

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

September 25, 2023

Mr. Bob Coffey
Executive Vice President, Nuclear
and Chief Nuclear Officer
Florida Power & Light Company
700 Universe Blvd.
Mail Stop: EX/JB
Juno Beach, FL 33408

SUBJECT: TURKEY POINT NUCLEAR GENERATING UNIT NOS. 3 AND 4 -

REGULATORY AUDIT SUMMARY FOR THE REVIEW OF LICENSE

AMENDMENT REQUEST TO REVISE THE FIRE PROTECTION PROGRAM IN SUPPORT OF REACTOR COOLANT PUMP SEAL REPLACEMENT PROJECT

(EPID L-2022-LLA-0128)

Dear Mr. Coffey:

By application dated August 26, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22243A161), Florida Power & Light Company (FPL, the licensee) submitted a license amendment request (LAR) for the Turkey Point Nuclear Generating Unit Nos. 3 and 4.

The proposed LAR will revise the operating license, paragraph 3.D, Fire Protection, for fire protection program changes that may be made without prior U.S. Nuclear Regulatory Commission (NRC) approval. One of the criteria for such a change is that the risk increase resulting from the change is less than 1x10-7/year (yr) for CDF [core damage frequency] and less than 1 x 10-8/yr for LERF [large early release frequency]. The change is to support replacement of the currently installed reactor coolant pump (RCP) seals with the Framatome RCP hydrostatic seal package equipped with the Passive Shutdown Seal.

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The NRC staff reviewed FPL's LAR and determined that a regulatory audit would assist in the timely completion of the LAR review. The NRC staff conducted a regulatory audit that consisted of a remote audit from March 9 to June 29, 2023. The audit plan was provided to Mr. Jarrett Mack of your staff by email dated January 5, 2023 (ML23006A026). The audit plan included a list of items to be provided on an electronic portal. The staff reviewed these documents and held discussions with members of FPL on the LAR relevant to the NRC staff's review. The results of the regulatory audit were used by the NRC staff to finalize requests for additional information, which were issued by email dated May 5, 2023 (ML23129A832), and August 14, 2023 (ML23226A075). The audit summary for the audit is enclosed.

Sincerely,

## /RA/

Michael Mahoney, Project Manager Plant Licensing Branch II-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosure: Audit Summary

cc: Listserv

#### REGULATORY AUDIT SUMMARY

### REGARDING LICENSE AMENDMENT REQUEST TO

#### REVISE THE FIRE PROTECTION PROGRAM IN SUPPORT OF

#### REACTOR COOLANT PUMP SEAL REPLACEMENT PROJECT

FLORIDA POWER & LIGHT COMPANY

TURKEY POINT NUCLEAR GENERATING UNIT NOS. 3 AND 4

DOCKET NOS. 50-250 AND 50-251

EPID NO. L-2022-LLA-0128

#### 1.0 BACKGROUND

The regulatory audit is a planned license or regulation-related activity that includes the examination and evaluation of primarily non-docketed information. The regulatory audit is conducted with the intent to gain understanding, to verify information, and/or to identify information that will require docketing to support the basis of a licensing or regulatory decision. Performing a regulatory audit of a licensee's information is expected to assist the U.S. Nuclear Regulatory Commission (NRC) staff in efficiently conducting its review or gain insights on the licensee's processes or procedures. Information that the NRC staff relies upon to make the safety determination must be submitted on the docket. However, the NRC staff may review supporting information retained as records under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.71, "Maintenance of records, making of reports," and/or 10 CFR 54.37, "Additional records and recordkeeping requirements," which, although not required to be submitted as part of the licensing action, would help the staff better understand the licensee's submitted information.

By application dated August 26, 2022 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22243A161), Florida Power & Light Company (FPL, the licensee) submitted a license amendment request (LAR) for the Turkey Point Nuclear Generating Unit Nos. 3 and 4 (Turkey Point).

The proposed LAR will revise the operating license, paragraph 3.D, Fire Protection, for fire protection program changes that may be made without prior NRC approval. One of the criteria for such a change is that the risk increase resulting from the change is less than 1x10-7/year (yr) for CDF [core damage frequency] and less than 1 x 10-8/yr for LERF [large early release frequency]. The change is to support replacement of the currently installed reactor coolant pump (RCP) seals with the Framatome RCP hydrostatic seal package equipped with the Passive Shutdown Seal.

An audit team consisting of NRC staff conducted a remote regulatory audit to support the review of the LAR from March 9 to June 29, 2023. The purpose of the audit was to gain an understanding of the information needed to support the NRC staff's licensing decision regarding the LAR and to develop requests for additional information (RAIs).

The information submitted in support of the LAR is under final review, and any additional information needed to support the LAR review will be formally requested by the NRC staff using the RAI process in accordance with the Office of Nuclear Reactor Regulation Office Instruction LIC–101, Revision 6, "License Amendment Review Procedures" (ML19248C539).

## 2.0 AUDIT ACTIVITIES AND OBSERVATIONS

The NRC audit team consisted of NRC staff. The list of attendees from the NRC, FPL, and FPL's contractors is provided in Section 4.0.

During the remote regulatory audit, the NRC audit team held an entrance meeting with FPL on March 9, 2023. During the remainder of the remote audit, the NRC audit team participated in technical discussions with FPL according to the audit plan dated January 5, 2023 (ML23006A026). The NRC audit team held an exit meeting with FPL on June 29, 2023, where the NRC staff provided a brief conclusion of the team's goals, objectives, and technical discussions. Section 5.0 contains a list of the documents audited by the NRC audit team.

## 3.0 RESULTS OF THE AUDIT

As a result of the remote regulatory audit, RAIs were issued to FPL on May 5, 2023 (ML23129A832) and August 14, 2023 (ML23226A075). FPL provided responses to the RAIs in supplements dated May 31, 2023 (ML23151A607), July 27, 2023 (ML23208A191), and August 25, 2023 (ML23240A153).

#### 4.0 <u>AUDIT PARTICIPANTS</u>

NRC	FPL	
Michael Mahoney	Jarrett Mack	
Charles Moulton	Keith Vincent	
Thinh Dinh	Maribel Valdez	
Ching Ng	James Totten	
Jeff Circle	Stetson Hindes	
Gurjendra Bedi	Jim Goodrich	
Thomas Scarbrough	Andy Ratchford (Jensen Hughes)	
Summer Sun	Usama Farradj (Jensen Hughes)	
Molly Keefe-Forsyth	Philip Opsal (Framatome)	
Nick Melly	Mark Ceraldi (Framatome)	
	Craig Schmiesing (Framatome)	
Ricky Paugh (Framatome)		
Gordy Salisbury (Framatome)		
	Jerry Tabat (Framatome)	
	Ahmed Abdelnabi (Framatome)	
	Annabelle Soete (Framatome)	

#### 5.0 LIST OF DOCUMENTS PROVIDED ON THE ELECTRONIC PORTAL

FPL provided the following supporting documents (e.g., analyses, calculations, reports, drawings, and procedures) on the NextEra Online Reference Portal during the audit.

- 38-9217970-002, "Passive Shutdown Seal (PSDS) for Reactor Coolant Pump Qualification of 8 Inch Model for 100A RCP Summary Report (US Unit)," Revision C.
- 38-9227792-000, "Passive Sealing Device for the shaft seal system of the 93D pumps of the 900 Mwe bearing Qualification Summary Note (lot N1) [translated]," Revision B.
- 38-9227846-000, "Passive Sealing Device for the shaft seal system of the 93D pumps of the 900 Mwe EDF bearing Speed of rotation of the shaft line during device activation phase (lot E1) [translated]," Revision C.
- 58-9217956-001, Revision D.
- 58-9346852-000, "Passive Shutdown Seal (PSDS) for Reactor Coolant Pump 8 inch model – High flow Test – Test Report," Revision A.
- 58-9350783-000, Revision A.
- EC 297082, "10 CFR 50.59 Evaluation Unit 4 RCP Seal Conversion," Revision 1.
- 38-9351816-000, "Applicability of Questions & Responses from NRC 2015 STP [South Texas Project] Audit (38-9348820-001) to PTN [Turkey Point]."
- 38-9348820-001, "Analysis of the RCP Seals behavior in ELAP [Extended Loss of (Alternating Current) AC Power] conditions."
- 38-9348850-000, "Analysis of RCP Seals Behavior in ELAP Conditions RCP Seals Leakage and Capability of O-Rings to Cope with ELAP Conditions," Revision B.
- 152-9348792-000, "Reactor Coolant Pump Seal and Seal Housing Procurement Specification for Turkey Point Units 3 and 4," dated August 12, 2020.
- Excerpts from 38-9351062-001, Revision A.
- 58-9346861-000, Revision A.
- 51-9351505-000, "Passive Shutdown Seal Evaluation of Failure to Actuate for Framatome RCP Seals," dated August 12, 2020.

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## ADAMS Accession No.: ML23249A241

OFFICE	NRR/DORL/LPL2-2/PM	NRR/DORL/LPL2-2/LA	NRR/DRA/APLB/BC
NAME	MMahoney	RButler (ABaxter/for)	JWhitman
DATE	9/6/2023	09/14/2023	09/18/2023
OFFICE	NRR/DEX/EMIB	NRR/DORL/LPL2-2/BC	NRR/DORL/LPL2-2/PM
NAME	SBailey	DWrona	MMahoney
DATE	09/19/2023	09/21/2023	09/25/2023

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