documents to ensure that NextEra was identifying and properly evaluating performance problems within the scope of the MR. For each sample selected, the inspectors verified that the SSC was properly scoped into the MR in accordance with 10 CFR 50.65 and verified that the (a)(2) performance criteria established by NextEra staff was reasonable. As applicable, for SSCs classified as (a)(1), the inspectors assessed the adequacy of goals and corrective actions to return these SSCs to (a)(2). Additionally, the inspectors ensured that NextEra staff was identifying and addressing common cause failures that occurred within and across MR system boundaries.

- SW pump P-41C increased vibration trending in January 2014
- ED/EDE 120 VAC electrical distribution systems on February 18, 2014

b. Findings

No findings were identified.

1R13 Maintenance Risk Assessments and Emergent Work Control (71111.13 – 5 samples)

a. Inspection Scope

The inspectors reviewed station evaluation and management of plant risk for the maintenance and emergent work activities listed below to verify that NextEra performed the appropriate risk assessments prior to removing equipment for work. The inspectors selected these activities based on potential risk significance relative to the reactor safety cornerstones. As applicable for each activity, the inspectors verified that NextEra personnel performed risk assessments as required by 10 CFR 50.65(a)(4) and that the assessments were accurate and complete. When NextEra performed emergent work, the inspectors verified that operations personnel promptly assessed and managed plant risk. The inspectors reviewed the scope of maintenance work and discussed the results of the assessment with the station's probabilistic risk analyst to verify plant conditions

were consistent with the risk assessment. The inspectors also reviewed the TS requirements and inspected portions of redundant safety systems, when applicable, to verify risk analysis assumptions were valid and applicable requirements were met.

- RHR system valve maintenance and testing on January 14, 2014
- ESFAS relay testing on January 15, 2014
- Inverter 1B corrective maintenance following internal transformer failure on February 19, 2014
- Planned SW cooling tower switchover on March 20, 2014
- 'B' feedwater regulating bypass valve M/A station replacement on March 27, 2014

b. Findings

No findings were identified.

1R15 Operability Determinations and Functionality Assessments (71111.15 – 7 samples)

a. Inspection Scope

The inspectors reviewed operability determinations for the following degraded or non-conforming conditions:

- East and west pipe chase low temperature impact on feedwater isolation valve operability on January 3, 2014
- Operability of safety-related equipment in close proximity to temporary scaffolding on January 16, 2014
- Service water pumphouse seismic monitor non-functional following monthly testing on January 24, 2014
- Containment enclosure ventilation area seal gaps identified on January 28, 2014
- 'A' EDG did not trip on overspeed during return to service testing on February 14, 2014
- Reactor coolant system (RCS) leakage into the RHR system on March 13, 2014
- Turbine-driven EFW pump P-37B oil leak identified during testing on March 19, 2014

The inspectors selected these issues based on the risk significance of the associated components and systems. The inspectors evaluated the technical adequacy of the operability determinations to assess whether TS operability was properly justified and the subject component or system remained available such that no unrecognized increase in risk occurred. The inspectors compared the operability and design criteria in the appropriate sections of the TSs and UFSAR to NextEra's evaluations to determine whether the components or systems were operable. Where compensatory measures were required to maintain operability, the inspectors determined whether the measures in place would function as intended and were properly controlled by NextEra. The inspectors determined, where appropriate, compliance with bounding limitations associated with the evaluations.

b. Findings

Introduction. The inspectors identified a Green NCV of 10 CFR 50, Appendix B, Criterion V, "Procedures," because NextEra did not ensure adequate separation was maintained between temporary scaffolding and safety-related equipment. Specifically,

six instances of scaffolding installed in the plant were identified with less than the minimum standoff distance to safety-related equipment specified in NextEra procedures and no corresponding engineering evaluation to support these deviations.

Description. 10 CFR 50, Appendix B, Criterion V, requires that activities affecting quality be prescribed by documented procedures and be accomplished in accordance with those procedures. When used in the plant, the design and installation of temporary scaffolding must be controlled to ensure that it is not installed too close to safety-related equipment. During a seismic event, scaffolding installed too close to safety-related equipment can come into contact with that equipment, cause damage to it, and affect its safety function. NextEra procedures control the installation of temporary scaffolding at Seabrook by specifying a minimum separation between scaffolding and safety-related equipment, and by requiring an engineering evaluation when the minimum separation cannot be met.

NextEra mechanical maintenance procedure, MS0599.47, "Erection of Scaffolding," Revision 2, states that members of scaffolding erected adjacent to operable safety-related equipment shall not be less than two inches unless justified by an Engineering Evaluation. MS0599.47 was revised in February 2013, and the requirement for scaffold separation from operable safety-related equipment was changed from "...should not be less than 2 inches and in no case less than 1/2 inch without an engineering evaluation" to "...shall not be less than 2 inches unless justified by engineering evaluation."

While performing a plant walkdown on January 15, 2014, the inspectors identified temporary scaffold members installed less than two inches from the 'A' Containment Building Spray (CBS) pump discharge and suction lines. The 'A' CBS pump and its associated piping are classified as safety-related equipment and were operable at the time. The identified scaffold did not include an engineering evaluation that provided acceptance of separation of less than two inches. Subsequent plant walkdowns by NextEra personnel identified five additional instances of scaffolding installed less than two inches from operable safety-related equipment without an associated engineering evaluation. NextEra personnel determined that an inadequate extent of condition review following the February 2013 revision of MS0599.47, resulted in scaffolding being staged in the plant at less than the new, more restrictive scaffold separation requirement of two inches. Having identified multiple instances where NextEra personnel had not complied with the separation requirement of the scaffolding procedure, the inspectors concluded that NextEra had not been adequately controlling the design and installation of temporary scaffolding.

NextEra entered the additional instances of inadequate separation identified during their independent walkdowns into the CAP. All discrepancies were corrected and assessed for any potential impact to the operability or functionality of affected systems. The inspectors reviewed the CRs and determined that the safety function of each system potentially impacted by temporary scaffolding, including those identified by the inspectors and NextEra, would not have been affected during a seismic event.

Analysis. The inspectors determined that not providing adequate separation between temporary scaffolding and safety-related equipment without an engineering basis was a performance deficiency within NextEra's ability to foresee and correct. Specifically, several scaffold members were observed within two inches of safety-related equipment without an engineering evaluation as specified by current procedural requirements.

This performance deficiency was considered more than minor because it affected the protection against external factors attribute of the Mitigating System cornerstone and its objective to ensure the availability, reliability, and capability of systems that respond to initiating events to prevent undesirable consequences. Specifically, NextEra did not evaluate scaffolding installation when insufficient separation to safety-related equipment existed after procedural requirements were revised to a more restrictive value. Additionally, it was similar to example 4.a in IMC 0612, Appendix E, "Examples of Minor Issues," which states that the issue of failing to appropriately evaluate scaffold installation as required by procedures is more than minor if the licensee routinely failed to perform engineering evaluations. The issue was evaluated in accordance with IMC 0609, Appendix A, "The Significance Determination Process for Findings At-Power" and determined to be of very low safety significance (Green) since it did not involve the loss or degradation of equipment or function specifically designed to mitigate a seismic event. This finding is related to the cross-cutting area of Problem Identification and Resolution-Evaluation, because NextEra did not thoroughly evaluate issues to ensure that resolutions address causes and extent of conditions commensurate with their safety significance (P.2). Specifically, NextEra personnel did not perform an adequate extent of condition review after revision of their erection of scaffolding procedure. This performance deficiency directly contributed to multiple instances of scaffolding members erected within two inches of safety-related equipment without an engineering evaluation.

Enforcement. 10 CFR 50, Appendix B, Criterion V, requires, in part, that activities affecting quality shall be prescribed by documented procedures and shall be accomplished in accordance with those procedures. NextEra mechanical maintenance procedure, MS0599.47, "Erection of Scaffolding," Revision 2, states that members of scaffolding erected adjacent to operable safety-related equipment shall not be less than two inches from the equipment unless justified by an Engineering Evaluation. Contrary to the above, on January 15, 2014, the inspectors identified that certain activities affecting quality at Seabrook were not accomplished in accordance with documented procedures. Specifically, following a revision of the minimum scaffolding separation requirement in February 2013, multiple instances of scaffolding outside of the new requirements were left uncorrected and engineering evaluations were not completed. Installation of temporary scaffolding in the vicinity of safety-related equipment has the potential to adversely affect that equipment's performance during a seismic event because it was installed with insufficient standoff distance. After the issue was identified by the inspectors, NextEra performed independent walkdowns of all scaffolding, identifying five additional instances of inadequate separation distance. All identified discrepancies were corrected or evaluated as adequate. Because this violation is of very low safety significance (Green) and NextEra entered this into their CAP (AR 01933827), this violation is being treated as an NCV consistent with the Enforcement Policy. **(NCV 05000443/2014002-01, Scaffolding Installed with Insufficient Separation to Safety Related Equipment)**

1R18 Plant Modifications (71111.18 – 1 sample)

Permanent Modifications

a. Inspection Scope

The inspectors evaluated a modification that replaced the SW flow element to the 'A' EDG jacket water cooler implemented under engineering change EC280824, and

completed on February 13, 2014. The inspectors verified that the design and licensing bases, as well as the performance capability of the affected SW train and associated components were not degraded by the modification. The inspectors reviewed associated modification documents, which included topic notes, implementation work order instructions, equivalent change revisions, applicable interface documents (for example, drawings), and applicable post-modification testing.

b. Findings

No findings were identified.

1R19 Post-Maintenance Testing (71111.19 – 6 samples)

a. Inspection Scope

The inspectors reviewed the post-maintenance tests for the maintenance activities listed below to verify that procedures and test activities ensured system operability and functional capability. The inspectors reviewed the test procedure to verify that the procedure adequately tested the safety functions that may have been affected by the maintenance activity, that the acceptance criteria in the procedure was consistent with the information in the applicable licensing basis and/or design basis documents, and that the procedure had been properly reviewed and approved. The inspectors also witnessed the test or reviewed test data to verify that the test results adequately demonstrated restoration of the affected safety functions.

- Thermal barrier cooling pump monthly surveillance following electrical breaker testing on January 11, 2014
- SEPS diesel generator DG-2A maintenance on January 21, 2014
- Portable diesel driven pump B.5.b functional test following repairs on February 3, 2014
- EDG 'A' exhaust valve Belleville washer replacement on February 11, 2014
- 1B vital inverter Ferro-Resonant transformer replacement on February 19, 2014
- Service water pump P-41C following shaft sleeve replacement on March 6, 2014

b. Findings

No findings were identified.

1R22 Surveillance Testing (71111.22 – 7 samples)

a. Inspection Scope

The inspectors observed performance of surveillance tests and/or reviewed test data of selected risk-significant SSCs to assess whether test results satisfied TSs, the UFSAR, and NextEra procedure requirements. The inspectors verified that test acceptance criteria were clear, tests demonstrated operational readiness and were consistent with design documentation, test instrumentation had current calibrations and the range and accuracy for the application, tests were performed as written, and applicable test prerequisites were satisfied. Upon test completion, the inspectors considered whether the test results supported that equipment was capable of performing the required safety functions. The inspectors reviewed the following surveillance tests:

- Rod control testing and verification of proper operation of digital rod position indication on January 9, 2014
- Portable diesel driven pump B.5.b annual functional test on January 14, 2014
- 'A' cooling tower pump comprehensive inservice test on January 16, 2014 (IST)
- RCS leak rate surveillance test on March 5, 2014 (RCS leak rate)
- RCS pump seal monthly controlled leakage surveillance on March 12, 2014
- Containment enclosure exhaust fan EAH-FN-4A monthly testing on March 19, 2014
- 'B' EDG operability surveillance and ESFAS slave relay testing March 25, 2014

b. Findings

No findings were identified.

Cornerstone: Emergency Preparedness

1EP4 Emergency Action Level and Emergency Plan Changes (71114.04 – 1 sample)

Emergency Preparedness Drill Observation

a. Inspection Scope

NextEra implemented various changes to the Seabrook Emergency Action Levels (EALs), Emergency Plan, and Implementing Procedures. NextEra had determined that, in accordance with 10 CFR 50.54(q)(3), any change made to the EALs, Emergency Plan, and its lower-tier implementing procedures, had not resulted in any reduction in effectiveness of the Plan, and that the revised Plan continued to meet the standards in 50.47(b) and the requirements of 10 CFR 50, Appendix E.

The inspectors performed an in-office review of all EAL and Emergency Plan changes submitted by NextEra as required by 10 CFR 50.54(q)(5), including the changes to lower-tier emergency plan implementing procedures, to evaluate for any potential reductions in effectiveness of the Emergency Plan. This review by the inspectors was not documented in an NRC Safety Evaluation Report and does not constitute formal NRC approval of the changes. Therefore, these changes remain subject to future NRC inspection in their entirety. The requirements in 10 CFR 50.54(q) were used as reference criteria.

b. Findings

No findings were identified.

1EP6 Drill Evaluation (71114.06 – 2 samples)

.1 Emergency Preparedness Drill Observation

a. Inspection Scope

The inspectors evaluated a routine NextEra emergency drill on March 12, 2014, to identify any weaknesses and deficiencies in the event classification and notification

activities. The inspectors observed emergency response operations in the simulator and technical support center to determine whether the event classification and notification activities were performed in accordance with procedures. The inspectors also attended the individual facility drill critique to compare inspector observations with those identified by NextEra staff, to evaluate NextEra's critique and to verify whether NextEra staff was properly identifying weaknesses and entering them into the CAP.

b. Findings

No findings were identified.

.2 Emergency Preparedness Training Observations

a. Inspection Scope

The inspectors observed a simulator training evolution for Unit 1 licensed operators on January 23, 2014, which involved simulated emergency plan implementation by an operations crew. NextEra planned for this evolution to be evaluated and included in performance indicator data regarding drill and exercise performance. The inspectors observed event classification and notification activities performed by the crew. The inspectors also attended the post-evolution critique for the scenario. The focus of the inspectors' activities was to note any weaknesses and deficiencies in the crew's performance and ensure that NextEra evaluators noted the same issues and entered them into the CAP.

b. Findings

No findings were identified.

2. RADIATION SAFETY

Cornerstone: Public Radiation Safety

2RS1 Radiological Hazard Assessment and Exposure Controls (71124.01)

a. Inspection Scope

From March 4 to March 8, 2014, the inspectors reviewed NextEra's performance in assessing the radiological hazards and exposure control in the workplace. The inspectors used the requirements in 10 CFR Part 20 and guidance in Regulatory Guide (RG) 8.38, "Control of Access to High and Very High Radiation Areas for Nuclear Plants," TSs, and the NextEra procedures required by TSs, as criteria for determining compliance.

Inspection Planning

The inspectors reviewed 2013 NextEra performance indicators for the occupational exposure cornerstone for Seabrook Nuclear Station. The inspectors reviewed the results of radiation protection program audits. The inspectors reviewed any reports of operational occurrences related to occupational radiation safety since the last inspection.

Radiological Hazard Assessment

The inspectors determined if there have been changes to plant operations since the last inspection that may result in significant new radiological hazards. The inspectors evaluated whether NextEra assessed the potential impact of these changes and has implemented periodic monitoring, as appropriate, to detect and quantify the radiological hazard.

The inspectors reviewed the last two radiological surveys from the Fuel Transfer Canal and Letdown Line in the Demineralizer Alley. The inspectors evaluated whether the thoroughness and frequency of the surveys were appropriate for the given new radiological hazard.

The inspectors conducted walk-downs and independent radiation measurements in the facility, including radioactive waste processing, storage, and handling areas to evaluate material and radiological conditions.

The inspectors reviewed one risk-significant work activity that involved exposure to radiation. This activity was the initial entry, survey and decontamination of the fuel transfer canal following the second dry spent fuel storage cask loading campaign. For this work activity, the inspectors assessed whether the pre-work surveys performed were appropriate to identify and quantify the radiological hazard and to establish adequate protective measures. The inspectors evaluated the radiological survey program to determine if radiological hazards were properly identified (e.g., discrete radioactive hot particles, transuranics and hard to detect nuclides in air samples, transient dose rates and large gradients in radiation dose rates).

The inspectors observed work in potential airborne radioactivity areas, and evaluated whether the air samples from the fuel transfer canal air sample locations were representative of the breathing air zone and were properly evaluated.

Instructions to Workers

The inspectors selected three containers of radioactive materials and assessed whether the containers were labeled and controlled in accordance with 10 CFR Part 20 requirements.

The inspectors reviewed the following radiation work permits (RWP) used to access high radiation areas (HRA) and evaluated if the specified work control instructions and control barriers were consistent with TS requirements for HRA.

- RWP 14-0015 High Integrity Container/Liner Shipping Preparation to include Capping, Weighing and Transfer to Waste Processing Building, January 1, 2014
- RWP 14-0022 Inspect CS Valves inside Letdown Valve Room at Power, January 15, 2014
- RWP 14-0027 Primary Auxiliary Building Demineralizer Alley Work/Entry, December 31, 2013
- RWP 14-0058 Fuel Storage Building Transfer Canal Radiation Protection Survey, Decontamination and Maintenance Support Activities, March 2, 2014

For these RWPs, the inspectors assessed whether allowable stay-times or permissible dose for radiologically significant work under each RWP were clearly identified. The inspectors evaluated whether electronic personnel dosimeter (EPD) alarm set-points were in conformance with survey indications and plant procedural requirements.

The inspectors reviewed two occurrences where a worker's EPD malfunctioned or alarmed. The inspectors evaluated whether workers responded appropriately. The inspectors assessed whether the issue was included in the corrective action program and whether compensatory dose evaluations were conducted as appropriate.

For work activities that could suddenly increase radiological conditions, the inspectors assessed the NextEra means to inform workers of these changes.

Contamination and Radioactive Material Control

The inspectors reviewed NextEra's criteria for the survey and release of potentially contaminated material. The inspectors evaluated whether there was sufficient procedural guidance on alarm response.

The inspectors reviewed NextEra's procedures and records to verify that the radiation detection instrumentation was used at an appropriate sensitivity level. The inspectors selected six sealed sources from the NextEra inventory records and reviewed whether the sources were accounted for and were tested for loose surface contamination.

The inspectors evaluated whether any recent transactions involving nationally tracked sources were reported in accordance with 10 CFR Part 20 requirements.

Radiological Hazards Control and Work Coverage

The inspectors evaluated ambient radiological conditions and performed independent radiation measurements during walk-downs of the facility. The inspectors assessed whether the conditions were consistent with applicable posted surveys, RWPs, and associated worker briefings.

The inspectors examined NextEra physical and programmatic controls for highly activated or contaminated materials stored within spent fuel and other storage pools. The inspectors assessed whether appropriate controls were in place to preclude inadvertent removal of these materials from the pool.

The inspectors examined the posting and physical controls for selected HRAs, locked high radiation area (LHRA) and very high radiation areas (VHRA) to verify conformance with the occupational performance indicator.

Risk-Significant HRA and VHRA Controls

The inspectors discussed with the Radiation Protection Manager (RPM) the controls and procedures for high-risk HRAs and VHRAs. The inspectors assessed whether any changes to NextEra relevant procedures reduce the effectiveness of worker protection.

The inspectors evaluated NextEra controls for VHRAs and areas with the potential to become a VHRA to ensure that an individual was not able to gain unauthorized access to these areas.

Problem Identification and Resolution

The inspectors evaluated whether problems associated with radiation monitoring and exposure control were being identified by NextEra at an appropriate threshold and were properly addressed for resolution in the licensee's corrective action program. The inspectors assessed the appropriateness of the corrective actions for problems documented by NextEra that involve radiation monitoring and exposure controls. The inspectors assessed NextEra processes for applying operating experience to their plant.

b. Findings

No findings were identified.

2RS2 Occupational ALARA Planning and Controls (71124.02)

a. Inspection Scope

The inspectors assessed performance with respect to maintaining occupational individual and collective radiation exposures as low as is reasonably achievable (ALARA). The inspectors used the requirements in 10 CFR Part 20, RG 8.8, "Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Plants will be As Low As Is Reasonably Achievable," RG 8.10, "Operating Philosophy for Maintaining Occupational Radiation Exposure As Low as Is Reasonably Achievable," TSs, and NextEra procedures required by TSs, as criteria for determining compliance.

Inspection Planning

The inspectors reviewed information regarding Seabrook's collective dose history, current exposure trends, and ongoing or planned activities in order to assess current performance and exposure challenges. The inspectors reviewed the plant's three year rolling average collective radiation exposure.

The inspectors compared the site-specific trends in collective exposures against the industry average values and from similar nuclear power plants. In addition, the inspectors reviewed any changes in the radioactive source term by reviewing the trend in average contact dose rate with reactor coolant piping and steam generator primary channel head space and manways. The inspectors reviewed site-specific procedures associated with maintaining occupational exposures ALARA, which included a review of processes used to estimate and track exposures from specific work activities.

Radiological Work Planning

The inspectors assessed whether NextEra planning identified appropriate dose reduction techniques; considered alternate dose reduction features; and estimated reasonable dose goals. The inspectors evaluated whether NextEra's ALARA assessment had taken into account decreased worker efficiency from use of respiratory protective devices and/or heat stress mitigation equipment. The inspectors determined

whether NextEra work planning considered the use of remote technologies as a means to reduce dose and the use of dose reduction insights from industry operating experience and plant-specific lessons learned. The inspectors assessed the integration of ALARA requirements into work procedure and RWP documents.

Source Term Reduction and Control

The inspectors used licensee records to determine the historical trends and current status of plant source term known to contribute to elevated facility collective dose. The inspectors assessed whether the licensee had developed contingency plans for expected changes in the source term as the result of changes in plant fuel performance issues or changes in plant primary chemistry.

Problem Identification and Resolution

The inspectors evaluated whether problems associated with ALARA planning and controls are being identified by the licensee at an appropriate threshold and were properly addressed for resolution in the licensee's corrective action program. The inspectors assessed NextEra's process for applying operating experience to their plant.

b. Findings

No findings were identified.

4. **OTHER ACTIVITIES**

4OA1 Performance Indicator Verification (71151)

Unplanned Scrams, Unplanned Power Changes, and Unplanned Scrams with Complications (3 samples)

a. Inspection Scope

The inspectors reviewed NextEra's submittals for the following Initiating Events Cornerstone performance indicators for the period of January 1, 2013 through December 31, 2013.

- Unplanned scrams per 7000 critical hours
- Unplanned scrams with complications
- Unplanned power changes per 7000 critical hours

To determine the accuracy of the performance indicator data reported during those periods, inspectors used definitions and guidance contained in Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6. The inspectors reviewed NextEra's operator narrative logs, event reports, and NRC integrated inspection reports to validate the accuracy of the submittals.

b. Findings

No findings were identified.

4OA2 Problem Identification and Resolution (71152 – 2 samples)

.1 Routine Review of Problem Identification and Resolution Activities

a. Inspection Scope

As required by Inspection Procedure 71152, "Problem Identification and Resolution," the inspectors routinely reviewed issues during baseline inspection activities and plant status reviews to verify that NextEra entered issues into the CAP at an appropriate threshold, gave adequate attention to timely corrective actions, and identified and addressed adverse trends. In order to assist with the identification of repetitive equipment failures and specific human performance issues for follow-up, the inspectors performed a daily screening of items entered into the CAP and periodically attended condition report screening meetings.

b. Findings

No findings were identified.

.2 Annual Sample: Increasing Frequency of Leaks in Service Water Piping in the Vicinity of Installation/Fabrication Welds

a. Inspection Scope

During the period January 27 to January 31, 2014, inspectors reviewed a root cause evaluation (RCE AR 16379222) completed by NextEra staff for a service water pipe leak that occurred in August 2013. This problem was described in a licensee event report submitted to the NRC dated December 23, 2013. The inspectors determined the effectiveness of actions by NextEra staff to identify, characterize, correct and prevent reoccurrence of SW system leaks.

The inspectors assessed problem identification threshold, apparent cause analysis, extent of condition reviews, and timeliness of corrective actions. The inspectors reviewed documents listed in the Attachment to this report and interviewed NextEra engineering personnel to assess the effectiveness of the planned, scheduled, and completed corrective actions to resolve the identified deficiency.

The inspectors reviewed non-destructive test procedures, procedure qualifications including test personnel qualifications to determine compliance with the applicable American Society of Mechanical Engineers codes and standards. Also, the inspectors reviewed system health reports, work orders, procurement documents, drawings and photographs to determine if the nonconforming condition was appropriately identified, documented, characterized and entered into NextEra's corrective action process.

The inspectors reviewed root cause evaluation AR 16379222 and interviewed members of the evaluation team. The inspectors interviewed the qualified non-destructive test examiner to evaluate the ultrasonic test method used. Test results were reviewed with the test examiner to assess the remaining wall thickness for continued operation without encroaching on minimum wall requirements.

b. Findings and Observations

No findings were identified. The root cause evaluation and corrective actions were reasonable, appropriate and timely.

NextEra's root cause evaluation addressed a history of SW degradation (corrosion/erosion) resulting in wall thinning and pressure boundary penetration and leakage. The areas where wall thinning and leakage occurred was determined to be associated with the loss of protective coating and/or liner failure at fabrication/installation welds which typically results in turbulent fluid flow. This turbulent flow was particularly aggressive in the attack of base metals and protective coatings at these weld locations and configuration changes. The inspectors assessed the root cause determination, results of the extent of condition investigation of other locations within the SW system and other fluid (circulating water) systems with similar piping materials, operating parameters and configurations.

The inspectors noted that examination using ultrasonic testing was performed at selected locations with known change in flow patterns and velocity changes. The results of this testing identified areas exhibiting variable wear rates. An evaluation of these test results was made to determine pipe structural and pressure retaining integrity.

The inspectors visually examined several portions of previous SW pipe and fittings that had been removed from the SW system in prior outages due to identified leaks. The removed samples provided confirmatory evidence of corrosive/erosive attack from turbulent flow at root locations of field welds, configuration changes and pipe to fitting intersections. These locations revealed characteristic "pin hole" leaks at weld locations and a general "wastage" of pipe and fitting interior diameters. These locations were evaluated for compliance with minimum wall thickness requirements. Those locations which were identified as active "leaks" at weld locations or, where areas exhibiting loss of wall thickness and were encroaching on minimum wall requirements, were dispositioned for repair/replacement in the CAP.

The inspectors determined that this issue received appropriate management attention as indicated by the corrective action that was taken to perform a temporary leak repair by the installation of a weldolet encapsulating the leak location. At the next outage, (OR16) the weldolet will be removed and replaced with a more suitable "flush patch". The patch will be coated internally with a corrosion/erosion resistant material. The inspectors discussed the licensee plans to systematically remove and replace the SW piping with a base metal that is significantly more resistant to erosion/corrosion attack. The inspectors examined numerous lengths of pipe and fittings which were staged for replacement in the plant during the April 2014 refueling outage and subsequent outages.

.3 Annual Sample: Review of Activities Associated with Alkali Silica Reaction Affected Structures

a. Inspection Scope

March 12 to 13, NRC inspectors from Region I and a structural engineer from the Division of License Renewal, NRR, witnessed testing conducted at the Ferguson Structural Engineering Laboratory (FSEL) at the University of Texas – Austin. The testing was conducted in support of the Seabrook Alkali-Silica Reaction (ASR)

Integrated Corrective Action Plan. Specifically, the inspectors witnessed load testing of the control beam for reinforcement anchorage (lap-splice) capacity. The testing was performed in accordance with MPR Project 0326-0063, Procedure 5-7, "Structural Testing of Shear and Anchorage Specimens," Revision 1.

The inspectors also reviewed the results of the December 2013, Combined Crack Indexing (CCI) measurements and the supporting engineering analysis. Proprietary data sheets and associated evaluations were made available for inspector review. Additionally, the inspectors' review included discussions with the responsible Seabrook engineers, as well as petrography specialists consulting for the University of Texas Ferguson Structural Engineering Laboratory

Lastly, the inspectors reviewed NextEra's revised Prompt Operability Determinations (PODs) that address additional Seabrook structures identified as being affected by ASR via the Phase 3 ASR walkdown program.

b. Findings and Observations

The inspectors identified no findings.

Review of CCI and Crack Width Measurements

The inspectors examined the December 2013 CCI measurement results documented in Foreign Print (FP) 100847 and FP 100848, dated January 30, 2014. As documented in these NextEra reports, there are 32 areas currently being monitored for ASR progression using the CCI and crack width methodology. As of December 2013, 26 of the 32 areas have been monitored on a six-month basis for approximately two years. Based upon the data collected to date, NextEra has concluded the following: 1) the data suggests a slow increasing trend in CCI and crack width over the past two years; 2) at 14 interior ASR locations, the horizontal and vertical CCI data indicates an overall upward trend (an average increase of 0.04 mm/m, with a measurement tolerance of 0.05 mm); 3) at nine exterior locations, the horizontal and vertical CCI data indicates no significant change over the two-year period; 4) the six floor/ceiling/roof locations indicate flat to upward trends early in the period, but no change later in the two-year period; and, 5) some fluctuation in the measured CCI and crack width values have been observed. The fluctuations may be attributed to thermal effects, cyclic or constant moisture exposure, measurement device accuracy, or the condition of the measured surfaces as impacted by cleaning/preparation and weathering effects. Independent inspector review of CCI and crack width measurement data and photographs of selected areas confirmed NextEra's conclusions. As stated in FP 100847 and FP 100848, NextEra will continue the six-month data collection to comply with the Structures Monitoring Program and validate these observed ASR progression trends.

Review of Operability Determinations

Based on the result of recent Phase 3 walkdowns, NextEra identified six additional areas with CCI > 1.0 millimeter per meter (mm/m). In accordance with the Seabrook Structures Monitoring Program (SMP), NextEra staff completed evaluations of the affected structures to assess the potential impact of ASR on continued operability. The six additional areas identified with a CCI value greater than 1.0 mm/m were: cooling tower exterior (elevation 25', reference CTE-02); primary auxiliary building (PAB)

penetration area (elevation -26', reference MF105-01); west pipe chase (elevation 12', reference MF202-02); and three areas in electrical manholes (below grade elevations, reference CI-W03-Wall, CI-W05-Wall, and CI-W11-Wall). The structural evaluations were documented as Supplement IV and V to FP 100716, "Seabrook Station: Impact of ASR on Concrete Structures and Attachments," and utilized the same design capacity versus calculated demand margin analysis approach as the previously completed POD's (reference Section 9.1, NRC Inspection Report 05000443/2012010). Inspector review of the six additional ASR-affected area PODs concluded that the impacted structures have adequate strength margin available and are fully capable of performing their safety functions.

Control Beam Testing Observations

The inspectors witnessed the performance of load testing of the first control beam (a specimen that has not undergone ASR aging). The beam (A-7, reinforcement anchorage control specimen) was tested in accordance with MPR Project 0326-0063, Procedure 5-7, "Structural Testing of Shear and Anchorage Specimens," Revision 1, on March 13, 2014. Beam failure occurred at a load of approximately 251,000 pounds, as compared to the estimated failure load of 214,000 pounds. The failure load was slightly higher than the estimated design capacity, but within the accuracy of the design calculations. No test anomalies were identified. The results of the control beam test will be used to compare subsequent ASR-affected specimen tests to evaluate the impact of ASR degradation on structural performance. The inspectors observed proper procedural adherence, good test coordination and proper communications and safety practices exhibited by the testing staff, supervisory personnel and quality assurance overseers. The inspectors verified proper testing preparations and quality control oversight as specified by MPR Project 0326-0063, Procedure 5-6, "General Preparation of Test Facilities and Specimens," Revision 2, and MPR Procedure 0326-0062-46, "Procedure for In-process Inspections of FSEL Reinforcement Anchorage Test Setup for Seabrook Station," Revision 0.

Initial Test Specimen ASR Expansion Results

NextEra and the UT-Austin FSEL staff have observed in the large-scale test specimens that the X- and Y-direction deep pin expansion measurements (comparable to the Seabrook vertical and horizontal wall surface CCI measurements) do not appear to correlate with the through-wall (e.g., out-of-plane, or Z-direction) deep pin expansion measurements after the initial phase of ASR expansion. X- and Y-direction expansion appears to plateau while the Z-direction expansion continues to trend upward (increase). All large-scale reinforcement anchorage and shear specimens have demonstrated this expansion trend. The Z-direction expansion in the test specimens has been observed to be 10 times greater than the X- and Y- expansions after approximately one year.

The preliminary implication of these test specimen expansion measurement trends is that the X- and Y- expansion measurement methods (CCI and crack width) currently used for monitoring the progression of ASR on Seabrook Station structure surfaces (per the Structures Monitoring Program) may not provide alone, an adequate means to monitor (1) ASR progression and (2) by inference (pending the completion of the testing program), the ASR impact on the affected building's structural performance. The validation of the use of the CCI and crack width measurements for monitoring the structural impact of ASR has been an objective of the large specimen testing program.

In considering these initial test program results, NextEra staff initiated an Action Report (No. 01952162) to address this issue. In addition to evaluating the future impact of using CCI to monitor ASR progression on affected structures, NextEra staff conducted a preliminary assessment of this test data for impact to their PODs completed for ASR-affected Seabrook structures. NextEra staff concluded this initial test program data does not adversely impact the POD margins analyses, principally because the PODs are not dependent upon measured CCI values for assessing the level of ASR degradation. Instead, those structures demonstrating the most significant ASR progression (as assumed by CCI and crack width measurements of >1.0 mm/m and >1.0 mm, respectively) were evaluated using conservative and bounding degradation values derived from published research and testing data developed from non-reinforced concrete specimens. At the close of the inspection period, NextEra staff had initiated actions to re-evaluate the use of CCI and crack width for the SMP and to re-evaluate their methods for monitoring and assessing ASR progression of test specimens in order to correlate test data to Seabrook Station.

NextEra staff communicated with the inspectors their plans to fabricate an additional large-scale test specimen to instrument with strain gages and allow ASR progression in order to validate the use of strain gages for through-wall (Z-direction) expansion monitoring. The purpose of this activity is to validate the use of one or more strain gage designs that can subsequently be installed in Seabrook structures to accurately monitor through-wall expansion. In addition, NextEra staff described plans to increase the core sampling of control and ASR-affected large scale test specimens in order to more accurately measure ASR impact on concrete compressive and tensile strength and modulus of elasticity. NextEra staff further communicated plans to conduct petrographic examination of through-wall core samples from the test specimens. This additional concrete material property testing and data collection is intended to be used to support the correlation of testing program structural performance data to Seabrook structures (along with additional, but not yet defined, core sampling of Seabrook ASR-affected structures).

In summary, the inspectors concluded that the PODs completed for ASR-affected Seabrook structures remain unaffected by the X-, Y- and Z-direction expansion data measured, to date, in the test specimens. Actions planned by NextEra to assess the adequacy of the SMP structural evaluation criteria and modify the ASR testing program were viewed appropriate by the inspectors and the Seabrook ASR Issue Technical Team, at this time. As stated above, the PODs use bounding assumptions not dependent on the degree of expansion measured. Additional inspections are planned by the NRC to evaluate NextEra's ongoing corrective actions to resolve the non-conformance related to ASR-affected structures at the Seabrook Station.

4OA3 Follow-Up of Events and Notices of Enforcement Discretion (71153 - 1 sample)

Plant Events

a. Inspection Scope

For the degraded plant equipment transient listed below, the inspectors reviewed and/or observed plant parameters, reviewed personnel performance, and evaluated performance of mitigating systems. The inspectors communicated the plant events to

appropriate regional personnel, and compared the event details with criteria contained in IMC 0309, "Reactive Inspection Decision Basis for Reactors," for consideration of potential reactive inspection activities. The inspectors reviewed NextEra's follow-up actions related to the events to assure that NextEra implemented appropriate corrective actions commensurate with their safety significance.

- 'B' steam generator feedwater bypass valve failed to open on March 14, 2014

b. Findings

No findings were identified.

40A5 Other Activities

.1 Cross-Cutting Aspects

The table below provides a cross-reference from the 2013 and earlier findings and associated cross-cutting aspects to the new cross-cutting aspects resulting from the common language initiative. These aspects and any others identified since January 2014 will be evaluated for cross-cutting themes and potential substantive cross-cutting issues in accordance with IMC 0305 starting with the 2014 mid-cycle assessment review.

Finding	Old Cross-Cutting Aspect	New Cross-Cutting Aspect
05000443/2013004-01, Inadequate Operability Determination Regarding Service Water Leakage and Associated TS Violation	H.1(b)	H.14

.2 Buried Piping, TI-2515/182, Phase 2 (1 sample)

a. Inspection Scope

The licensee's buried piping and underground piping and tanks program was inspected in accordance with paragraphs 03.02.a of the Temporary Instruction (TI) 2515/182, and it was confirmed that activities which correspond to the completion dates specified in the program, that have passed since the Phase 1 inspection was conducted, have been completed.

The licensee's buried piping and underground piping and tanks program was inspected in accordance with paragraph 03.02.b of the TI and responses to specific questions found in <http://www.nrc.gov/reactors/operating/ops-experience/buried-pipe-ti-phase-2-insp-req-2011-11-16.pdf> were submitted to NRC headquarters staff.

b. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On April 10, 2014, the inspectors presented the inspection results to Mr. Kevin Walsh, Site Vice President, and other members of the Seabrook Station staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

K. Walsh, Site Vice President
T. Vehec, Plant General Manager
V. Brown, Senior Licensing Engineer
M. Chevalier, RP Supervisor
J. Connolly, Site Engineering Director
D. Currier, Emergency Planning Manager
K. Douglas, Maintenance Director
D. Flahardy, Radiation Protection Manager
M. Ossing, Licensing Manager
V. Pascucci, Nuclear Oversight Manager
D. Robinson, Chemistry Manager
T. Waechter, Nuclear Plant Shift Manager

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened/Closed

05000443/2014002-01	NCV	Scaffolding Installed with Insufficient Separation to Safety Related Equipment (Section 1R15)
---------------------	-----	---

LIST OF DOCUMENTS REVIEWED

Section 1R01: Adverse Weather Protection

Procedures

ON1090.13, Response to Natural Phenomena Affecting Plant Operations, Revision 1
OS1200.03, Severe Weather Conditions, Revision 20
OS1090.09, Station Cold Weather Operations, Revision 2

Section 1R04: Equipment Alignment

Procedures

OS1026.02, Operating the DG 1A Lube Oil System, Revision 14
OS1026.03, Operating DG 1A Jacket Water Cooling System, Revision 11
OS1026.04, Operating DG 1A Starting Air System, Revision 12
OS1026.05, Operating the DG 1A Fuel Oil System, Revision 14
OS1026.06, Operating the DG 1A Air Intake, Exhaust and Vacuum System, Revision 9
OS1036.01, Aligning the Emergency Feedwater System for Automatic Operation, Revision 17
OX1461.03, SEPS Operational Readiness Status Surveillance, Revision 1

Condition Reports

1880681 1904097 1936382 1934562 1952234

Section 1R05: Fire ProtectionProcedures

Seabrook Station Fire Protection Pre-Fire Strategies, Volume I, PAB-F-1A-Z, PAB-F-1J-Z
 Seabrook Station Fire Protection Pre-Fire Strategies, Volume I, RHR-F-1B-Z, RHR-F-2B-Z,
 RHR-3B-Z, RHR-F-4B-Z, RHR-F-4B-Z1, RHR-F-4B-Z2
 Seabrook Station Fire Protection Pre-Fire Strategies, Volume I, RHR-F-1A-Z, RHR-F-2A-Z,
 RHR-3A-Z, RHR-F-4A-Z, RHR-F-4A-Z1, RHR-F-4A-Z2
 Seabrook Station Fire Protection Pre-Fire Strategies, Volume II, SEPS-F-1-0 21'-0"
 Seabrook Station Fire Protection Pre-Fire Strategies, Volume II, SW-F-1A-Z

Section 1R06: Flood Protection MeasuresCondition Reports

00158490 01939967

Miscellaneous

Seabrook Station Moderate Energy Line Break Study

Section 1R11: Licensed Operator Regualification ProgramProcedures

ER 1.1, Classification of Emergencies, Revision 53

Section 1R12: Maintenance EffectivenessProcedures

ER-AA-201-2001, System and Program Health Reporting, Revision 4
 PEG-40, Scoping Changes and Program Interfaces, Revision 5
 PEG-45, Maintenance Rule Program Monitoring Activities, Revision 17

Condition Reports1625261 1927188 1927781 1932096 1932711 1933065
1936449 1945056Miscellaneous

ED/EDE 120 VAC System Health Report
 EE-10-010, Maintenance Rule–PRA Basis Document PRA Risk Ranking and performance
 Criteria based on SSPSS-2009, Revision 1
 NEI-99-02, Revision 7
 SW-P-41C In-Service Testing Pump Data Sheet and Data Logs
 Service Water System Health Report

Section 1R13: Maintenance Risk Assessments and Emergent Work ControlProcedures

OS1046.24, Removing EDE-I-1B from Service during Power Operation, Revision 3

Miscellaneous

Maintenance Rule a(4) Risk Assessment Report for Workweek 1407-12
 PRA-301, MR (a)(4) Process for On-Line Maintenance Group Instruction, Revision 0
 WM-AA-100-1000, Work Activity Risk Management, Revision 0

Maintenance Orders/Work Orders
40248951 40295189

Section 1R15: Operability Determinations and Functionality Assessments

Procedures

- IX1670.905, Seismic Monitoring Data Retrieval Following a Seismic Event, Revision 6
- IX1670.919, SWPH Seismic Monitor Calibration, Revision 6
- MA 4.8, Control of Scaffolding, Revision 10
- MA 5.7, Station Barriers, Penetration Seals, and Fire Barrier Wrap, Revision 17
- MS0599.16, Construction, Repair and Rework of Silicone Base Penetration Seals, Revision 7
- MS0599.47, Erection of Scaffolding, Revision 2
- MX0539.50, Emergency Diesel Generator Engine 34-Month Preventative Maintenance, Revision 6
- MX0599.02, 18 Month Inspection of Technical Requirement Fire Rated Assembly Penetration Seals, Revision 2
- OS1005.05, Safety Injection System Operation, Revision 25
- OX1413.01, 'A' Train RHR Quarterly Flow and Valve Stroke Tests, and 18 Month Valve Stroke Observation, Revision 20
- OX1413.03, 'B' Train RHR Quarterly Flow and Valve Stroke Tests, and 18 Month Valve Stroke Observation, Revision 11
- OX1426.34, Diesel Generator 1A 18 Month Operability Surveillance, Revision 10
- OX1436.02, Turbine Driven Emergency Feedwater Pump Quarterly and Monthly Valve Alignment, Revision 20

Condition Reports

0182029	0216388	0214364	0221647	1612785	1804255
1833819	1914234	1918208	1928775	1930569	1930855
1933827	1934585	1935442	1936576	1937513	1937679
1941086	1941153	1942147	1945355	1945771	1946400
1947827	1949876				

Maintenance Orders/Work Orders

40153374	40191167	40199273	40228515	40245357	40250128
40291172	40291812	40291925	40292272		

Miscellaneous

- Calculation C-S-1-61035, Allowable CEVA Penetration Seal Opening Size, Revision 3
- Colt-Pielstick PC2V Engine Vendor Manual
- EE-98-019, Control of Temporary Loads in Seismic Areas
- Engineering Evaluation 14-001, Scaffold & Temporary Equipment Engineering Evaluation
- FP22849, Terry Turbine Instruction Manual, Revision 1
- Preventive Maintenance Activity MS-CAT-12-SEAL-INSP
- Penetration Seal Design, Seal No. PB-021-EV101-7502, FP4490R-01
- Penetration Seal Design, Seal No. PB-021-EV101-7504, FP4492R-01
- Tech Spec and Commitment Logs dated January 2-3, 2014
- Technical Requirement TR21-4.3.3.3.1

Drawings

- 1-RH-B20662, Residual Heal Removal Sys. Train 'A' Detail, Revision 22

Section 1R18: Plant ModificationsProcedures

IS1672.141, SW-F-6181, DG-E-42A Jacket Water Cooler Service Water Outlet Flow Calibration,
Revision 6

EN-AA-100, Design Control Program, Revision 1

EN-AA-100-1003, Control of Design Interfaces, Revision 1

EN-AA-205-1100, Design Change Packages, Revision 9

EN-AA-205-1103, Equivalent Design Package, Revision 0

Condition Reports

1860416 1881903 1939926

Maintenance Orders/Work Orders

40233615

Miscellaneous

Specification 9763-006-174-1D, Data Sheets for Electronic Transmitters (Non-Class 1E),
Revision 14

Drawings

1-SW-D20795, Service Water System Nuclear Detail, Revision 43

Section 1R19: Post-Maintenance TestingProcedures

LS0556.08, Routine Preventative Maintenance 7.5 KVA Westinghouse Inverter, Revision 8

LS0556.09, Replacement of Ferro-Resonant Transformers and Capacitors in Westinghouse 7.5
KVA Inverters, Revision 5

MM-AA-100, Conduct of Maintenance, Revision 4

MX0539.63, Emergency Diesel Generator Exhaust Valve Removal, Replacement, and Belleville
Washer Replacement, Revision 2

ON0443.113, Portable Diesel Driven Pump Annual Functional Test, Revision 5

OS1046.24, Removing EDE-I-1B from Service during Power Operation, Revision 2

OS1047.01, Vital Inverter Operation, Revision 14

OS1247.01, Loss of a 120VAC Instrument Panel, Revision 17

OS1412.10, Thermal Barrier Cooling Water Pump Monthly Rotation, Revision 6

OX1416.04, Service Water Quarterly Pump and Discharge Valve Test and Comprehensive
Pump Test, Revision 19

OX1446.03, Electrical Bus Weekly Operability, Revision 12

OX1456.86, Operability Testing of IST Pumps, Revision 10

SAG-9, PDDP and Hose Trailer Deployment, Revision 5

Condition Reports

0221649 1931807 1932393 1932711 1933020 1933808

1934499 1934512 1934562 1936449 1936703 1936858

1940192 1940751 1941180 1945142 1946434 1946440

1946653 1947234 1947394

Maintenance Orders/Work Orders

01168951 01207733 01210186 0305866 0320197 40196428

40228208 40239216 40259353 40290809 40295189 40298167

40298355

Miscellaneous

Calculation C-S-1-86208, Extreme Damage Mitigating Strategy Flow Capability, Revision 3
Calculation C-S-1-50014, SW Pumps (SW-P-41A thru D) IST Uncertainties, Revision 0
Calculation 9763-3-ED-00-34-F, AC Ground Detection System
FP35465, SEPS Generator Set Technical Manual
FP500076, Godwin PDDP Instruction Manual, Revision 6
NASA TN D-8177, Apollo Experience Report–Detection and Minimization of Ignition Hazards
From Water/Glycol Contamination of Silver-Clad Electrical Circuitry
Standing Order SOO-14-001, B.5.b Pump Status, dated January 28, 2014
Westinghouse Technical Bulletin NSID-TB-87-09

Drawings

4950C70, Sheet 4, Inverter Schematic
1-NHY-310105, Sheet E02a, UPS 1-I-1B Vital Instrument Distribution Panel 1-PP-1B
1-NHY-310231, Sheet I20a, Motor/Load List Motor Control Center 1-EDE-MCC-615, Revision 7
1-NHY-310895, Sheet B4Qa, Thermal Barrier PCCW Recirc. Pump P-322B Schematic
Diagram, Revision 2

Section 1R22: Surveillance Testing

Procedures

EN-AA-205-1102, Temporary Configuration Changes, Revision 5
MA-AA-100-1011, Equipment Troubleshooting, Revision 0
ON0443.113, Portable Diesel Driven Pump Annual Functional Test, Revisions 1 and 5
ON0443.114, 18 Month B.5.b Equipment Inventory Surveillance, Revision 10
OS1001.04, RCS Unidentified Leak Rate Action Level Exceedence, Revision 0
OS1007.01, Automatic and Manual Rod Control, Revision 12
OX1408.06, Controlled Leakage Monthly Surveillance, Revision 6
OX1416.06, Service Water Cooling Tower Pumps' Quarterly and 2 Year Comprehensive Test,
Revision 21
OX1423.07, Monthly Testing of Train A Enclosure Emergency Exhaust, Revision 8
OX1426.05, DG 1B Monthly Operability Surveillance, Revision 28
OX1426.19, Aligning DG 1B Controls for Auto Start, Revision 3
OX1456.46, Train B ESFAS Slave Relay K608 Quarterly Go Test, Revision 7

Condition Reports

1822620 1929096 1933872 1934512 1941467 1949526
1949825

Maintenance Orders/Work Orders

40149909 40178159 40235580 40244087 40245450 40259353
40264853 40246660 40246721 40246722 40287931 40290041
40290042

Miscellaneous

1-SW-OT-031 IST Pump Data Log
1-SW-OT-011 IST Pump Data Log
Activity 1-CP-CP-113-CRDM-1, CRDM Current Command Trace Acquisition, Revision 6
ASME OM CODE-2004
Calc 88-002, IST Calculation of Total Developed Head for Service Water and Cooling Tower
Pumps
Engineering Evaluation SS-EV-98006, Revision 1

Drawings

1-CS-B20725, Chemical & Volume Control Sys. Seal Water Detail, Revision 20
1-NHY-310932, Cntmnt Encl Emer Exh Fan 1-FN-4A Schematic Diagram, SH-BB3a, Revision 9
1-NHY-310932, Cntmnt Encl Emer Exh Fan 1-FN-4A Legend & SW Development, SH-BB3b,
Revision 10
1-NHY-503515, EAH – Contn. Encl. Emer Exh Fltr Fan Logic Diagram, Revision 7

Section 1EP4: Emergency Action Level and Emergency Plan Changes

Procedures

ER 3.3, Emergency Operations Facility Operations, Revision 51

Section 1EP6: Drill Evaluation

Procedures

EP-AA-101-1000, Nuclear Division Drill and Exercise Procedure, Revision 5
ER 1.1, Classification of Emergencies, Revision 52
ER 1.2, Emergency Action Plan Activation, Revision 61
ER 3.1, Technical Support Center Operations, Revision 53

Condition Reports

1948051 1910629

Miscellaneous

ER 2.0B, Seabrook Station State Notification Fact Sheet, Revision 31
Form EPDP-03A, EP Cornerstone Reporting and Information Form, Revision 23

Section 2RS1: Radiation Hazard Assessment and Exposure Control

Procedures

HD0958.04, Posting of Radiologically Controlled Areas, Revision 33
HD0958.03, Personnel Survey and Decontamination Techniques, Revision 24
HD0958.13, Generation and Control of Radiation Work Permits, Revision 39
HD095817, Performance of Routine Radiological Surveys, Revision 12
HD0958.19, Evaluation of Dosimetry Abnormalities, Revision 37
HD0958.38, Evaluation of Isotopic Mix, Revision 29
HN0958.25, High Radiation Area Control, Revision 37
HN0958.30, Inventory and Control of LHRA or VHRA Keys and Locksets, Revision 26
HX0958.23, Radioactive Source Control, Revision 20
RP-AA-100-1001, RP Conduct of Ops, Revision 3
RP-AA-100-1002, Radworker Instructions and Responsibilities, Revision 1
RP-AA-101, Personnel Monitoring Program, Revision 0
RP-AA-101-1001, Radiation Protection Conduct of Operations, Revision 3
RP-AA-101-1002, Dosimetry Data Processes for Sentinel Software, Revision 3
RP-AA-101-2004, Method for Monitoring and Assigning Effective Dose Equivalent for High Dose
Gradient Work, Revision 3
RP-AA-102-1001, Area Rad Surveys, Revision 0
RP-AA-102-1000, Alpha Monitoring, Revision 0
RP-AA-102-1002, Dosimetry Data Process for Sentinel, Revision 3
RP-AA-103-1001, Posting Requirements, Revision 1
RP-AA-103-1002, High Rad Controls, Revision 1
RP-AA-107-1003, Unconditional and Conditional Release of Material, Revision 1

Audits, Self-Assessments, and Surveillances

Seabrook Station Radiation Protection Department Self Evaluation and Trend Analysis
Report for 4th Quarter 2013, January 31, 2014

Quick Hit Assessment Report 1928716, NRC 71124.01 and .02 Radiological Hazard
Assessment and ALARA Planning and Control, February 3, 2014

Seabrook Nuclear Oversight Report SBK-14-001, Radiation Protection and Radwaste
Programs, February 24, 2014

Condition Report

01836289	01855852	01898310	01903346	01906680	01934952
01940807	01941338	01943228	01945353	01945687	

Miscellaneous

Seabrook Updated Final Safety Analysis Report

Seabrook Survey M-20140304-5, Initial Entry into Fuel Transfer Canal, March 4, 2014

Seabrook Survey M-20140122-3, HSYQ066A FSB-21-FB202 Quarterly, January 22, 2014

Seabrook Survey M-20140203-2, HSYQ-082B WPC-(-26)-MF-106 Quarterly, February 3, 2014

Seabrook Survey M-20130904-3, HSXQ-079A PAB-7-PB309 Quarterly, September 4, 2013

Seabrook Survey M-20131123-2, HSYQ-083A WPC-(-20)-MF102 Quarterly, November 23, 2013

Seabrook RWP 14-0015 High Integrity Container/Liner shipping Preparation to Include Capping,
Weighing and Transfer to WPB, January 1, 2014

Seabrook RWP 14-0022 Inspect CS Valves inside Letdown Valve Room at Power, January 15, 2014

Seabrook RWP 14-0027 PAB Demin Alley Work/Entry, December 31, 2013

Seabrook RWP 14-0058 FSB Transfer Canal RP Survey, Decon and Maintenance Support
Activities, March 2, 2014

Seabrook Non Exempt Source Inventory and Leak Test, September 14, 2013

Seabrook Exempt Source Index, July, 22, 2013

Seabrook Dosimetry Abnormality Occurrence Report CR 01904744, November 18, 2013

Seabrook Dosimetry Abnormality Occurrence Report CR 01906680, December 4, 2013

Seabrook 2014 Air Sample Log, March 7, 2014

Seabrook Lesson Plan HP1188C Alpha Monitoring Course, April 15, April 29 and May 13, 2013

Seabrook Log of VHRA and LHRA Access Points, March 5, 2014

Seabrook LHRA In Service Key Box Log, January 31, 2014

Seabrook LHRA/VHRA Key Issue Log, March 4, 2014

Seabrook HRA/LHRA Briefing Acknowledgement Form, March 5, 2014

Work Order

40235669

Section 2RS2: Occupational ALARA Planning and ControlsProcedures

RP-AA-104 ALARA Program, Revision 2

RP-AA-104-1000, ALARA Implementing Procedure, Revision 5

Audits, Self-Assessments, and Surveillances

Seabrook Station Radiation Protection Department Self Evaluation and Trend Analysis
Report for 4th Quarter 2013, January 31, 2014

Quick Hit Assessment Report 1928716, NRC 71124.01 and .02 Radiological Hazard
Assessment and ALARA Planning and Control, February 3, 2014

Seabrook Nuclear Oversight Report SBK-14-001, Radiation Protection and Radwaste
Programs, February 24, 2014

Corrective Action Document

01836312	01843713	01856278	01867573	01872019	01883752
01890162	01893578	01896323	01904259	01930630	01944341

Miscellaneous

EPRI Standard Radiation Monitoring Program Results through OR 15, September 25, 2012
 Seabrook Updated Final Safety Analysis Report
 Seabrook Post Outage Critique: ALARA and Station Dose Performance, June 2013
 Seabrook Station Nuclear Plant 5-Year ALARA Plan 2013-2017, July 31, 2013
 Seabrook ALARA Review Board Meeting 13-04, December 11, 2013
 Seabrook ALARA Review Board Meeting 14-01, March 3, 2014
 Seabrook Temporary Shielding Log for OR 16, March 2014
 Pre-Job ALARA Review Package: 13-01 Dry Fuel Transfer from Pool to Pad and Associated Tasks for 8 ISFSI Casks, June 27, 2013
 Post-Job ALARA Review: 13-01 Dry Fuel Transfer from Pool to Pad and Associated Tasks for 8 ISFSI Casks, December 4, 2013
 Pre-Job ALARA Review Package 14-01 OR 16 Reactor Dissassembly and Reassembly, December 26, 2013
 Pre-Job ALARA Review Package 14-02 OR 16 Steam Generator Eddy Current Testing and Tube Plugging, February 25, 2014
 Pre-Job ALARA Review Package 14-03 OR 16 In Service Inspection, February 25, 2014
 Pre-Job ALARA Review Package 14-07 OR 16 Fuel Handling Project, February 25, 2014
 Pre-Job ALARA Review Package 14-09 OR 16 RCP Seal Replacement, February 25, 2014
 Pre-Job ALARA Review Package 14-10 OR 16 Scaffolding, February 25, 2014
 Pre-Job ALARA Review Package 14-13 Replace Rx Ventillation Ducting Under Vessel with New Design, February 25, 2014
 Post Project Critique Dry Fuel Storage, Seabrook Station 2nd Loading Campaign, October 2013:

Section 40A1: Performance Indicator VerificationProcedures

NAP-206, NRC Performance Indicators, Revision 6

Miscellaneous

LIC-13017, Documentation Supporting the Seabrook Station NRC 1st Quarter 2013 Performance Indicator Submittal
 LIC-13036, Documentation Supporting the Seabrook Station NRC 2nd Quarter 2013 Performance Indicator Submittal
 LIC-13037, Documentation Supporting the Seabrook Station NRC 3rd Quarter 2013 Performance Indicator Submittal
 LIC-14004, Documentation Supporting the Seabrook Station NRC 4th Quarter 2013 Performance Indicator Submittal
 MSPI Derivation Reports

Section 40A2: Problem Identification and ResolutionNon-Destructive Test Reports

40265240-01, UT Extent of Condition Thickness Examination, B Train
 40265234-01, UT Extent of Condition Thickness Examination, A Train

Condition Reports

01897164 01637922

Maintenance Orders/Work Orders

40265234 40268662 40268965 40268967 94080896 94080893

Drawings

1-SW-B20794, Service Water System Nuclear Detail (Service Water Pump House)
 1-SW-B20795, Service Water System Nuclear Detail (Turbine Bldg., Aux Bldg.)
 SK-EC270504-2000, Installation Detail Service Water Piping Repairs
 SK-EC156603-2001, Installation Detail of Weldolet Service Water Pipe Repair
 SW 1802-09-EC 2080429, SW Piping Repair (Flush Patch) Line No 1-SW-1802-004

Section 40A3: Follow-up of Events and Notices of Enforcement DiscretionProcedures

MA-AA-100-1011, Equipment Troubleshooting, Revision 0
 OS1235.03, SG Level Instrument Failure, Revision 14

Condition Reports

1948268 1952067

Maintenance Orders/Work Orders

40300038

Miscellaneous

Instrument Loop Diagram ILD-1-FW-L04220, Steam Generator RC-E-11B Feedwater Bypass
 Flow (Loop 2) 1-FW-L-4220, Revision 14
 Operational Decision Making Bulletin, dated 3/18/2014

Section 40A5: Other ActivitiesProcedures

ER-AA-102 Underground Piping and Tank Integrity Program, Revision 6
 ER-AA-102-1000 Underground Piping and Tanks Integrity Examination Procedure, Revision 2
 Seabrook Station Underground Piping and Tanks Inspection Program, Revision 2
 SH 6.4 Dig Safe (01/06/12) Excavation of Site Locations Penetrating Plane of Ground,
 Revision 13

Miscellaneous

AR 00213052-01-00, Complete Initiative Action 1 Status Complete
 AR 00213052-02-00, Complete Initiative Action 2 Risk Ranking Buried Piping
 AR 00213052-03-00, Complete Initiative Action 3 Develop Inspection Plan by 06/30/11
 AR 00213052-04-00, Complete Initiative Action 4 Implement Inspection Plan 06/30/12
 AR00213052-05-00, Develop Asset Management Plan Status Complete 01/26/10
 AR00213052-06-00, Inspect Buried Piping Containing radioactive material 09/16/10
 AR00213052-07-00, Underground Piping and Tanks Procedure Oversight 12/22/11
 AR00213052-08-00, Prioritize Underground Piping and Tanks 06/27/12
 AR 01600464 (12/09/10) Aux Steam and Aux Steam Condensate Leak w/i guard pipe
 NRC Temporary Instruction 2515/182, Issue 11/17/11 and 8/8/13; Review of the Implementation
 of the Industry Initiative to Control Degradation of Underground Piping and Tanks
 NEI 09-14 Initial Issue, November 2009 Guideline for the Management of Underground Piping
 and Tank Integrity
 NEI 09-14 Guideline for the Management of Underground Piping and Tank Integrity, Revision 1,
 December 2010

NEI 09-14 Guideline for the Management of Underground Piping and Tank Integrity Inspection
and Analysis Methodologies, Revision 3

LIST OF ACRONYMS

ADAMS	Agencywide Document Access and Management System
ALARA	as low as reasonably achievable
CAP	corrective action program
CFR	<i>Code of Federal Regulations</i>
CSSI	containment spray safety injection
EAL	emergency action level
EDG	emergency diesel generator
EFW	emergency feedwater
EPD	electronic personal dosimeter
ESFAS	engineered safety features actuation system
HRA	high radiation area
IMC	Inspection Manual Chapter
LHRA	locked high radiation area
MR	Maintenance Rule
NCV	non-cited violation
NEI	Nuclear Energy Institute
NRC	Nuclear Regulatory Commission
OOS	out of service
PAB	primary auxiliary building
RCS	reactor coolant system
RG	Regulatory Guide
RHR	residual heat removal
RPM	Radiation Protection Manager
RWP	radiation work permit
SDP	significance determination process
SEPS	supplemental emergency power system
SSC	structure, system, or component
SW	service water
TI	temporary instruction
TS	technical specification
UFSAR	Updated Final Safety Analysis Report
VAC	volts alternating current
VHRA	very high radiation area
WO	work order