



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

June 19, 2015

LICENSEE: Duke Energy Carolinas, LLC

FACILITY: Oconee Nuclear Station, Units 1, 2, and 3

SUBJECT: SUMMARY OF MAY 27, 2015, MEETING WITH DUKE ENERGY CAROLINAS, LLC, TO DISCUSS ONGOING MAJOR PROJECTS AT OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

On May 27, 2015, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Duke Energy Carolinas, LLC (Duke Energy or the licensee) at the Oconee Office Complex Auditorium, 155 East Pickens Highway, Seneca, SC. The purpose of the meeting was to provide for the NRC the status of the ongoing major projects at the Oconee Nuclear Station, Units 1, 2, and 3 (ONS, Oconee). The meeting notice and agenda, dated May 21, 2015, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession No. ML15141A108. A list of attendees is enclosed.

The licensee's presentation is found in the meeting slides (ADAMS Accession No. ML15148A263). The licensee presented a summary of the status of the following major projects and other items of interest which are ongoing at ONS:

- Protected Service Water (PSW) System
- National Fire Protection Association (NFPA) Standard 805 Transition
- Keowee Hydro Upgrades
- Tornado/High Energy Line Break (HELB)/Main Steam Isolation Valves (MSIVs)
- Significant NRC Commitments
- Fukushima Modifications
- External Flooding Modifications
- Upcoming Regulatory Submittals

Duke Energy is in the process of completing modifications for a new PSW system. The PSW system is designed for safe shutdown of all three units for certain events in the turbine building that damage the common emergency power (safety) buses. The PSW system consists of new electrical power supplies for certain existing plant safety systems, as well as new pumps to provide cooling water to the steam generators to remove decay heat from the reactor coolant system once the reactor is shutdown, if the normal plants systems are not available. The installation of the PSW system will reduce the overall plant risk in the event of a fire at the Oconee site. During the meeting, the licensee indicated that they have completed Milestones 1, 2, 3, and 4 and that the remaining milestones are on track to meet the required dates per the NRC Confirmatory Order dated July 1, 2013. During the discussion concerning Milestone 4, Duke Energy outlined the NRC staff's Milestone 4 inspection results, specifically noting the identified discrepancies between the flow model for the PSW system and the as-built PSW system. Duke Energy went on to outline how they are addressing these discrepancies and supporting a follow-up inspection concerning the Milestone 4 implementation. Also during the

discussion, and as outlined in the meeting presentation, Duke Energy discussed in further detail the in-progress items for Milestones 5 and the status of Milestone 6.

ONS is one of two pilot plants that received NRC approval to transition to NFPA 805 for compliance with the NRC fire protection regulations, Title 10 of the *Code of Federal Regulations*, (10 CFR) Part 50, Section 50.48. The NRC staff completed its review of the license amendment request (LAR) requesting approval of the transition, and issued the license amendments approving the transition on December 29, 2010 (ADAMS Accession No. ML103630612). The licensee outlined the current project status, including remaining items to complete. The licensee also outlined, as noted in the meeting presentation, the reduction in core damage frequency based on the implementation of NFPA 805. Finally, the licensee discussed the ongoing actions that will continue until the PSW modification is complete. These actions include fire watches for 10 CFR 50 Appendix R noncompliances. At the end of the discussion, the NRC staff noted that NFPA 805 inspections would be taking place in the next 18 to 24 months.

The two Keowee Hydroelectric Units (KHU) were commissioned in 1971, and are the emergency alternate current power source for all three Oconee Units. Since this time, the KHUs have undergone maintenance, most recently including the refurbishing or replacing of all 56 generator field poles on each KHU. This was done as part of an effort to refurbish and overhaul both KHUs. During the meeting, Duke Energy discussed their current plans to replace the stators in both KHUs. This maintenance will require separate outages to both KHUs. As was the case during the replacement of the generator field poles, this maintenance will require the KHUs to be out of service for longer than allowed by the ONS technical specifications. As such, the licensee will be required to submit an LAR, requesting extended outage time in order to complete the work. As was discussed in the meeting, the licensee intends to have a pre-submittal meeting with the NRC staff during the 3rd quarter of 2015, to discuss the submittal of this LAR. Further details concerning the status of the KHU stator replacement can be found in the licensee's presentation.

During the meeting, the licensee discussed the current status regarding the completion of Tornado mitigation, HELB mitigation, and MSIV installation activities. A detailed discussion on the status of completed and future actions can be found in the licensee's presentation. The licensee has previously informed the NRC staff that a Tornado mitigation LAR and a HELB LAR will be submitted in the 1st quarter of 2017. The licensee has also communicated the intention of installing the MSIVs in 2020 for ONS-1, 2021 for ONS-2, and 2022 for ONS-3. The licensee stated that as they are completing PSW implementation, they are refocusing on Tornado/HELB/MSIV activities. During the meeting, the licensee and NRC staff expressed interest in holding pre-submittal meetings for the Tornado mitigation, HELB mitigation, and MSIV installation LARs. The licensee stated that they would like to start the discussion with the NRC staff in the fall of 2015.

During the meeting, the licensee outlined how they manage Regulatory Commitments in docketed communication to the NRC. The licensee stated that the commitments currently being tracked are in eight specific categories. These categories are outlined in further detail in the licensee's presentation. During the discussion, the licensee stated that they will provide the NRC Project Manager a 6-month list on upcoming due dates for regulatory commitments.

The licensee provided the status of several modifications including the design and construction work associated with their response to the NRC's Orders and request for information pursuant to 10 CFR Section 50.54(f) issued in accordance with the Near-Term Task Force (NTTF) review of the insights from the Fukushima Dai-ichi accident. The licensee discussed the current status and compliance dates required for the Flexible and Diverse Mitigation Strategies, the Spent Fuel Pool Level Indication, the Seismic walkdowns and hazard evaluation, and the Emergency Preparedness assessments. Further discussion, including an outline of the compliance dates, can be found in the licensee's presentation. During the discussion, the NRC staff informed the licensee that any delays to the compliance dates should be communicated, and, if necessary, relief requested, early in the schedule. The licensee stated that the implementation for the topics discussed above was on schedule.

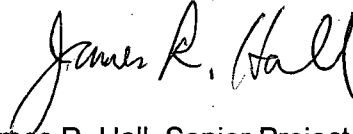
The licensee also provided the status of several modifications including the design and construction work associated with the external flood project. This work is being completed in response to a Confirmatory Action Letter issued to the licensee in June 2010, and the NRC's request for information pursuant to 10 CFR 50.54(f) associate with the NTTF flooding hazard reevaluation recommendations. The licensee discussed the revised Flooding Hazard Reevaluation Report (FHRR) that was submitted on March 6, 2015, and is currently under review by the NRC staff. Further detail on the flooding protection and response strategy, the external flood modifications, and the regulatory path forward can be found in the licensee's presentation. During the meeting, the NRC staff asked questions concerning some of the flooding modifications including why the flood diversion wall appeared to have a sudden stop and why a large wall that was planned and discussed during previous Major Projects Meetings no longer appeared to be in the list of flooding modifications. The licensee stated that the flood diversion wall appeared to stop suddenly because its purpose was to divert the flood waters and not stop them completely and the design completed this task. The licensee also stated that the large wall discussed during previous Major Projects Meetings was no longer on the list of future flooding modifications because the wall wasn't needed to mitigate the new flood level as outlined in the revised FHRR.

Finally, the licensee discussed their planned licensing submittals for the next couple of years and those currently under review. A more detailed list of the licensing submittals can be found in the licensee's presentation. During this discussion, the NRC staff requested that the licensee communicate with the NRC Project Manager regarding the priorities of the planned and current licensing submittals. The licensee expressed their gratitude at the frequency and quality of the communication they had with the NRC Project Manager.

Members of the public were in attendance at the meeting and via a teleconference line. During the public portion of the meeting, there was one question from a member of the public regarding the licensee's approach to flood mitigation. The NRC addressed the question. Public meeting feedback forms were made available to the public. One Public Meeting Feedback form was received. The comment received on the feedback form expressed concern over the location of the meeting. The comment recommended that future Major Projects Meetings be held at public facilities because holding the meeting at a licensee facility can be intimidating to some members of the public. This comment has been forwarded to the Office of Nuclear Reactor Regulation Senior Communications Analyst who will forward it to the Office of the Executive Director for Operations for consideration.

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Please direct any inquiries to me at 301-415-4032, or by email to Randy.Hall@nrc.gov.

A handwritten signature in black ink, reading "James R. Hall". The signature is written in a cursive style with a large, stylized "H".

James R. Hall, Senior Project Manager
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270, and 50-287

Enclosure:
List of Attendees

cc w/encl: Distribution via Listserv

LIST OF ATTENDEES

MAY 27, 2015, 8:00 AM TO 3:00 PM

MEETING WITH DUKE ENERGY CAROLINAS, LLC

MAJOR PROJECTS MEETING

OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

DOCKET NOS. 50-269, 50-270, AND 50-287

NRC	DUKE ENERGY	MEMBERS OF PUBLIC
Bill Dean	Bill Pitesa	Rick Metcalf
Victor McCree	Preston Gillespie	Lloyd Genenette
Louise Lund	Scott Batson	Ben Turetzky
Joel Munday	David Baxter	Dick Mangrum
Tony Gody	Ed Burchfield	Jim Wheeler
Mike Franovich	Chris Wasik	Ray Clovky
Robert Pascarelli	Bob Heineck	William Freebairn*
Ed Crowe	Carrie Dunton	
Jannette Worosilo	Thomas Ray	
Greg Croon	Scott Lynch	
Natasha Childs	Doug Phelps	
Randy Hall	Terry Patterson	
Jeff Whited	Eddie Anderson	
Roger Hannah	Jay Ratliff	
Christopher Cook*	B.J. Gatten	
Mohamed Shams*		

* Participated via conference line

Enclosure

Please direct any inquiries to me at 301-415-4032, or by email to Randy.Hall@nrc.gov.

James R. Hall, Senior Project Manager /RA/
Plant Licensing Branch II-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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ADAMS Accession Nos.: PKG ML15161A434

Slides: ML15148A263

Notice: ML15141A108

Summary: ML15161A431

OFFICE	DORL/LPL2-1/PM	DORL/LPL2-1/LA	DORL/LPL2-1/BC	DORL/LPL2-1/PM
NAME	JWhited	SFiguroa	RPascarelli	JHall
DATE	06/17/15	06/10/15	06/19/15	06/19/15

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