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Murphy, Martin

From: Thomas, George *mtc*
Sent: Friday, October 14, 2011 1:58 PM
To: Modes, Michael
Cc: Murphy, Martin; Conte, Richard
Subject: Followon Information Request for TIA Reg Seabrook ASR
Attachments: Information Request ASR 10-14-11.docx

Michael,

As a follow-on from the inspection during the week of 9/26, please have the Seabrook licensee provide the information requested in the attached.

George Thomas
NRR/DE/EMCB
301-415-6181

Information Request for TIA related to Seabrook ASR Degradation of Control Building "B"
Electrical Tunnel Concrete

1. Please provide the following documents referenced in EDS 36180, Revision 01, "Structural Monitoring Program":
 - a) EC 145305
 - b) AR 574120
 - c) AR 581434
 - d) EC 250348
 - e) AR 587429
 - f) AR 587432
2. Please provide values of cracking index (in mm/m) from the crack measurements made thus far on the ASR affected Electrical B-Tunnel. Also provide values of damage rating index determined from petrographic examination of core samples from the tunnel thus far.
3. The NRC staff understands that the licensee has been taking and testing core samples from the interior of the ASR-affected structures. Please explain how Seabrook plans to assess the degradation effects on the exterior of the affected structures in contact with the soil and ground water, which may likely be more severe if the source of moisture is water infiltration from the outside?
4. Is Seabrook planning to also measure values of Poisson's ratio of ASR-affected concrete from core samples to enable characterization of the affected concrete using a complete set of measured mechanical properties (namely, elastic modulus, poisson ratio, compressive strength and tensile strength) typically used in analysis and design of concrete structures. Please explain if not.