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

July 22, 2011

LICENSEE: Florida Power & Light Company

FACILITIES: Turkey Point, Units 3 and 4

SUBJECT: SUMMARY OF JUNE 23, 2011, PUBLIC MEETING WITH FLORIDA POWER & LIGHT COMPANY, ON TURKEY POINT, UNITS 3 AND 4 EXTENDED POWER UPRATE LICENSE AMENDMENT REQUEST (TAC NOS. ME4907 AND ME4908)

On June 23, 2011, a Category 1 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) staff and representatives of Florida Power & Light Company (FPL, the licensee) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss the extended power uprate (EPU) license amendment request (LAR) currently under review by the NRC staff. More specifically, the NRC and licensee discussed draft requests for additional information (RAIs) generated by the NRC technical staff to gain a common understanding of the questions. The draft RAIs discussed were generated by the Reactor Systems Branch (SRXB), Nuclear Performance and Code Review Branch (SNPB), Containment and Ventilation Branch (SCVB), and Mechanical and Civil Engineering Branch (EMCB). Once a common understanding of the RAIs is reached between the NRC staff and FPL, the RAIs will be issued formally and located in the Agencywide Documents Access and Management System (ADAMS). A list of attendees is provided as an Enclosure.

The licensee provided a PowerPoint presentation prior to the meeting to help facilitate the discussion (ADAMS Accession No. ML11178A068). Also, the licensee provided an outline of the new EPITOME analysis that is scheduled to be submitted by the end of July (ML11178A067). The licensee presented on its path forward for addressing each of the NRC staff's RAIs.

The first RAIs that were discussed were generated by the SRXB. The NRC reviewers summarized their questions and provided clarification to the licensee. The NRC reviewer asked a question regarding "Overpressure Protection During Power Operation" and the acceptance criteria specified in NUREG-0800. NUREG-0800 requires that the second safety-grade signal from the reactor protection system initiate the trip signal. In its October 21, 2010, EPU application, the licensee refers to the updated final safety analysis report (UFSAR), Chapter 14 loss-of-load analysis to demonstrate that adequate overpressure protection exists in the Turkey Point units. The NRC reviewer considers that the Turkey Point UFSAR, Chapter 14 analysis is inconsistent with NUREG-0800 since the UFSAR, Chapter 14 analysis is based upon the reactor tripping upon receipt of the first safety-grade signal. The NRC reviewer asked the licensee to provide an overpressure protection analysis that meets the acceptance criteria for pressurized-water reactors specified in NUREG-0800. During the meeting the licensee stated that Turkey Point was licensed before the issuance of NUREG-0800 and was not licensed to the second safety-grade criteria. The licensee continued by stating that there is acceptable margin

with the first safety-grade trip. The NRC reviewer revised its original question to have the licensee provide a quantitative discussion of margin with the first safety-grade trip before and after EPU conditions.

Similar to the question above, the SRXB reviewer asked a question regarding the "Chemical and Volume Control System Malfunction" for a boron dilution event. The SRXB reviewer stated that the licensee provided an analysis for a boron dilution event for Modes 1, 2, and 6, but not for Modes 3, 4, and 5 (hot standby, hot shutdown, and cold shutdown). The SRXB reviewer asked the licensee to provide an analysis for Modes 3, 4, and 5 as specified in NUREG-0800. Similar to the above, the licensee stated that the Turkey Point licensing basis does not cover boron dilution events for Modes 3, 4, and 5. The licensee continued by stating that Turkey Point was licensed before the issuance of NUREG-0800. Also, the licensee provided NRC generic communications for its basis for not completing an analysis for Modes 3, 4, and 5 for the boron dilution event. The generic communications referenced during the meeting are Generic Letter-85-05 and a memorandum from Stephen H. Hanauer, Director of the Division of Safety Technology, Nuclear Reactor Regulation (NRR) to Roger J. Matton, Director of the Division of Safety Integration, NRR. In summary, the generic communications concluded that the consequences are not severe enough to jeopardize the health and safety of the public and do not warrant backfitting requirements for boron dilution events at operating reactors. The SRXB reviewer stated that he would review these generic communications and set up a call at a later date to discuss a potential path forward. For the remainder of the SRXB questions, there was a common understanding of the questions between the licensee and the NRC. The licensee asked if the NRC staff was able to complete its confirmatory analysis of the RETRAN decks provided in letter dated June 21, 2011. The SRXB reviewer stated that the confirmatory analysis has not been completed yet but would let the licensee know if any RAIs are generated. The licensee offered the idea of performing an audit of the Westinghouse office located in Rockville, Maryland instead of RAIs due to timing. The NRC staff stated that they would indicate to the licensee if they plan on generating RAIs or performing an audit once the confirmatory analysis is complete.

The next discussion was on the Boric Acid Precipitation analysis input parameters provided by the licensee in a letter dated May 19, 2011. The SNPB reviewer generated questions regarding the assumptions the licensee used to perform the analysis (for example, the licensee assumed 100-percent condensation of the steam). The SNPB reviewer asked the licensee to verify or validate the assumption. Also, the reviewer performed a confirmatory analysis using the input parameters provided in the May 19, 2011, letter and generated different results from the licensee. More specifically, the NRC reviewer generated different results of the incipient boric acid precipitation without hot leg recirculation after a loss-of-coolant accident, approximately 5-hours as opposed to the 6-hours generated by the licensee. The SNPB reviewer requested to see the complete Westinghouse analysis report but the licensee did not have a readily available copy to provide to the NRC. At the conclusion of the discussion, the licensee suggested to set up an audit at the Westinghouse office located in Rockville, Maryland. The purpose of the audit is for the SNPB reviewer to view the complete Westinghouse analysis report to determine if any deviations are present between the methodologies used by Westinghouse and the NRC. The SNPB reviewer stated that he is available to perform the audit the second week of July 2011.

The next discussion was on the EPITOME analysis the licensee plans on submitting by the end of July 2011 due to an RAI issued by email dated April 1, 2011 (ML110950084, RAI SCVB-1.10). The licensee provided details of the new analysis and its path forward for

addressing the NRC staff's question. The licensee stated that one additional technical specification change will occur due to the new analysis. The change is to the operating containment pressure from 3 psig to 1 psig, which is more restrictive and provides more margin. The SCVB reviewer stated that the licensee's proposed path forward seems acceptable.

The last group of questions discussed were generated by the EMCB reviewer. The EMCB reviewer drafted RAIs requesting the licensee to provide a summary of the stresses, support qualification results, and margins for the spent fuel pool (SFP) supplemental heat exchanger and Normal Containment Cooler (NCC) units. The SFP heat exchanger is safety-related and the NCC units are nonsafety related components. The licensee stated that the information requested is not available at this time due to the design calculations not being complete and the modifications being performed under Title 10 of the *Code of Federal Regulations*, Section 50.59 (i.e., not needing prior NRC approval). Also, the licensee stated that the SFP supplemental heat exchangers are not needed for the implementation of the EPU. The licensee proposed to provide a commitment to provide a summary of the SFP supplemental heat exchanger design when available but emphasized that the NCC units are nonsafety related. The NRC staff stated that they would meet internally to discuss an acceptable path forward for the SFP cooling system modification and provide feedback to the licensee at a later date. Also, it was concluded that the draft RAI regarding the NCC units could be deleted due to the modification being nonsafety related.

Members of the public were in attendance. After the meeting, a member of the public asked questions via email ranging from understanding the purpose of the meeting to searching for all Turkey Point EPU related documents in ADAMS. Public Meeting Feedback forms were not received.

Please direct any inquiries to me at 301-415-5888, or Jason.Paige@nrc.gov.

Sincerely,

Jason Paige, 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: List of Attendees

cc w/encl: Distribution via ListServ

LIST OF ATTENDEES

June 23, 2011

MEETING WITH FLORIDA POWER & LIGHT COMPANY

EXTENDED POWER UPRATE LICENSE AMENDMENT REQUEST

U.S. Nuclear Regulatory Commission

D. Saenz
J. Paige
T. Orf
N. Karipineni
B. Lee
W. Wang
S. Miranda
L. Ward
J. Lehning
C. Basavaraju
A. Sallman
R. Lobel
W. Lyon
B. Parks
A. Tsirigotis
M. Khanna
W. Jessup

Florida Power & Light Co.

J. Hoffman
L. Abbott
C. O'Farrill
P. Tiemann
T. Abatellio

Westinghouse

K. Koller
S. Nguyen
R. Null
D. Crytzer
B. Oelrich
L. Mayhue
K. Shearer
B. Kellerman
A. Fisher
D. Williams
R. Morrison
T. Gerlowski, Jr.
M. Rudakewiz

Bechtel

P. Ferrari
R. Pate

Public

L. Otero

Enclosure

addressing the NRC staff's question. The licensee stated that one additional technical specification change will occur due to the new analysis. The change is to the operating containment pressure from 3 psig to 1 psig, which is more restrictive and provides more margin. The SCVB reviewer stated that the licensee's proposed path forward seems acceptable.

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/RA/

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

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DISTRIBUTION:

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LPL2-2 Branch Reading	NKaripineni, NRR	RidsNrrDeEmcb	BParks, NRR
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RidsNrrDorlLpl2-2 Resource	SBush-Goddard, EDO	RidsNrrDirsIhpb	ASallman, NRR
RidsNrrPMTurkey Point Resource	DSaenz, NRR	CBasavaraju, NRR	MKhanna, NRR
RidsNrrLABClayton Resource	SMiranda, NRR	WWang, ACRS	ATsirigotis, NRR
RidsOgcRp Resource	RPettis, NRR	RLobel, NRR	WJessup, NRR
RidsRgn2MailCenter Resource	RidsNrrDeEqvb	LWard, NRR	WLyon, NRR

ADAMS Accession No. PKG ML11195A170 NoticeML11160A048 Outline ML11178A067Handouts ML11178A068 Summary ML11195A152

OFFICE	DORL/LPL2-2 /PM	DORL/LPL2-2/LA	DORL/LPL2-2/BC	DORL/LPL2-2/PM
NAME	JPaige	BClayton	DBroaddus (TOrf for)	JPaige
DATE	7/20/11	7/20/11	7/22/11	7/22/11

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