



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

April 17, 2012

Mr. Paul Freeman
Site Vice President, North Region
Seabrook Nuclear Power Plant
NextEra Energy Seabrook, LLC
c/o Mr. Michael O'Keefe
P.O. Box 300
Seabrook, NH 03874

SUBJECT: SEABROOK STATION, UNIT 1 - INFORMATION REQUEST IN SUPPORT OF
THE APRIL 23, 2012, PUBLIC MEETING RELATED TO ALKALI-SILICA
REACTION CONCRETE DEGRADATION ISSUES

Dear Mr. Freeman:

On March 23, 2012, the U.S. Nuclear Regulatory Commission (NRC) staff issued a public meeting notice (Agencywide Documents Access and Management System (ADAMS) Accession No. ML120870217) to discuss NextEra Energy Seabrook, LLC's (NextEra's) plans and schedule regarding concrete degradation caused by alkali silica reaction (ASR) at Seabrook Station, Unit 1 (Seabrook).

By letter dated March 26, 2012 (ADAMS Accession No. ML120480066), NRC issued Inspection Report 05000443/2011010 related to the ASR issue in safety-related structures. The inspectors concluded that these structures can currently perform their safety-related functions despite the observed degradation due to ASR. However, the NRC indicated in the inspection report that it still has concerns associated with the long-term operability; therefore, additional information was requested in the inspection report. Enclosed are questions that the NRC staff requests that NextEra address during the upcoming meeting on April 23, 2012, at NRC Headquarters in Rockville, Maryland.

P. Freeman

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If you have any questions, please contact John G. Lamb at (301) 415-3100 or e-mail John.Lamb@nrc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Meena Khanna', with a wavy, cursive style.

Meena Khanna, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-443

Enclosure:
As stated

cc w/encl: Distribution via Listserv

Questions for Seabrook ASR Public Meeting on April 23, 2012

1. What buildings are affected by alkali silica reaction (ASR)? How do you plan to confirm ASR and what is your supporting basis?
2. When do you plan to update the operability determinations for all buildings affected by ASR and what key information do you plan to incorporate into them including key assumptions, bases for inputs, including material properties, and calculation methods used?
3. If you continue to use the empirical relationships in the American Concrete Institute (ACI) design basis code for operability determinations, what is the basis for use of those relationships, and what is the explanation regarding why these are appropriate for the degraded conditions in the building?
4. What are your ongoing or planned methods, analysis or testing that will be used to monitor/manage ASR affected structures? What is your knowledge of the ASR reaction rate, possible end point, and how it affects operability?
5. When will you submit to the NRC staff your Corrective Action Plan to address this issue?
6. When will you provide the technical details for the larger-scale testing planned at the contracted research and development facility?
7. When do you plan to complete the identification of all of the long-term aging effects of ASR on the affected structures?
8. When do you plan to submit an aging management program for the ASR-affected structures?

P. Freeman

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If you have any questions, please contact John G. Lamb at (301) 415-3100 or e-mail John.Lamb@nrc.gov.

Sincerely,

/ra/

Meena Khanna, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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*via email

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