



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
2100 RENAISSANCE BLVD., SUITE 100
KING OF PRUSSIA, PA 19406-2713

September 1, 2015

Mr. Dean Curtland
Site Vice President
Seabrook Nuclear Power Plant
NextEra Energy Seabrook, LLC
c/o Mr. Michael Ossing
P.O. Box 300
Seabrook, NH 03874

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR SEABROOK STATION, UNIT NO. 1
(REPORT 05000443/2015005)**

Dear Mr. Curtland:

On August 12, 2015, the U.S. Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of Seabrook Station, Unit No. 1 (Seabrook). The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014 through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, Seabrook operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined the performance at Seabrook during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

The enclosed inspection plan lists the inspections scheduled through June 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. In addition to baseline inspections, the NRC will perform Inspection Procedure 60855.1, "Operation of an Independent Spent Fuel Storage Installation at Operating Plants," and Temporary Instruction (TI) 2515-191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

As noted in the 2015 end-of-cycle letter regarding the Alkali-Silica Reaction (ASR) concrete issues, the NRC will continue to provide focused oversight of NextEra's testing being conducted at the Ferguson Structural Engineering Laboratory at the University of Texas - Austin and your

assessment of ASR progression in Seabrook concrete structures. Our inspection activities will be conducted using our annual follow-up of selected Problem Identification and Resolution samples. While tentative dates for these ongoing inspections are included in the attached inspection schedule, we understand that your testing schedule is subject to change and we will coordinate closely with your ASR project management staff to select the most advantageous opportunities to observe your activities.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The onsite portion of the audit has been completed at Seabrook, and the information gathered will aid staff in development of the Final Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, as mentioned above, the NRC staff will confirm through inspections the full implementation of the orders mentioned above performing TI 2515-191, "Inspection of the Implementation of Mitigation Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact me at (610) 337-5233 with any questions you have regarding this letter.

Sincerely,

/RA/

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

Docket Nos. 50-443
License Nos. NPF-86

Enclosure: Seabrook Inspection/Activity Plan

cc w/encl: Distribution via ListServ

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DOC NAME: S:\ROP Assessment Meetings\ROP-16 Mid-Cycle Review\Branch 3\Seabrook\2015 MC Letter SB - Final.docx
 ADAMS Accession No. **ML15229A049**

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NAME	PCataldo/ MSD per email	MDraxton/ MSD	GDentel/ GTD		
DATE	08/ 24/15	08/ 25 /15	08/25 /15		

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Seabrook
Inspection / Activity Plan
07/01/2015 - 06/30/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			71124 - REMP		1
1	07/06/2015	07/09/2015	IP 71124.07	Radiological Environmental Monitoring Program	
			71124 - 01 EXPOSURE CONTROL 02 ALARA		2
1	09/21/2015	09/22/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	09/21/2015	09/22/2015	IP 71124.02	Occupational ALARA Planning and Controls	
			7111108P - INSERVICE INSPECTION		1
1	10/05/2015	10/16/2015	IP 7111108P	Inservice Inspection Activities - PWR	
			7111111B - REQUAL INSP W/ P/F RESULTS		2
1	11/30/2015	12/04/2015	IP 7111111B	Licensed Operator Requalification Program	
			ASR - PI&R SAMPLE - ASR MONITORING		2
1	10/05/2015	10/09/2015	IP 71152	Problem Identification and Resolution	
			71124 - HP 71124.01 02 03 04		1
1	10/19/2015	10/23/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	10/19/2015	10/23/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1	10/19/2015	10/23/2015	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	10/19/2015	10/23/2015	IP 71124.04	Occupational Dose Assessment	
			EP - EP PROGRAM INSPECTION		1
1	12/07/2015	12/11/2015	IP 7111402	Alert and Notification System Testing	
1	12/07/2015	12/11/2015	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1	12/07/2015	12/11/2015	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
			ISFSI - ISFSI OPERATIONAL INSPECTION		1
1	11/16/2015	11/20/2015	IP 60855	Operation Of An ISFSI	
1	11/16/2015	11/20/2015	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			71151 - HP PI VERIFY RAD HAZARD ALARA		1
1	12/07/2015	12/10/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	12/07/2015	12/10/2015	IP 71124.02	Occupational ALARA Planning and Controls	
1	12/07/2015	12/10/2015	IP 71151	Performance Indicator Verification	
			EP - EP EXERCISE EVALUATION		4
1	04/04/2016	04/08/2016	IP 7111401	Exercise Evaluation	
			71124 - 01 EXPOSURE CONTROL		1
1	04/04/2016	04/07/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			ASR - PI&R SAMPLE - ASR MONITORING		2
1	04/04/2016	04/08/2016	IP 71152	Problem Identification and Resolution	

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Seabrook
Inspection / Activity Plan
07/01/2015 - 06/30/2017

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			TI-191 - FUKUSHMIA LESSONS-LEARNED		1
1	05/16/2016	05/20/2016	IP 2515/191	Inspection of Licensee's Responses to Order EA-12-049, EA-12-051 & EP Info Request March 12, 2012	
			71124 - 05 RAD MONITORING INSTRUMENTATION		1
1	05/16/2016	05/20/2016	IP 71124.05	Radiation Monitoring Instrumentation	
			7111121 - CDBI		5
1	08/01/2016	08/05/2016	IP 7111121	Component Design Bases Inspection	
1	08/15/2016	08/19/2016	IP 7111121	Component Design Bases Inspection	
1	08/29/2016	09/02/2016	IP 7111121	Component Design Bases Inspection	
			71124.08 - RADWASTE		1
1	08/15/2016	08/19/2016	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
			71152BI - PI&R BIENNIAL		4
1	10/03/2016	10/07/2016	IP 71152B	Problem Identification and Resolution	
1	10/17/2016	10/21/2016	IP 71152B	Problem Identification and Resolution	
			71124 - 71151 PI VERIFY 71124.01 AND 05 RAD MONT		1
1	12/05/2016	12/08/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	12/05/2016	12/08/2016	IP 71124.05	Radiation Monitoring Instrumentation	
1	12/05/2016	12/08/2016	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1	12/05/2016	12/08/2016	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
			71124 - 71124.01 RAD HAZARD AND 02 ALARA		1
1	03/20/2017	03/23/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	03/20/2017	03/23/2017	IP 71124.02	Occupational ALARA Planning and Controls	
			7111108P - INSERVICE INSPECTION		1
1	04/10/2017	04/21/2017	IP 7111108P	Inservice Inspection Activities - PWR	
			71124 - 71124.01RADHAZ02ALARA03AIRBORNE04DOSE		1
1	04/10/2017	04/13/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1	04/10/2017	04/13/2017	IP 71124.02	Occupational ALARA Planning and Controls	
1	04/10/2017	04/13/2017	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1	04/10/2017	04/13/2017	IP 71124.04	Occupational Dose Assessment	
			7111105T - TRIENNIAL FIRE PROTECTION		5
1	06/26/2017	06/30/2017	IP 7111105T	Fire Protection [Triennial]	
			ISFSI - ISFSI LOADING CAMPAIGN INSPECTION		1
1	06/26/2017	06/30/2017	IP 60855	Operation Of An ISFSI	
1	06/26/2017	06/30/2017	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	

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