



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

August 2, 2021

LICENSEE: Florida Power & Light Company

FACILITY: Turkey Point Nuclear Generating Unit Nos. 3 and 4

SUBJECT: SUMMARY OF PRE-APPLICATION MEETINGS WITH FLORIDA POWER AND LIGHT CONCERNING A PROPOSED DIGITAL INSTRUMENTATION AND CONTROL UPGRADE ON TURKEY POINT UNIT NOS. 3 AND 4 (EPID L-2021-LRM-0007)

On February 18 and April 8, 2021, partially closed observation public meetings were held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of Florida Power & Light Company (the licensee) via teleconference. The purpose of the partially closed meetings was to discuss the licensing process proposed for the Turkey Point Nuclear Generating Unit Nos. 3 and 4 digital instrumentation and control (DI&C) license amendment request. The meeting notices and agendas, dated February 4 and March 25, 2021, are available in the Agencywide Documents Access and Management System (ADAMS) at Accession Nos. ML21035A141 and ML21088A014. A list of attendees is provided as Enclosure 1.

The licensee presented information for both meetings which are available in ADAMS. The slides for the public portion of the meetings can be found under ADAMS Accession Nos. ML21047A210, ML21096A061, and ML21096A077).

FEBRUARY 18, 2021

The licensee provided an update regarding the intent to submit a licensing amendment request for a digital upgrade on two vertical panels in the control room for Turkey Point Units 3 and 4, using the Tricon Platform approved by the NRC in a safety evaluation dated April 12, 2012 (ADAMS Accession No. ML120900890). The focus for this meeting was in the areas proposed architecture for the system (including the diversity and defense-in-depth (D3) analyses), details regarding the Vendor Oversight Plan (VOP), and the various follow-up items from the December 9, 2020 meeting.

The licensee provided an update on ongoing design lifecycle activities and discussed the proposed quality assurance (QA) program elements related to the DI&C upgrade. The staff questioned the pedigree of the QA program that the licensee intended to use given that one being applied was not approved as part of the Triconex topical report approval. The licensee indicated that a gap was identified and an audit would be performed to evaluate any differences. The licensee affirmed that QA related activities would be conducted consistent with Framatome's QA program.

Lessons-learned from the NRC's DI&C Workshop were discussed. The NRC clarified that Inspection Procedure 35017, "Quality Assurance Implementation Inspection" (ADAMS Accession No. ML20259A220) will be better integrated into the Reactor Oversight Program under Inspection Manual Chapter 2515, "Light Water Reactor Inspection Program Operations Phase," but would not be part of baseline inspection activities.

Additional discussions during the meeting covered assumptions related to the D3 analyses, describing the engineered safety features actuation system (ESFAS) architecture, the safety/non-safety system interface, the scope of the Triconex approval, ongoing review activities concerning operator manual actions, and aspects related to environmental qualification testing and summary activities.

It was discussed that the scope of the proposed technical specification surveillance reduction change and the use of diagnostics be discussed at a future pre-submittal meeting.

#### APRIL 8, 2021

The April 8, 2021, pre-submittal meeting focused on architecture for the system, the human factors engineering (HFE) design elements, cyber-security, and an on ongoing design lifecycle activities. During the open session the licensee addressed the proposed intent and content of the VOP and the associated procedures involved. The NRC staff commented regarding the need for a discussion of the criteria for NextEra's acceptance of procedures associated with the digital modification and demonstration of a clear tie of that acceptance to the procedure and whether an audit was/will be conducted of that procedure. Additionally, the NRC staff provided administrative lessons-learned from other recent reviews. This included a discussion of editorial format issues (i.e., numbering, subsections, common terminology etc...) associated with the VOP that would facilitate an easier review and documentation of the NRC staff's findings. The NRC staff also suggested that clear attribution of the responsible company/organization performing each development activity would support a more efficient review.

In the closed session, the scope of the NRC's approval of the Tricon topical report was discussed. The NRC staff commented on various components and programs that were not approved and recommended the submittal of detailed information to support more effective NRC review activities. During the HFE discussion, the licensee outlined the implementation plans regarding validation and verification activities. The NRC staff had questions regarding the schedule of the implementation activities and the multidisciplinary team assigned. The discussion also included current cybersecurity design requirements applicable to Turkey Point and the licensee's proposed cybersecurity elements for the proposed modification.

The licensee addressed the proposed technical specification (TS) changes that will likely be included with the proposed request. There was a discussion about the expected involvement with various automated indications proposed. Additional discussion was held regarding the applicability of precedent reviews that the licensee intended to credit in support of the human-system interface activities.

The licensee discussed changes to the lifecycle design schedule from the last meeting. The NRC staff indicated concern with the ability to support the revised schedule in part due to the change in schedule for certain lifecycle design activities. The NRC staff discussed that the unavailability of some design information along with the change in the NRC staff's access to

various design activities combined with the expanded scope of the proposed change may provide a challenge to the ability of the NRC staff to meet the requested date. It was discussed that an overview of the proposed submittal, a discussion of those items considered beyond the scope of the Tricon topical report approval, a discussion of the simulator training plan and schedule, as well as additional discussions regarding the scope of the VOP and VOP summary document be included at the next pre-submittal meeting.

One member of the public was in attendance during the open session. No Public Meeting Feedback forms or comments were received.

Please direct any inquiries to me at 301-415-2315, or [Eva.Brown@nrc.gov](mailto:Eva.Brown@nrc.gov).

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Plant Licensing Branch II-2  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos.: 50-250 and 50-251

Enclosure:  
List of Attendees

cc w/enclosure: Listserv

SUBJECT: SUMMARY OF PRE-APPLICATION MEETINGS WITH FLORIDA POWER AND LIGHT CONCERNING A PROPOSED DIGITAL INSTRUMENTATION AND CONTROL UPGRADE ON TURKEY POINT UNITS 3 AND 4 (EPID L-2021-LRM-0007) DATE: AUGUST 2, 2021

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**ADAMS Accession Nos.: ML21190A186**

**\* via e-mail**

OFFICE	LPL2-2/PM	LPL2-2/LA	LPL2-2/BC
NAME	EBrown	RButler	DWrona
DATE	7/9/2021	7/14/2021	8/2/2021

**OFFICIAL RECORD COPY**

PARTICIPANT LIST FOR PRE-APPLICATION MEETING WITH  
NEXTERA-FLORIDA POWER AND LIGHT  
TO DISCUSS PENDING SUBMITTALS  
RELATED TO DIGITAL INSTRUMENTATION AND CONTROLS AND  
FEBRUARY 18 AND APRIL 8, 2021

Nuclear Regulatory Commission

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Aaron Armstrong\*  
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NextEra-FPL

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Framatome

Ron Legrand  
Ted Quinn  
Jerry Mauck  
Ron Jarrett  
Rick Turk  
Bill Hannaman  
Brian Haynes  
Michael Howard\*  
John Hefler\*

\* February 18th only

\*\* April 8th only

Enclosure