



C-10 Envisions A Clean, Safe,  
Sustainable Energy Future

REC-10321-14M0703

March 10<sup>th</sup> 2014

William M. Dean  
Regional Administrator Region I  
US Nuclear Regulatory Commission  
2100 Renaissance Blvd., Suite 100  
King of Prussia, PA 19406-2713

Dear Mr. Dean,

C-10 Foundation requests the NRC clarify their position on comments made by NextEra's Seabrook ASR Project Manager, Mr. Noble, at the NRC Public Meeting held on December 18<sup>th</sup> 2013 in Hampton, New Hampshire.

Mr. Noble stated at the NRC public meeting his intention to clarify NextEra's position on three areas of repeated public concern at the December 18<sup>th</sup> 2013 public meeting. After his comments, the SAITT members or NRC officials present did not offer any comment or state the NRC position on the three statements presented below by Mr. Noble to clarify the facts concerning the public's questions on the ASR concrete degradation occurring at Seabrook. We fully appreciate that Mel Gray is new to SAITT and was not in a position to challenge the statements made, but James Trapp, William Cook, Michael Marshall and David Lew, your deputy, were obligated to clarify misinformation.

C-10 Foundation determined there were inaccuracies in Mr. Noble's statements. As we had numerous requests from the public to confirm their accuracy, we requested our expert, Dr. Brown to comment on Mr. Noble's statements. We have worked with SAITT, shared our expert's commentaries and have found SAITT in agreement with many of Dr Brown's comments concerning the assumptions asserted by NextEra in your investigation. We are requesting, in writing, the NRC response to Mr. Noble's statements at the NRC public meeting on December 18<sup>th</sup>, 2013.

No doubt, when the NRC is holding a public informational meeting to report on an unresolved safety item and the progress of the NRC Seabrook's ASR extent of condition investigation, your committee would assure the information presented to the public reflect scientific accuracy and your position clearly. Under each question below presented by NextEra's Mr. Noble, we have provided our paraphrase of Mr. Noble's statements, Dr. Paul Brown's comments, and our request for the NRC position on NextEra's scientific basis.

The three questions posed by Mr. Noble at the NRC public meeting to clarify the facts concerning them were as follows:

- 1) **Why was NextEra not using Unit 2 for replica testing to pursue destructive testing to determine the extent of ASR?** Mr. Noble stated that there were "practical and technical reasons" why it was not as suitable as people think. He did not state the list of "practical and technical reasons" other than one. His example was that it is difficult to take sections without losing "core testing" since you are extracting samples from a larger piece. They found that areas of ASR are fairly localized, so taking core samples only tests one point in the concrete. According to our expert, Dr. Paul Brown, finding localized ASR actually makes the unit more suitable for evaluating ASR because its progression can be monitored. This would then provide far more reasonable basis for predicting its progression, than is the use of model concrete.  
**C-10 requests** that you clarify what NextEra's "practical and technical reasons" are specifically and what your position is concerning each? What is the NRC position on requiring the industry to utilize Unit 2 to do non-destructive testing and destructive ASR testing?

- 2) **Why aren't there more "core tests" done on the actual concrete at Seabrook?** Mr. Noble stated that that ASR is fairly localized so cores only test a particular spot. He also stated that removing cores from the bulk structure loses the structural context of the core. According to Dr. Brown, Mr. Noble's statement is false. The use of cores is the generally accepted method for establishing the loss of comprehensive strength as well as the loss of tensile strength. Taking cores at various locations over time also allows an assessment of the progression of ASR. Taking cores also provides samples for petrographic analysis. To avoid taking cores begs the question. Why?

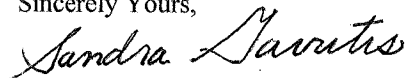
**C-10 request** the NRC position on the basis of Mr. Noble's conclusion and what the NRC position on the NRC requirement to establish the criteria for: sampling size, locations of core testing, and the list of material properties to be tested and provide them publically.

- 3) **What is the extent of the impact of groundwater intrusion on the ASR concrete?** Mr. Noble stated the presence of the salt marsh did not impact the reactor as it was built on bedrock and the regions below grade are in excavated bedrock. So the water seeping into the structures is fresh water. While it is true they found salt in one of the well samples, they believe that it is due to chloride from de-icing salts, not from the marsh. Dr. Brown has repeatedly stated that deicing salt is commonly calcium chloride, not sodium chloride, so it is unlikely to be the source of sodium. According to Dr Brown, if there are evaporative fronts that allow water to migrate through the concrete by capillary suction, then salt water exposure is highly material. **C-10 requests** the NRC position on Mr. Noble's statement.

C-10 has reviewed NextEra's environmental consultant, Radiation Safety and Control Service's report TSD # 09-019 and stated ( on page 7) they conclude the plant "would be subject to salt-water intrusion under pumping conditions because of their proximity to salt water bodies". They also stated that in their assessment the salt water in the well nearest Unit 2 and closest to the marsh is attributed to marsh salt water being drawn up due to the aggressive dewatering program at the facility to keep the tritium plume on-site from a spent fuel pool leak first discovered in 1999 and not repaired until 2004 from mitigating off -site. The most pressing public "groundwater infiltration" concern is secondary to the NRC determinations as early as 2008 that Seabrook's groundwater infiltration had become "aggressive " with test results demonstrating increases in levels for chlorides, sulfur and changes in the PH. To our knowledge, SAITT has recently required groundwater testing as a result. **C-10 requests** that you provide the date when Seabrook's groundwater monitoring was initiated, the test results and all documentation made public.

Thank you. We appreciate your time and attention to our request.

Sincerely Yours,



Sandra Gavutis  
Executive Director  
C-10 Research and Education Foundation  
44 Merrimac St.  
Newburyport, Ma. 01950

cc. Mel Gray, Chief, Engineering Branch I, DRS, RI  
James Trapp, Deputy Director, Division of Reactor Safety (DRS),RI  
William Cook, Senior Reactor Analyst, RI  
David Lew, Deputy Regional Administrator, Region 1  
Michael Marshall, Division of License Renewal, NRR



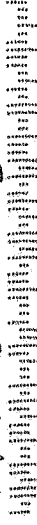
44 Merrimac Street  
Newburyport, MA 01950

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William W. Dean  
Regional Administrator Region 1  
U.S. Nuclear Regulatory Commission  
2100 Renaissance Blvd. Suite 100  
King of Prussia, PA.

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