

August 5, 2016

The Honorable Kathleen O'Connor Ives
Commonwealth of Massachusetts
State House, Room 215
Boston, MA 02133-1053

Dear Senator O'Connor Ives:

On behalf of the Nuclear Regulatory Commission (NRC), I am responding to your letter of May 10, 2016, regarding Seabrook Power Station, which is operated by NextEra Energy Seabrook, LLC (NextEra). In your letter, you and three other members of the Massachusetts State Legislature urge the NRC to withdraw the operating license for Seabrook due to concerns regarding the capability to evacuate the 10-mile emergency planning zone (EPZ), and concrete degradation due to an alkali-silica reaction (ASR).

For the reasons stated below, based on NRC inspection and oversight, the NRC continues to conclude that Seabrook is operating safely and does not pose undue risk to public health and safety. Thus, the NRC does not have a safety or legal basis to modify, revoke, or suspend the operating license for Seabrook.

There are predetermined protective action plans in place for each U.S. nuclear power plant's EPZ. These plans are designed to avoid or reduce doses to the public from potential exposure to radioactive materials. The NRC works in partnership with the Federal Emergency Management Agency (FEMA) to ensure the adequacy of onsite and offsite emergency plans and preparedness. FEMA has the responsibility for assessing offsite emergency preparedness, including coordination and implementation of radiological protection guidelines. The NRC has responsibility for assessing onsite emergency planning and preparedness. The NRC relies on FEMA to provide a reasonable assurance finding on the adequacy of offsite emergency response programs, including the means for evacuation of the public. The NRC requires plant operators, as a condition of their license, to develop and maintain emergency preparedness plans. Ultimately, the NRC has the overall responsibility for determining that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency at an NRC-licensed facility.

Each nuclear power plant's 10-mile EPZ is based on consequence analyses of various reactor accidents, including its design-basis accidents, and protective action guidelines issued by the U.S. Environmental Protection Agency. Based on the NRC analyses, studies, and independent evaluations, as well as the numerous exercises and drills of offsite and onsite emergency plans and preparedness that have been conducted at every nuclear power plant site over the past few decades, the NRC believes the 10-mile EPZ provides reasonable assurance that adequate protective actions can and will be taken in the event of an emergency. In addition, our regulations require that measures be established to prevent, within a 50 mile radius, ingestion of radioactive material in potentially contaminated water or foodstuffs in the event of an accident.

The Commonwealth of Massachusetts and the State of New Hampshire have the overall authority for making protective action decisions (sheltering, evacuation, etc.) for ensuring the safety of their citizens during a radiological event. Their radiological emergency plans for implementing those decisions were developed by their respective emergency management agencies and subsequently approved by FEMA.

These plans and strategies are demonstrated in full-scale biennial exercises with the NRC, FEMA, and State and local officials that are assessed by the NRC and FEMA. On April 5, 2016, both the NRC and FEMA evaluated the Seabrook biennial exercise. The NRC did not identify any findings or violations. Enclosed is the NRC's report of NextEra's performance.

With regard to the concrete degradation, the NRC continues to fully inspect and assess NextEra's actions. The NRC reviewed NextEra's engineering evaluations to date and has determined that there are no immediate safety concerns and that ASR-affected structures at Seabrook remain capable of performing their intended safety functions. The NRC continues to perform inspections approximately every six months. These inspections focus on NextEra's actions to monitor the effects of ASR by visual observations and measurements, and its performance in assessing the results for potential impact on structural capability. A comprehensive list of NRC actions and correspondence on this topic is available on the NRC website at: <http://www.nrc.gov/reactors/operating/ops-experience/concrete-degradation.html>.

The NRC expects NextEra to complete its evaluations and to submit to the NRC a license amendment request with its proposed resolution of the ASR conditions affecting Seabrook structures. This submittal will be subject to NRC review.

I hope this information is useful to you. Please be assured that the NRC shares your interest in ensuring Seabrook operates in a manner that protects public health and safety. If you need any additional information please contact Nancy McNamara, NRC Region I Office State Liaison Officer, at (610) 337-5337.

Sincerely,

/RA/

Stephen G. Burns

Enclosure:
As stated

Identical letters sent to:

The Honorable Kathleen O'Connor Ives
Commonwealth of Massachusetts
State House, Room 215
Boston, MA 02133-1053

The Honorable Daniel Wolf
Commonwealth of Massachusetts
State House, Room 405
Boston, MA 02133-1053

The Honorable Ann-Margaret Ferrante
Commonwealth of Massachusetts
State House, Room 26
Boston, MA 02133-1053

The Honorable James Kelcourse
Commonwealth of Massachusetts
State House, Room 130
Boston, MA 02133-1053