



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I**
2100 RENAISSANCE BOULEVARD, SUITE 100
KING OF PRUSSIA, PENNSYLVANIA 19406-2713

February 12, 2014

Mr. Stephen B. Comley

Dear Mr. Comley:

I am responding to questions you raised during and after the December 18, 2013, meeting in Hampton, New Hampshire, held to discuss the concrete degradation experienced at Seabrook Station due to an Alkali-Silicia Reaction (ASR) in the concrete. Those questions were provided in the nearly 60 pages of material you provided to the staff at that meeting, which can be accessed on the NRC's document management system (ADAMS Accession Number ML14023A685), as well as in various emails with Richard Barkley of my staff. Due to the number and range of concerns provided, I am addressing them in an enclosure to this letter. I have also provided documents from our Office of Public Affairs as well as other sources that directly related to your concerns.

I trust this is responsive to the concerns you raised. If you have additional questions or concerns about Seabrook Station, especially the ASR concrete degradation, or additional information to provide on any of the enclosed matters, please do not hesitate to contact Richard Barkley of my staff at (610) 337-5328.

Sincerely,

/RA/

Glenn T. Dentel, Chief,
Reactor Projects Branch 3
Division of Reactor Projects

Enclosures:

1. Response to Questions Provided by Mr. Comley
2. Fact Sheets on the Use of Potassium Iodide in Emergency Planning
3. January 22, 2008, Memo from the Director of the Office of Science and Technology Policy – Executive Office of the President
4. NRC Information Notice 2008-04: Counterfeit Parts Supplied to Nuclear Power Plants
5. Decommissioning Funding Status Reports for FP&L and NextEra

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Response to Concerns and Questions Raised by Stephen Comley

- 1) (Wrongdoing) You provided a number of quotes allegedly raised to you suggesting wrongdoing by unnamed members of the NRC staff (e.g., claims that allegations are penciled away, that NRC engineers do not “rock the boat,” and that an NRC staff member was demoted for talking about his boss, among others.) No names or specific incidents were provided.

Response:

As your concerns do not provide specifics regarding who is involved, and alleged possible NRC staff wrongdoing, we have forwarded your concerns to our NRC Office of Inspector General in accordance with the NRC’s internal policies. We urge you to contact the Office of Inspector General at (301) 415-5930 to discuss your concerns in further detail.

- 2) (Counterfeit/Substandard Parts) You provided a number of historic references to concerns and allegations you raised, principally in the 1987 - 1990 timeframe, regarding alleged counterfeit and substandard parts used by the nuclear industry at that time. These concerns were raised by individuals in the industry whose identity you were not willing to reveal. You further stated that your concerns were ignored by the NRC staff as well as by most of the Commissioners serving at that time, and by senior representatives in the Department of Justice and the Administration of former President Reagan. You also asked for the name of the staff member who was in charge of the NRC inspection program for parts vendors during that time period. No information on specific counterfeit or substandard parts, or licensees that might have installed such parts, was provided in the materials submitted at the December 18, 2013, meeting.

You also requested a list of counterfeit and/or substandard parts replaced or not replaced at Seabrook.

Response:

When fraudulent or counterfeit parts were believed to be supplied to NRC licensees, principally nuclear power plants, the NRC has taken actions to notify the nuclear industry of these events and take corrective actions. For example, in April 2008, the NRC issued an Information Notice to the industry regarding counterfeit parts; a copy is enclosed. In 1989, the NRC staff issued Generic Letter 89-02, “Actions to Improve the Detection of Counterfeit and Fraudulently Marketed Products.” In that Generic Letter, it also lists a number of communications made in preceding years regarding this issue. Furthermore, 10 CFR Part 21 requires that suppliers or NRC licensees promptly report to the NRC component defects or noncompliances that could create a substantial safety hazard so that appropriate action can be taken.

We have reviewed the materials you provided, but noted that most of your concerns in this area seem to date to the 1987-1990 time period, or shortly thereafter. Absent any specific information in this matter, such as the parts involved, their suppliers or the licensee(s) which used such parts, and given the historic nature of your concerns, the staff cannot take any further action in this matter without more information from you. We recognize that this is a significant concern to you given your protracted and costly legal

involvement with the agency and the Department of Justice in this matter in the early 1990s. However, we cannot take further action at this time without specific information.

As for the NRC vendor inspection program, those efforts are continuing and have expanded in recent years with the construction of four new nuclear reactors in Georgia and South Carolina. Those efforts are being conducted by the Division of Construction Inspection and Operational Programs in the NRC Office of New Reactors. Prior efforts in this area were the responsibility of the Office of Nuclear Reactor Regulation. However, given significant changes in personnel and the NRC organization since the 1989-1990, few if any, staff from that organization remain with the agency.

Regarding your request for a list of counterfeit and/or substandard parts replaced or not replaced at Seabrook Station, the NRC does not retain such a list. NextERA has a corrective action system to address the identification and correction of any such equipment. The NRC has unfettered access to this system for inspection and enforcement purposes, but does not develop lists of the type you describe.

- 3) (Emergency Planning – Potassium Iodide) You asserted that laws governing the distribution of potassium iodide (KI) tablets to citizens living up to 20 miles from nuclear power plants are not being implemented.

Response:

The law to which you are referring is Section 127(f) of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the Act), which was signed into law by President Bush on June 12, 2002. However, as detailed in the enclosed January 22, 2008, memorandum from the Office of Science and Technology Policy (OSTP) – Executive Office of the President, this provision of the Act was waived. This document provides the technical basis for this decision, and why there exists more effective preventive measures than KI for the population between 10-20 miles from a nuclear station. Since this waiver of the Act is permitted by law, and was promulgated by an individual delegated this authority by the President, the NRC is acting in accordance with the law as it currently stands.

If you have questions or comments on this decision, we suggest you direct your concern to OSTP at:

Office of Science and Technology Policy - Executive Office of the President
Eisenhower Executive Office Building
1650 Pennsylvania Avenue
Washington, DC 20504
Phone: 202-456-4444

- 4) (Emergency Planning) You questioned the ability of local authorities to implement the emergency preparedness program in the 10-mile emergency planning zone (EPZ), as well as the ability to protect the special needs population both inside and outside the 10-mile EPZ. You also asked that the NRC hold a meeting with the State Police in Massachusetts and New Hampshire to gain their insights on the ability of local officials to implement the emergency plan in the event of a radiological release at Seabrook Station. You further asked why the NRC has not required emergency planning beyond 10 miles.

Response

Each reactor site in the US has onsite and offsite emergency plans to assure that adequate protective measures can be taken to protect the public in the event of a radiological emergency. Federal oversight of emergency preparedness for nuclear power plants in the US is shared by the NRC and Federal Emergency Management Agency (FEMA). This sharing is facilitated through a Memorandum of Understanding (MOU) that is responsive to the President's decision of December 7, 1979, that FEMA take the lead in overseeing offsite planning and response, and that NRC assist FEMA in carrying out this role. The NRC has statutory responsibility for the radiological health and safety of the public by overseeing onsite preparedness and has overall authority for both onsite and offsite emergency preparedness.

The NRC must have reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency. The NRC's decision of reasonable assurance is based on licensees complying with NRC regulations and guidance. In addition, licensees and area response organizations must demonstrate they can effectively implement emergency plans and procedures during periodic evaluated exercises. These plans include provisions for dealing with school children, as well as special needs populations, such as nursing home patients, imprisoned individuals, and other persons incapable of evacuating an area on their own. The options include providing assistance to relocate them or sheltering them in place. Each plant owner is required to exercise its emergency plan with the NRC, FEMA, and offsite authorities at least once every two years to ensure state and local officials remain proficient in implementing their emergency plans. Licensees also self-test their emergency plans regularly by conducting drills. Each plant's performance in drills and exercises can be accessed through the NRC Web site:

<http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>.

FEMA takes the lead in initially reviewing and assessing the offsite planning and response, and in assisting State and local governments, while the NRC reviews and assesses the onsite planning and response. FEMA findings and determinations as to the adequacy and capability of implementing offsite plans are communicated to the NRC. The NRC reviews the FEMA findings and determinations as well as the onsite findings. The NRC then makes a determination on the overall state of emergency preparedness.

As for emergency planning activities beyond the 10 mile EPZ, FEMA does require that licensees have plans in-place out to 50 miles from a facility to address the possible ingestion of radioactive materials. The primary risk from a radiological release beyond 10 miles is not from the direct exposure of individuals to radiation from a release plume, but rather long-term exposure from residual contamination in surface water, on the ground, on food supplies or ingested by livestock. Protective actions for the 50-mile

Ingestion Pathway Zone include stopping the distribution of contaminated food and water, relocating livestock, and controlling access to the area.

The Seabrook Station offsite emergency preparedness plans meet current NRC and FEMA requirements as demonstrated during the last exercise conducted in late 2012, and will be evaluated again in an exercise in late 2014. In those exercises, the performance of the State Police in New Hampshire and Massachusetts, as well as the numerous local communities in both states, is evaluated by a team of FEMA employees and contractors. Since FEMA has offsite EP responsibility, we suggest you contact the FEMA Region I office that is responsible for Seabrook Station's emergency plan to discuss your concerns:

FEMA Region I
 Attn: Steve Colman, Regional Assistance Chair
 99 High St.
 Boston, MA 02110
 1-877-336-2734 (or 617-832-4731 for Steve's direct number)

- 5) (Decommissioning Funding) You asked how much money is set aside for decommissioning Seabrook Station.

Response

As of the end of 2012, approximately \$460 million has been set aside in decommissioning funds for Seabrook Station. Per 10 CFR 50.75(f)(1), licensees are required to provide that information to the NRC. The information as of March 2013 is available to the public in the NRC's document management system under Accession Number ML13093A156; a copy of that report is attached.

- 6) (CNN DVD) You provided a DVD copy of a CNN report and urged it to be placed in the NRC library.

Response

As this video is not an NRC production, was not required to be submitted to the NRC, and would require the copyright clearance of CNN, we cannot load such a video on the NRC website. However, CNN has loaded many such videos to YouTube. We suggest you contact CNN to determine if this video is publicly accessible.

- 7) (Seabrook Concrete) You asked which company supplied the concrete during the construction of Seabrook Units 1 and 2.

Response

Concrete is a composite of cement, aggregate (e.g., crushed rock and sand), water and, in some cases, small amounts of admixtures. The component of concern in the Alkali Silica Reaction is the aggregate, which contains the reactive silica. As stated at the public meeting, the aggregate that was supplied to the constructor, United Engineers and Constructors, originated from four quarries in southern Maine (denoted in NextEra's

slide presentation at the meeting and now available on the NRC website). While that aggregate was originally tested by a short duration test and found to be acceptable, the test performed was not adequate to identify that ASR would develop over a much longer time frame.

- 8) (Seabrook Concrete) Can Seabrook's Unit 2 ever go on-line or would a second unit have to be constructed from scratch? If that is indeed the case why isn't the testing of the degradation of the cement being done on the Seabrook Nuclear Plant on the old Unit 2?

Response

The NRC construction permit for Seabrook Unit 2 was cancelled in 1988. Moreover, since that time, a number of key plant components, namely the steam generators, were sold to other utilities for use, while the upper portions of the containment liner were torn down following the sale of the site to NextEra.

During the meeting on December 18, 2013, NextEra staff discussed with the NRC staff their large-specimen testing program underway at the University of Texas' Ferguson Structural Engineering Laboratory. The NRC has neither recommended nor ordered NextEra to take this approach nor have we approved it. Neither has the NRC required the licensee to use concrete from the cancelled Seabrook Unit 2 structures. Should NextEra elect to use the results of this test program to resolve the ASR non-conforming condition, the testing methodology and results will be subject to NRC review pursuant to the applicable regulatory processes described in 10 CFR 50.59 and/or 50.90. Should NextEra decide to use another approach, the NRC will likewise implement these regulatory review processes.

- 9) (Public Meeting Transcription) You requested a copy of the video made during the public meeting on December 18, 2013, and asked why the agency changed its position regarding transcribing this meeting?

Response

NRC management decided before the meeting to have our sound contractor video record the meeting do that due to the high level of public interest in the issue. Management even pursued webcasting the meeting to the public, but ran into technical challenges at that conference facility venue. The intention is to place it on the NRC website with the other Seabrook ASR information. We did not change our position regarding transcribing the meeting – it was not transcribed. As a rule, the NRC does not transcribe the roughly one thousand public meetings it conducts annually.

Members of the public are free to record such meetings if they so desire. On December 18, the meeting was recorded by three groups - the NRC sound contractor, a local cable access station, and by a friend of yours. The NRC video is scheduled to be posted on our website in mid-February. The video will be unedited, with the exception of a remark that will be deleted. Specifically, someone at the microphone mentioned their name and home address, so for personal privacy and identity protection reasons, the NRC is obligated to withhold that information.

- 10) (NRC Staff Notes) You requested the notes of Diane Screnci, Sr. Public Affairs Officer, taken during conversations you had with her, information which she later summarized and passed on to the NRC's Office of the Inspector General.

Response

As Ms. Screnci mentioned to you, the personal notes of NRC staff members are not releasable under the FOIA process. However, the subject matter you discussed with Ms. Screnci was captured by the many documents you submitted to the NRC, which as stated earlier are publicly available on the NRC's document management system ADAMS at ML14023A685. A copy of this letter is being provided to the NRC Office of Inspector General for information.

The same applies to Richard Barkley, whom you have spoken with and emailed on a number of occasions since early December 2013.

- 11) (Commission/EDO Response to Your Concerns) You stated at the meeting and in a subsequent email that you feel the public has a right to hear from each of the NRC Commissioners, the NRC Executive Director of Operations (EDO) and the five NRC panel members who attended the NRC public meeting given the significance of the NRC deciding whether to extend the Seabrook Nuclear plant's operating license from 2030 to 2050. You believe it is important to note the NRC should also be taking in account the age of the material and parts from when the construction of the Seabrook Nuclear Plant first started, not from the time it was licensed.

Response

The purpose of the public meeting of December 18, 2013, was to inform the public of the actions being taken by NextEra and the NRC to address the ASR issue, and for the NRC to answer questions from the public. It was not a formal legal hearing. As the individuals most directly responsible for the oversight of the NRC inspection program for Seabrook Station, my staff and I are the most appropriate to address your concerns and questions. Should you feel the need to express your questions and concerns to the five members of the Commission or the EDO, you are always free to do so directly via phone, email, or in writing.

Regarding the monitoring of the condition of the material and parts at Seabrook Station during the period of extended operation, the NRC has imposed a large number of testing and surveillance requirements on the facility during the current license period. Those requirements will continue during the period of extended operation, and be supplemented by aging management programs implemented to monitor the condition of select material and components at Seabrook Station independent of their age. As with any industrial facility, many parts of the station will be replaced in the future, or have already been replaced, due to equipment obsolescence, corrosion, or in the case of components in continuous use (e.g., gaskets, select valves and valve packing, etc.), because the components have reached the end of their service life. This process will continue independent of the length of service of the facility.