NRC NEWS

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NRC TO INCREASE OVERSIGHT OF CONCRETE DEGRADATION REVIEWS INVOLVING SEABROOK NUCLEAR POWER PLANT

The Nuclear Regulatory Commission will conduct additional inspections and reviews to independently verify and assess work being done to address concrete degradation identified at the Seabrook nuclear power plant. The single-reactor facility is located in Seabrook, N.H., and is operated by NextEra Energy Seabrook, LLC.

The NRC's Reactor Oversight Process does not prescribe increased oversight based on the company's performance in this area. However, "the (agency) staff believes the additional inspections and assessments are needed to support the review of licensee commitments and planned large-scale concrete specimen testing by the licensee, the development of staff technical guidance, and stakeholder communications and outreach activities," NRC Region I Administrator Bill Dean wrote in a memorandum to Executive Director for Operations William Borchardt.

That request for further resources has now been approved via the "Deviation Memorandum," which refers to a deviation from the Reactor Oversight Process.

The degradation of concrete in some areas of specific structures at the Seabrook plant is being caused by an alkali silica reaction, or ASR. ASR is a chemical combining of reactive silica from the concrete aggregate with the alkali from the cement paste in the presence of moisture. The result of the reaction is a gel, which can expand and may cause micro-cracks in the concrete.

While the extent of the problem at Seabrook is still being evaluated, the NRC has determined that the structures identified to be affected by ASR can perform their safety function when called upon.

A copy of the Deviation Memorandum and other documents related to the Seabrook ASR issue are available on the NRC's web site at: www.nrc.gov.

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