



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

November 20, 2017

LICENSEE: NextEra Energy Seabrook, LLC

FACILITY: Florida Power & Light Company/NextEra Energy Fleet

SUBJECT: SUMMARY OF SEPTEMBER 20, 2017, MEETING WITH FLORIDA POWER & LIGHT COMPANY/NEXTERA ENERGY REGARDING CLOSURE OF NRC GENERIC SAFETY ISSUE 191/NRC GENERIC LETTER 2004-02 (EPID L-2017-LRC-0000)

On September 20, 2017, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Florida Power & Light Company/NextEra Energy (the licensee) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was for the licensee to discuss with the NRC staff its plans for sending closure letters for NRC Generic Safety Issue 191, "Experimental Studies of Loss-of-Coolant-Accident-Generated Debris Accumulation and Head Loss with Emphasis on the Effects of Calcium Silicate Insulation"/NRC Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors." The meeting notice and agenda, dated September 6, 2017, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML17249A589. A list of attendees is enclosed.

The licensee started the meeting by going through its presentation (ADAMS Accession No. ML17310B232). The beginning of the presentation provided a general overview as to the licensee's plans for closing out GL 2004-02. This included the statement that all of the plants would follow NRC-endorsed guidance, including option 2A of SECY-12-0093, "Closure Options for Generic Safety Issue – 191, Assessment of Debris Accumulation on Pressurized-Water Reactor Sump Performance," and the in-vessel debris loading methodology from WCAP-17788, which the licensee recognized was still under NRC staff review. The licensee stated that the upcoming submittals were planned to be stand-alone submittals, meaning they do not refer to previous submittals related to GL 2004-02 and that it is the licensee's intention to include everything the NRC staff needs to close out the generic issue in the upcoming letters. The NRC staff asked whether the licensee planned to submit one letter for the fleet or if each plant would have its own letter. The licensee said that there would be one letter sent in per site.

Following the general overview, the licensee's presentation moved on to describe some of the specifics on how each plant planned to address closing out GL 2004-02. The licensee started with St. Lucie Plant (St. Lucie), Unit Nos. 1 and 2. The licensee described how for St. Lucie, Unit Nos. 1 and 2, other than in-vessel debris loading, all aspects of the Revised Content Guide and Staff Review Guidance were addressed with fully deterministic approaches and methodologies previously accepted by the NRC. The licensee described how the same was true for Turkey Point Nuclear Generating (Turkey Point) Unit No. 3, with the exception that head loss and bypass testing results from other plants will be used to bound the conditions at Turkey Point Unit No. 3. The NRC staff noted that this would be something it would need to take a close look at when the submittal arrives.

The license went on to describe that Turkey Point Unit No. 4 would also rely on head loss and bypass testing data from another plant, as well as utilize Section 6, "Alternative Evaluation Methodology," of Nuclear Energy Institute (NEI) 04-07, "Pressurized Water Reactor Sump Performance Evaluation Methodology," for break sizes larger than 23 inches. In the licensee's presentation, it stated that Turkey Point Unit No. 4 Region II breaks use pre-event air partial pressure for determining available net positive suction head, but that containment accident pressure was not utilized. The NRC staff noted that this would also be a topic that the staff would need to look at carefully. The NRC staff then commented that crediting the use of containment pressure may be outside of a plant's licensing basis and could require the need to change the licensing basis through a license amendment. The NRC staff asked why the licensee did not choose to follow the risk-informed option 2B approach of SECY-12-0093. The licensee stated that it felt there was no technical issue preventing it from following option 2A and that the results to how it would operate the plant would not have changed.

Although applicable to each plant, the NRC staff then asked how the licensee would handle the fact that the sites were relying on WCAP-17788 for in-vessel debris loading, although it was still under NRC staff review and may change prior to final approval. The licensee said it is developing plans based on the current version of the WCAP and once approved, will review the final version to see if any of the plants would need to supplement their response.

The presentation moved on to Point Beach Nuclear Plant (Point Beach), Units 1 and 2. Like Turkey Point Unit No. 4, Point Beach, Units 1 and 2, plan to utilize Section 6 of NEI 04-07 for break sizes larger than 17 inches. In addition, Point Beach, Units 1 and 2, used an assumption that both strainer trains are in service for breaks between 17 and 31 inches for head loss testing and for all breaks up to 31 inches for bypass testing. The NRC staff commented that by not accounting for single failure for all breaks, it seemed an exemption would be required.

The last plant to discuss its approach to closing out the GL was Seabrook Station (Seabrook). For Seabrook, the licensee stated that for head loss and in-vessel debris loading, Section 6 of NEI 04-07 would be utilized for breaks larger than 17 inches. For bypass testing, Seabrook used another plant's testing results, and for breaks between 17 and 31 inches, it was assumed that both strainer trains were in service. Seabrook, like Turkey Point Unit No. 4, made the statement that Region II breaks use pre-event air partial pressure for determining available net positive suction head, but that containment accident pressure was not utilized. One item that was different to the other sites was that for debris transport for Region II breaks (greater than 17 inches), the licensee credited some fine particles holdup at the debris interceptors. The NRC staff noted that this would be a topic that the staff would need to look at it carefully. The licensee agreed that further discussion would likely be needed on this topic after the letter is submitted.

Members of the public were in attendance but there were no comments or questions. No public meeting feedback forms were received.

Please direct any inquiries to me at 301-415-2048 or by e-mail to Justin.Poole@nrc.gov.

A handwritten signature in black ink, appearing to read "Justin Poole" with a stylized flourish at the end.

Justin C. Poole, Project Manager
Plant Licensing Branch 1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-250, 50-251, 50-266, 50-301,
50-335, 50-389, and 50-443

Enclosure:
List of Attendees

cc w/Enclosure: Distribution via Listserv

LIST OF ATTENDEES
SEPTEMBER 20, 2017, MEETING WITH
FLORIDA POWER & LIGHT COMPANY/NEXTERA ENERGY REGARDING
CLOSURE OF NRC GENERIC SAFETY ISSUE 191/NRC GENERIC LETTER 2004-02

NRC Participants:

- Victor Cusumano, Branch Chief, Division of Safety Systems (DSS), Technical Specifications Branch (STSB), Office of Nuclear Reactor Regulation (NRR)
- Stephen Smith, Senior Reactor Engineer, NRR/DSS/STSB
- Andrea Russell, Reactor Systems Engineer, NRR/DSS/STSB*
- Steven Bloom, Branch Chief, Division of License Renewal (DLR), Chemical, Corrosion, and Steam Generator Branch (MCCB)
- Paul Klein, Senior Materials Engineer, NRR/DLR/MCCB
- Matthew Yoder, Senior Chemical Engineer, NRR/DLR/MCCB
- Brian Wittick, Branch Chief, Division of Engineering (DE), Structural Engineering Branch (ESEB), NRR
- Bryce Lehman, Structural Engineer, NRR/DE/ESEB
- Justin Poole, Project Manager, Division of Operating Reactor Licensing (DORL), NRR
- Perry Buckberg, Project Manager, NRR/DORL
- Mahesh Chawla, Project Manager, NRR/DORL
- Michael Wentzel, Project Manager, NRR/DORL
- CJ Fong, Technical Assistant (Acting), Chairman's Office

NextEra Energy Participants:

- Larry Nicholson, Director Licensing & Regulatory Affairs
- Daniel Forter, Senior Director of Projects
- Jarrett Mack, NextEra Licensing
- Paul Leonard, Technical Lead, ENERCON
- Thomas McCarthy, Project Manager, ENERCON
- Jacob Morris, ENERCON*
- Austin Glover, ENERCON*
- Haifeng Li, ENERCON*
- Joe Tezak, ENERCON*
- Tim Sande, ENERCON*

Public:

- Craig Sellers, Project Manager, Calvert Cliffs Nuclear Power Plant*
- Ron Holloway, Project Manager, Wolf Creek Generating Station*

* participated by teleconference

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ADAMS Accession No.: ML17310B206

Package Accession No.: ML17310B213

| OFFICE | NRR/DORL/LPL1/PM | NRR/DORL/LPL1/LA | NRR/DORL/LPL1/BC | NRR/DORL/LPL1/PM |
|--------|------------------|------------------|------------------|---------------------|
| NAME | JPoole | LRonewicz | JDanna | JPoole / JDanna for |
| DATE | 11/13/2017 | 11/08/2017 | 11/20/2017 | 11/20/2017 |

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