



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
475 Allendale Road
King of Prussia, PA 19405

May **XX**, 2011

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MEMORANDUM TO: John Jolicoeur, Deputy Director
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Peter Wilson, Deputy Director /RA/
Division of Reactor Safety

SUBJECT: REQUEST FOR TECHNICAL ASSISTANCE
SEABROOK STATION ALKALI-SILICA REACTION

Region I requests technical assistance from the Office of Nuclear Reactor Regulation (NRR) to determine how the newly discovered aging affect of alkali-silica reaction, for safety related concrete structures at Seabrook Station, should be treated in the context of the current design basis.

Background

As a result of their assessment to support renewal of their license per Part 54, NextEra analyzed concrete core samples from exterior walls of the Control Building. In August 2010 the tests resulted in a report of a change in material properties. The analysis revealed moderate-to-severe alkali-silica-reaction (ASR), in chronically wetted areas of the foundation, with reductions reported in the concrete compressive strength and modulus of elasticity. These reductions demonstrated the possibility that the Control Building may not have met its design basis function, and therefore, required further evaluation. The Control Building was subsequently found to be within the design limits defined by the current licensing basis (with reduced margins). The licensee continues to evaluate the extent of this condition.

Licensee Position

Recommended Actions

CONTACT: Michael Modes, DRS
(610)337-5198

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Summary

Region I requests NRR to address the following:

- 1.

Coordination

This request was discussed between Richard Conte (RI/DRS/EB1) and Meena Khanna (NRR/DE/EMCB) during a various conference calls on the subject of ASR at Seabrook. The TIA was accepted with an agreed upon response date within **XX** days after receipt. The Region also understands that final response to this TIA will be made public.

References

<http://portal.nrc.gov/edo/ri/EB1/Shared%20Documents/Forms/AllItems.aspx>

Docket No. 50-443

SUNSI Review Completed: ADAMS: Yes No Initials: T=Telephone E=E-mail F=Fax

DOCUMENT NAME: ~~G:\DRS\DRS\Work in Progress\Memo-012011-Palisades-BMV-HD~~
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