



June 6, 2016  
Docket No. 50-443  
SBK-L-16076

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

Seabrook Station  
Reply to a Notice of Violation; EA-16-101

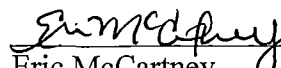
Reference: Seabrook Station, Inspection Report 05000443/2016008 Related to Alkali-Silica Reaction Affects on Safety-Related Concrete Structures and Notice of Violation

NextEra Energy Seabrook, LLC (NextEra Energy Seabrook), has reviewed the subject Notice of Violation and files the attached Reply to Notice of Violation EA-16-101 pursuant to 10 CFR 2.201.

If there are any questions regarding this letter, please contact Mr. Michael Ossing, Licensing Manager, at (603) 773-7512.

Sincerely,

NextEra Energy Seabrook, LLC

  
Eric McCartney  
Site Vice President

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

**Attachment 1 to SBK-L-16076**

Statement of Violation:

During an NRC inspection conducted between February 1 and March 24, 2016, a violation of NRC's requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures or drawings, of a type appropriate to the circumstances, and shall be accomplished in accordance with these instructions, procedures or drawings.

NextEra Nuclear Fleet Administrative Procedure, EN-AA-203-1001, "Operability Determinations/Functionality Assessments," identifies the responsibilities and requirements for preparation and approval of Immediate Operability Determinations (IOD) and Prompt Operability Determinations (POD) for establishing the acceptability of continued operation of a plant structure, system, or component that is suspected to be degraded or nonconforming. Per Section 2.0, Terms and Definitions, IODs are performed by the Shift Manager without delay (within 8 hours of discovery), using best available information to make an operability declaration. Upon request of the Shift Manager, a POD is performed as a follow-up to an IOD when additional information is needed to confirm the declaration of operability.

Contrary to the above, on two occasions between March 17, 2015, and January 22, 2016, NextEra Energy Seabrook, LLC (NextEra) did not accomplish an activity affecting quality in accordance with its procedure. Specifically, NextEra received information from vendors identifying non-conforming conditions adversely impacting two reinforced concrete structures at Seabrook Station, and did not complete an appropriate IOD or initiate a follow-up POD to evaluate the impact of that non-conforming condition on structural performance. In particular,

- 1) On March 17, 2015, NextEra entered a WJE report, entitled "Condition Assessment of the Cracking in the RHR and CS Equipment Vault," into the station document tracking system and added the report's recommendations into the Corrective Action Program under Action Report (AR) 01977456, without completing an appropriate IOD or initiating a POD. The report identified structural loading (a load not considered by ACI 318-71, the design and construction code of record) due to ASR as the cause for the excessive bulk expansion and cracking of the RHR/CS Vault interior and exterior support walls, and
- 2) On December 2, 2015, NextEra initiated AR 02094762 to track recommendations from SG&H report entitled "Evaluation and Design Confirmation of As-Deformed CEB," without completing an appropriate IOD or initiating a POD. The report also identified structural loading due to ASR as the cause for deformation of the Containment Enclosure Building (CEB), a condition not conforming with ACI 318-71.

This violation is associated with a Green Significance Determination Process finding.

NextEra Energy Seabrook's Reply to the Notice of Violation

I. Reason for Violation

The reason for the violation is that the reviewer of the vendor reports did not follow the requirements of EN-AA-203-1001, Operability Determinations / Functionality Assessments. The cause for the violation was determined to be an over-reliance on the site's subject matter expert for both technical and oversight roles. The subject matter expert was focused more on the potential impact on the structures, versus comprehensively documenting and dispositioning newly identified potential non-conforming conditions.

II. Corrective Steps Taken and Results Achieved

- On February 12, 2016, a Prompt Operability Determination for RHR Equipment Vault concrete cracking addressing the information contained in WJE report entitled "Condition Assessment of the Cracking in the RHR and CS Equipment Vault," was approved. (AR 1977456)
- On February 19, 2016, a Prompt Operability Determination for Containment Enclosure Building deformation was approved. (AR 2094762)
- Established the expectation via a read and sign that a cross-discipline team will be utilized to review new vendor documentation for ASR and building deformation issues.

III. Corrective Steps That Will be Taken including a comprehensive and integrated ASR corrective action plan for resolving ASR induced non-conformances with the current licensing basis and the date when the structures monitoring program will be revised to monitor the progression of ASR degradation related to bulk expansion and deformation:

1. Reinforce the lessons learned from this event and the requirements of EN-AA-203-1001, including entry requirements and the need for timely and comprehensive IODs and PODs, with Design Engineering.
2. Revise the Building Structures Monitoring Program to capture the use of the cross-discipline team to review new vendor documentation for ASR and building deformation issues.
3. A comprehensive and integrated ASR corrective action plan for resolving ASR-induced non-conformances with the current licensing basis has been developed and is provided in Attachment 2.
4. The date the structures monitoring program will be revised to monitor the progression of ASR degradation related to bulk expansion and deformation is provided in Attachment 2.

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Attachment 1

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IV. Date When Full Compliance Will Be Achieved

Full compliance for the cited violation was achieved on February 19, 2016 when the second POD discussed in the notice of violation was approved by the Shift Manager. The schedule for the additional comprehensive corrective actions required by the NRC's notice of violation is provided in Attachment 2.

**Attachment 2 to SBK-L-16076**

A comprehensive and integrated ASR corrective action plan for resolving ASR induced non-conformances with the current licensing basis and the date when the structures monitoring program will be revised to monitor the progression of ASR degradation related to bulk expansion and deformation:

1. Submit a License Amendment Request to reconcile current licensing basis to address ASR impacts on structures inclusive of a methodology change for evaluating structural deformation of Seismic Category 1 structures. Due Date: July 31, 2016
2. Revise ASR Structures Monitoring Program to include ASR induced deformation effects monitoring and methodology. Due Date: August 19, 2016
3. Conduct Core Bore Sampling and Installation of extensometers to monitor out of plane expansion in various plant locations to be representative of plant structures' conditions and to allow monitoring of levels of ASR. Due Date: December 31, 2016
4. Perform Susceptibility Evaluations on all Seismic Category 1 structures in a risk ranked progression order. Due Date: June 30, 2017
5. Complete Final Detailed Analysis Calculations of record for all Required Structures for ACI Code 318-71 Compliance. Due Date: July 31, 2017