

**Heater, Keith**

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**From:** Gray, Mel  
**Sent:** Wednesday, July 30, 2014 4:58 PM  
**To:** Heater, Keith  
**Subject:** FW: Email Regarding NRC Inspection Report 05000443/2011-007

Keith,

Please use this email to close EDATS R1-2014-0216. Also please place in ADAMS public. Please remove her email address from each location. Thanks.

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**From:** Gray, Mel  
**Sent:** Wednesday, July 30, 2014 4:56 PM  
**To:** Debbie Grinnell <[REDACTED]> ([REDACTED])  
**Subject:** RE: Email Regarding NRC Inspection Report 05000443/2011-007

Debbie, I retyped the address. Hopefully this email reaches you. Mel Gray

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**From:** Gray, Mel  
**Sent:** Wednesday, July 30, 2014 4:53 PM  
**To:** 'mailto:[REDACTED]'  
**Cc:** Michael Modes; William Cook ([REDACTED]); Dentel, Glenn; Sheehan, Neil; Screnci, Diane ([REDACTED])  
**Subject:** Email Regarding NRC Inspection Report 05000443/2011-007

Debbie,

I am responding to your email below rather than the recipient, Angie Bufford of our NRC Division of License Renewal. The reason being is your email is in reference to NRC Inspection Report 05000443/2011007, dated May 23, 2011 (ADAMS ML111360432). This is a document issued from the NRC Region I Office. This inspection report documents NRC review of NextEra's scoping of non-safety related structures, systems and components and aging management programs related to NextEra's license renewal application for the Seabrook Station.

Page 16 of this report discusses inspector conclusions related to work order#0844358. NRC inspectors concluded this document incorrectly compared the testing of anchors submerged in raw water in a manhole with the anchors supporting the RHR piping inserted into a calcium carbonate degraded wall and concluded, based on the submerged bolting, that the bolting in the RHR anchors were acceptable. The inspectors further noted this comparison did not take into account the additional concern of a "recently discovered alkaline silica degradation" associated with the calcium carbonate degraded wall and that the issue of anchor bolting integrity was not revisited subsequent to the discovery of ASR.

Your email inquired as follows:

"My question to you is from ML111360432. It is in reference to (AR 01633206) where the testing of anchors in raw water with the anchors supporting the RHR piping inserted into the carbonated degraded wall and concluded based on submerged bolting that the bolting in the RHR were acceptable. This was not revisited after ASR concrete degradation was discovered. Has it? WO0844358 was translated into Condition report 08-15902. The implications of NRC Bulletin 70-02 anchor bolt integrity program were not considered. We want to know if this has been done correctly and when."

NRC Response:

- AR 01633206 was the revised analysis that corrected the initial error of drawing a conclusion about bolts in calcified concrete from the degradation of bolts in raw water.

- WO 0844358 translation into CR 08-15902 preceded AR 01633206 and was part of Seabrook staff's initial error in closing the issue. The WO and CR preceded the identification of ASR. Therefore ASR was not considered.
- NRC Bulletin 79-02 is referenced in our inspection report. This document was not initially considered but, became part of the revised analysis. Except for the effect of ASR the analysis was correctly implemented in the AR.
- Regarding ASR, our inspection report cover letter and "Overall Findings" section state: "Except for the alkali-silica reaction issue, the inspection results support a conclusion of reasonable assurance with respect to managing the effects of aging in the systems, structures, and components identified in the application." Review of ASR and managing the aging effect on concrete, including anchor performance, remains an open item in our review of the Seabrook license renewal application. NRC Safety Evaluation Report with Open Items (ML12160A374) includes NRC Open Item 3.0.3.2.18-1, which concerns the enhancement to the Seabrook Structures Monitoring aging management program to manage the effects of ASR.
- Since issuance of the referenced NRC inspection report in May 2011, NRC inspectors have reviewed NextEra's evaluations and conclusions that that ASR-affected structures at Seabrook Station remain capable of performing their intended safety functions regarding anchorage capacity. We have determined these evaluations to be adequate and the conclusions supported (ADAMS ML12338A283, Section 3.2.6 for anchors) Inspectors have also reviewed NextEra's plans to address this non-conforming condition involving anchorage and found them to be adequate (ADAMS ML13221A172, Section 8.0).

Sincerely,

Mel Gray  
Chief, Engineering Branch 1

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**From:** Debbie Grinnell [mailto: [REDACTED]]  
**Sent:** Wednesday, June 25, 2014 9:33 AM  
**To:** Buford, Angela  
**Subject:** Re: Question

Hi Angie,

It was a pleasure to meet you.

Yes. My original question is evident in your email exchange with me.

From my email sent to you on April 24th 2014.

"My question to you is from ML111360432. It is in reference to (AR 01633206) where the testing of anchors in raw water with the anchors supporting the RHR piping inserted into the carbonated degraded wall and concluded based on submerged bolting that the bolting in the RHR were acceptable. This was not revisited after ASR concrete degradation was discovered. Has it? WO0844358 was translated into Condition report 08-15902. The implications of NRC Bulletin 70-02 anchor bolt integrity program were not considered. We want to know if this has been done correctly and when"

It has been two month and should be a yes or no easy question for SAITT to answer.

My Best,

Debbie