



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

August 5, 2015

Mr. Barry Connell  
City Council, Newburyport City Hall  
60 Pleasant Street  
P.O. Box 550  
Newburyport, MA 01950

Dear Mr. Connell:

I am responding to your letter of June 26, 2015, to Nuclear Regulatory Commission (NRC) Chairman Stephen Burns. In that letter, you requested the agency to stop the review of the license renewal application submitted by NextEra Energy Seabrook, LLC (NextEra) on June 1, 2010, and initiate proceedings to revoke the Seabrook Station license. Specifically, you raised concerns about Seabrook Station's continued operation:

- (1) The NRC's consideration of relicensing of Seabrook Station more than 20 years before its current license is set to expire;
- (2) The NRC's ability to continue to assure Seabrook Station's safe operation during the period of extended operation (20 year renewal of the operating license);
- (3) The NRC's required monitoring of NextEra and of NextEra's reporting about the continued deterioration of the Seabrook Station concrete in a salt-marsh environment;
- (4) The safety of operating Seabrook Station in a densely populated region with a limited road network; and
- (5) The reduction of excess generating capacity in New England that could lead to a somewhat fragile power supply and the stimulation of additional development of alternate generating technologies.

The NRC takes its mission of ensuring public health and safety seriously. Consistent with the NRC's mission, as established by the Atomic Energy Act and the Energy Reorganization Act, the NRC inspects Seabrook Station's daily operations to ensure that NextEra continues to operate the plant safely and in accordance with NRC requirements. The NRC has resident inspectors stationed at Seabrook Station who perform these daily inspections as a part of the NRC's oversight process. This ongoing oversight and inspection process looks at NextEra's compliance with the NRC's regulations in a number of areas, including plant safety, radiation protection for both members of the public and plant workers, and emergency preparedness. The NRC staff also evaluates any new information (from plant operating experience) to determine whether changes are needed at Seabrook Station. The NRC has full authority to take appropriate action, as necessary, to protect public health and safety, including modifying, suspending, or revoking the license.

Regarding your statement that the NRC is reviewing the Seabrook Station license renewal application more than 20 years before its current license expires, NextEra submitted its

license renewal application on June 1, 2010, consistent with Title 10 of the *Code of Federal Regulations* (10 CFR) 54.17(c), which states that “[a]n application for a renewed license may not be submitted to the Commission earlier than 20 years before the expiration of the operating license or combined license currently in effect.” Seabrook Station’s current license expires on March 15, 2030. A major consideration in 10 CFR 54.17(c) for an applicant to seek license renewal in advance of the expiration date of its current license is that it can take several years — as much as 10 or more — to plan, design, and construct major new generating facilities. Such long lead times are normally required by energy-planning decision makers (e.g., the State or the power plant owner) regarding whether Seabrook Station will continue to operate beyond the current license period.

The NRC’s license renewal rule, 10 CFR Part 54, “Requirements for Renewal of Operating Licenses for Nuclear Power Plants,” was designed to ensure that the license renewal review could establish reasonable assurance of public health and safety during the period of extended operation. The 10 CFR Part 54 rulemaking was comprehensive, involving extensive supporting safety research and public comments. The safety research resulted in the NRC’s “Generic Aging Lessons Learned (GALL) Report (NUREG-1801),” which forms the technical basis for the NRC staff review of a licensee’s programs to ensure adequate material aging management of plant structures and components. Note that the GALL report is widely regarded for material aging management by the international nuclear community. For Seabrook Station, more than six thousand structure and component line items are being reviewed by the staff and documented in the NRC safety evaluation report (SER) for adequate material aging management to ensure the performance of the safety function of the structures and components during the period of extended operation.

With respect to concrete degradation in a salt-marsh environment and concrete degradation (alkali-silica degradation) reported by NextEra, the NRC addresses these areas of plant performance as a part of the ongoing inspection and oversight of Seabrook Station. This level of inspection and oversight would continue through the period of extended operation, if granted. In addition, adequate aging management of concrete structures, which is within the scope of the license renewal safety review (i.e., to serve an intended safety function as specified in 10 CFR 54.4, “Scope”), is addressed in the SER for Seabrook Station. This review continues and may result in additional aging management measures as necessary (e.g., enhanced surveillance, monitoring, and trending, as appropriate). The SER status is provided at: <http://www.nrc.gov/reactors/operating/licensing/renewal/applications/seabrook.html>.

With regard to your concern about the operation of Seabrook Station in a densely populated region with a limited road network, it is important to recognize the substantial effort by many parties in assuring an appropriate emergency plan exists and can be implemented. Over the years, the combined efforts of the Federal Emergency Management Agency (FEMA), NextEra, the States of Massachusetts, New Hampshire, and Maine, as well as volunteers and local first responders (e.g., police, firefighters, and medical response personnel), have produced detailed emergency preparedness programs that ensure the adequate protection of the public in the event of a radiological event at Seabrook Station. FEMA evaluates and approves the plans for the State and local responders, while NRC reviews and inspects the Seabrook Station emergency preparedness program. Emergency plans are dynamic and are routinely reviewed and updated to reflect an ever changing environment. NRC requirements for emergency preparedness planning are in the regulations at 10 CFR 50.47, “Emergency plans,” and Appendix E to 10 CFR Part 50, “Domestic Licensing of Production and Utilization Facilities.”

Through NRC standard inspections and required exercises, the NRC staff reviews emergency preparedness throughout the life of Seabrook Station, keeping up with changing demographics and other site-related factors, and takes appropriate measures to ensure adequate protection of members of the public and workers. The most recent emergency drill for Seabrook Station occurred on April 17, 2012. The results of the drill were published by FEMA in the Seabrook Station After Action Report/Improvement Plan. These results are publicly available at: <http://www.nrc.gov/about-nrc/emerg-preparedness/related-information/fema-after-action-reports.html>.

Regarding reduction of excess generating capacity in New England and stimulation of additional development of alternate generation technologies, the NRC has long held the position that it does not address generating capacity or utility economics in its license renewal reviews. These matters are under the regulatory jurisdiction of the States (or other appropriate energy planning or policy agencies, such as Federal Energy Regulatory Commission) and are not necessary parts of the NRC's mission to protect public health and safety regarding safe nuclear operation or the use of nuclear materials.

I hope that this letter has been responsive to your concerns. Please contact me at (301) 415-1183 or [chris.miller@nrc.gov](mailto:chris.miller@nrc.gov) if you have any further questions.

Sincerely,

*/RA/*

Christopher G. Miller, Director  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket No. 50-443

cc: Listserv

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Sincerely,

/RA/

Christopher G. Miller, Director  
Division of License Renewal  
Office of Nuclear Reactor Regulation

Docket No. 50-443

cc: Listserv

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Letter to B. Connell from C. Miller dated August 05, 2015

SUBJECT: RESPONSE TO BARRY CONNELL CONCERNING SEABROOK STATION

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