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

April 28, 2015

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P.O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: ST. LUCIE PLANT, UNIT NOS. 1 AND 2 – AUDIT REPORT TO SUPPORT PROPOSED AMENDMENT TO TRANSITION TO THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805 FIRE PROTECTION LICENSING BASIS (TAC NOS. MF1373 AND MF1374)

Dear Mr. Nazar:

A review team, consisting of U.S. Nuclear Regulatory Commission (NRC) staff and contractors, participated in a regulatory audit of the St. Lucie Plant, Unit Nos. 1 and 2. The audit took place at Florida Power & Light Company (FPL) from November 18, 2013, to November 21, 2013. The regulatory audit supports the NRC staff's review of FPL's application for license amendment for St. Lucie Plant, Unit Nos. 1 and 2, to transition the plant's fire protection licensing basis to Title 10 of the *Code of Federal Regulations* Section 50.48(c), which endorses, with exceptions, the National Fire Protection Association Standard 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition.

Enclosed please find the NRC staff's audit report, documenting completion of the audit. The NRC staff's review of the subject application for amendment is still ongoing.

If you have any questions regarding this matter, please contact me at 301-415-1447 or Farideh.Saba@nrc.gov.

Sincerely,

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operator Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-335 and 50-389

Enclosure:
Audit Report

cc w/enclosure: Distribution via Listserv

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

AUDIT REPORT BY THE OFFICE OF NUCLEAR REACTOR REGULATION

FLORIDA POWER AND LIGHT COMPANY

ST. LUCIE PLANT, UNIT NOS. 1 AND 2

DOCKET NOS. 50-335 AND 50-389

PROPOSED AMENDMENT TO TRANSITION TO THE

NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805

DOCKET NOS. 50-335 AND 50 389

1.0 INTRODUCTION

A review team, consisting of U.S. Nuclear Regulatory Commission (NRC) staff and contractors from the Pacific Northwest National Laboratories (PNNL) and Southwest Research Institute (SwRI)/Center for Nuclear Waste Regulatory Analyses (CNWRA) participated in a regulatory audit of the Florida Power & Light Company (FPL, the licensee) St. Lucie Plant, Unit Nos. 1 and 2 (St. Lucie). The audit took place in NextEra Energy offices located in Juno Beach, Florida from November 18, 2013, to November 21, 2013. The regulatory audit supports the NRC staff's review of FPL's application for license amendment for St. Lucie to transition the plant's fire protection licensing basis to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.48(c), which endorses, with exceptions, the National Fire Protection Association (NFPA) Standard 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition.

2.0 AUDIT OBJECTIVE AND OUTLINE

The purpose of the audit was to gain an understanding of the information needed to support the NRC staff's technical review of the proposed license amendment and to develop requests for additional information (RAIs), as needed. The information submitted by FPL in support of St. Lucie's proposed license amendment is under final review, and any additional information needed to support the review will be formally requested by the NRC staff using the NRC RAI process.

The audit team consisted of nine NRC personnel, three PNNL personnel, and three SwRI/CNWRA personnel. Attachment 1 provides the schedule of activities during the audit. Attachment 2 lists audit participants from the NRC, PNNL, CNWRA, and the licensee.

Enclosure

The audit team held an entrance meeting on November 18, 2013, with FPL audit participants (see Attachment 4 for participant names). During the remainder of the audit, team members met in smaller groups according to the audit plan handed out to participants (included as Attachment 5 of this report, with minor editorial corrections). Technical discussions were focused on five major areas: fire protection engineering, safe shutdown/circuit analyses, fire probabilistic risk assessment, fire modeling, and programmatic review. Licensee personnel conducted plant walkdowns and presentations focusing on these technical areas.

Attachment 3 is a list of documents reviewed by the team.

The attendance lists for the entrance and exit meetings are provided as Attachments 4 and 6. At the conclusion of the audit, the NRC team participated in a summary exit meeting with St. Lucie staff and management on November 21, 2013. The NRC staff provided a short discussion of the team's goals, objectives, walkdowns, and technical discussions.

Attachments
1. Schedule of Activities
2. List of Audit Participants
3. List of Documents Reviewed
4. NRC NFPA 805 Audit Entrance Meeting Attendance
5. Audit Plan
6. NRC NFPA 805 Audit Exit Meeting Attendance

Principal Contributor: Leslie Fields

Date: April 28, 2015

Schedule of Activities

Monday, November 18, 2013

8:15 a.m. Audit arrival.

9:00 a.m. Audit entrance meeting. Plant overview discussions (plant overview presentations were completed the, established computer connections, and began technical reviews.

9:30 a.m. Virtual tour.

10:00 a.m. Technical discussions on fire probabilistic risk assessment (FPRA), fire modeling (FM), safe shutdown (SSD), and fire protection engineering (FPE) started.

12:30 p.m. Technical discussions continued on FPRA and FM in support of FPRA; National Fire Protection Association 805, Chapter 3. Started review of radioactive release, recovery actions, non-power operations, SSD, and nuclear safety capability assessment.

4:45 p.m. Licensee wrap-up meeting.

5:15 p.m. Adjourn.

Tuesday, November 19, 2013

8:00 a.m. Plant tour/walkdown.

10:00 a.m. Radiation absorbed dose (rad) release teleconference call.

1:00 p.m. Technical discussions.

3:00 p.m. Human reliability analysis presentation.

3:15 p.m. Request for additional information (RAI) presentation.

4:30 p.m. Licensee wrap-up.

Wednesday, November 20, 2013

8:00 a.m. Probabilistic risk assessment (PRA) and FM internal discussion.

8:30 a.m. Programmatic breakout, PRA breakout.

12:00 p.m. Breakouts and discussions continued.

4:30 p.m. Licensee wrap-up.

Attachment 1

Thursday, November 21, 2013

8:30 a.m. Final reviews and closeout discussions for programmatic, FPE, and rad release completed.

10:45 a.m. SSD - RAI discussion and closeout.

1:00 p.m. Afternoon remaining RAI closeouts.

1:00 p.m. PRA closeout discussion.

2:30 p.m. FM closeout discussion.

4:30 p.m. Exit meeting.

List of Audit Participants

U.S. Nuclear Regulatory Commission (NRC) Team

• Leslie Fields	NRC	Audit Team Leader
• Harrold Barrett	NRC	Safe Shutdown/Audit Technical Lead
• Hossein Hamzehee	NRC	Branch Chief
• Jay Robinson	NRC	Request for Additional Information Lead/ Programmatic
• Paul Lain	NRC	SSD, Fire Protection Engineering (FPE)
• Alayna Pearson	NRC	FPE
• Ray Gallucci	NRC	Fire Probabilistic Risk Assessment (FPRA)
• Naeem Iqbal	NRC	Fire Modeling (FM)
• Garrett Newman	NRC	FPRA Observer

Pacific Northwest National Laboratory (PNNL) Team

• Steve Short	PNNL	FPRA
• Robert Layton	PNNL	SSD, FPE
• William Ivans	PNNL	FPRA

Center for Nuclear Waste Regulatory Analyses (CNWRA) Team

• Marc Janssens	CNWRA	FM/Lead
• Kaushik Das	CNWRA	FM
• Robert Fosdick	CNWRA	Programmatic

St. Lucie Plant (St. Lucie) Response Team

• Vinny Rubano	Corporate	Project Engineering
• Anil Julka	Corporate	Probabilistic Risk Assessment (PRA) Manager
• Mahmoud Heiba	Corporate	PRA Engineer
• William A. Cross	Corporate	Fleet Licensing Manager
• Rob Regan	Corporate	Fleet Project Manager
• Alex Panagos	Corporate	Project Engineer (Contractor)
• Bob McDaniel	St. Lucie	Fire Protection Supervisor
• Roseann Conrad	St. Lucie	Fire Protection/FM/Rad Release
• Ken Frehafer	St. Lucie	Licensing Lead
• Mike Bladek	St. Lucie	Operations
• Liz Kleinsorg	Hughes Associates	Fire Protection
• Andy Ratchford	Hughes Associates	Fire Protection
• Rob Jackson	Hughes Associates	Fire Protection

• Sean Hunt	Hughes Associates	Fire Modeling
• Jeff Gromatzky	ENERCON	Safe Shutdown Analysis/Nuclear Safety Capability Assessment
• Bill Lamb	ERIN	PRA
• Ashton Williams	ERIN	PRA
• Kiang Zee	ERIN	PRA
• Usama Farradj	ERIN	PRA
• Brandon Jamar	Hughes	Project Manager

Industry Representatives (none)

List of Documents Reviewed

1. Fire Protection Training, Qualification, and Requalification (St. Lucie Plant) (0005729)
2. Fire Protection System Impairment (AP-0010239)
3. Fire Protection Plan (1800022)
4. Fire Protection Guidelines (0010434)
5. Records Management Program (RM-AA-100)
6. NFPA 805 Fire Protection to Define Safe and Stable for Use at St. Lucie Plant, Units 1 and 2 (PSL-FPER-11-012)
7. Unit 1 Tech Specs
8. Fire Protection Evaluation (PSP-FPER-11-006)
9. Unit 2 Essential Equipment List (2998-B-049)
10. Evaluation of Unit 1 Control Room Abandonment Times at the St. Lucie Plant (PSL_Unit1_MCR_Rev_0)
11. An Independent Review of Port St. Lucie PRA Against the Requirements of the ASME PRA Standard
12. Implementation of 10 CFR 50.65, the Maintenance Rule (ADM-17.08_021)
13. Maintenance Rule Program Administration (ER-AA-100-2002)
14. Corrective Action Program and Condition Reporting (PI-AA-01)
15. Report 0493060006.103, "St. Lucie, Units 1 and 2 Fire Probabilistic Risk Assessment Hot Gas Layer and Multi-Compartment Analysis," Revision 1, ERIN Engineering, Walnut Creek, CA 2013
16. Hughes Associates, "Evaluation of Unit 1 Control Room Abandonment Times at the St. Lucie Plant," Revision 0, Hughes Associates, Inc., Baltimore, MD, November 6, 2009
17. Hughes Associates, "Evaluation of Unit 2 Control Room Abandonment Times at the St. Lucie Plant," Revision 0, Hughes Associates, Inc., Baltimore, MD, November 6, 2009; N1-FSS-F003, Revision 1 (Multi-Compartment Analysis)
18. ML021410012, "St. Lucie Unit 1 Docket No. 50-335 FPL Response to Request for Additional Information for 10 CFR 50 Appendix R K1 Exemption Clarification/Request," Florida Power & Light Company, Jensen Beach, FL, May 15, 2002
19. Report 0027-0053-000-002, "Evaluation of Development and Timing of Hot Gas Layer Conditions in Selected PSL Fire Zones," Revision 0, Hughes Associates, Inc., Charlotte, NC, February 2013
20. Report 0027-0053-000-003, "Supplemental Generic Fire Modeling Treatments: Transient Fuel Package Ignition Source Characteristics," Revision 0, Hughes Associates, Inc., Charlotte, NC, February 2013
21. Report 0027-0053-000-002, "Evaluation of the Development and Timing of Hot Gas Layer Conditions for Fire Scenarios Involving Secondary Combustible Materials at PSL," Revision 0, Hughes Associates, Inc., Charlotte, NC, March 2013
22. Hughes Associates, "Generic Fire Modeling Treatments," Project Number 1SPH02902.030, Revision 0, January 15, 2008
23. Hughes Associates, "Supplemental Generic Fire Model Treatments: Closed Electrical Panels," Revision B, Baltimore, MD, October 11, 2011
24. Hughes Associates, "Supplemental Generic Fire Model Treatments: Hot Gas Layer Tables," Revision H, Baltimore, MD, August 10, 2012
25. "Expanding the Use of Generic Fire Model Treatments," Zucal, G.T., Voskull, J.L., Vanover, D.E., Hunt, S.

NRC NFPA 805 Audit Entrance Meeting Attendance

NFPA 805 Audit:	St. Lucie Plant Entrance Meeting
Date:	November 18, 2013
Time:	9:30 a.m.
U.S. Nuclear Regulatory Commission	
Leslie Fields Alex Klein Hossein Hamzehee Jay Robinson Harold Barrett Naeem Iqbal Alayna Pearson Ray Gallucci	
Pacific Northwest National Laboratories (NRC Contractors)	
Robert Layton Steve Short William Ivans	
Center for Nuclear Waste Regulatory Analyses (NRC Contractors)	
Marc Janssens Kaushik Das Robert Fosdick	Fire Modeling/Lead Fire Modeling Programmatic/Lead
Florida Power & Light Company (St. Lucie)	
Vinny Rubano Anil Julka Mahmoud Heiba William A. Cross Alex Panagos Roseann Conrad Ken Frehafer Andy Terezakis	
Hughes Associates Inc. (FPL Contractors)	
Liz Kleinsorg Andy Ratchford Rob Jackson Jeff Gromatzky Bill Lamb Ashton Williams Kiang Zee Usama Farradj Brandon Jamar	

Audit Plan

FLORIDA POWER & LIGHT COMPANY, ST LUCIE PLANT, UNITS 1 AND 2, REGULATORY AUDIT IN SUPPORT OF THE LICENSE AMENDMENT REQUEST TO IMPLEMENT THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805, "PERFORMANCE-BASED STANDARD FOR FIRE PROTECTION FOR LIGHT WATER REACTOR ELECTRIC GENERATING PLANTS," AS INCORPORATED INTO TITLE 10 OF THE *CODE OF FEDERAL REGULATIONS* PARAGRAPH 50.48(c)

DOCKET NOS. 50-335 AND 50-389

I. BACKGROUND

The Florida Power & Light Company, St. Lucie Plant, Units 1 and 2 (St. Lucie), has submitted a license amendment request (LAR) (Reference 1) to change its fire protection program to one based on the National Fire Protection Association (NFPA) Standard 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants," 2001 Edition, as incorporated into Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Section 50.48(c).

The U.S. Nuclear Regulatory Commission (NRC) staff's review of the LAR has commenced in accordance with the Office of Nuclear Reactor Regulation's (NRR) Office Instruction LIC-101, "License Amendment Review Procedures." The NRC staff has determined that a regulatory audit of the St. Lucie LAR should be conducted in accordance with the NRR Office Instruction LIC-111, "Regulatory Audits," for the staff to gain a better understanding of the licensee's calculations, proposed plant modifications, and other aspects of the LAR.

A regulatory audit is a planned license or regulation-related activity that includes the examination and evaluation of primarily non-docketed information. A regulatory audit is conducted with the intent to gain understanding, verify information, and/or identify information that will require docketing to support the basis of the licensing or regulatory decision. Performing a regulatory audit of licensee information is expected to assist the 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, there may be supporting information retained as records under 10 CFR 50.71 and/or 10 CFR 54.37 that, although not required to be submitted as part of the licensing action, would help the staff better understand the licensee's submitted information.

The objectives of this regulatory audit are to:

- Gain a better understanding of the detailed calculations, analyses, and bases underlying the NFPA 805 LAR and confirm the staff's understanding of the LAR.

- Identify further information that is necessary for the licensee to submit for the staff to reach a licensing or regulatory decision. This will result in requests for additional information (RAIs).

- Verify that the licensee's planned process for self-approval of fire protection program (FPP) changes will meet the proposed NFPA 805 license condition and quality requirements.

- Establish an understanding of proposed plant modifications necessary to implement NFPA 805.

- Verify the implementation of processes or procedures that the licensee committed to as part of NFPA 805 implementation.

II. REGULATORY AUDIT BASIS

The basis of this audit is the licensee's LAR (Reference 1) and the Standard Review Plan Section 9.5.1.2, "Risk-Informed, Performance-Based (RI/PB) Fire Protection" (Reference 2). References 3 through 7 provide additional information that will be used to support the audit.

III. REGULATORY AUDIT SCOPE OR METHOD

The team will review the licensee's NFPA 805 transition as proposed in the LAR. Key to this effort is the licensee's RI/PB FPP. The team will review the fundamental FPP elements and minimum design requirements. A sample of fire protection engineering evaluations may be selected for review. In addition, the team will review, as necessary, the regulatory basis, references, licensing actions, existing engineering equivalency evaluations, and issues that the licensee has deemed "previously approved."

The scope of the review of nuclear safety performance criteria may include both at-power and non-power operational modes, and may require a sample of procedures and other documentation. The compliance by fire area review will, as necessary, include multiple spurious operations, the transition of operator manual actions to recovery actions (RAs), fire protection engineering evaluations, and NFPA 805 deterministic requirements. The team may also include alternatives to compliance with NFPA 805, if any are identified.

The team may review a sample of fire risk assessments and plant change evaluations for one or more fire areas, the evaluation of the additional risk of RAs, the licensee's process for self-approving post-transition FPP changes, cumulative risk and combined changes, as well as uncertainty and sensitivity analyses. The review may also include licensee risk-informed evaluations to ensure that defense-in-depth and safety margins have been evaluated.

The team will also review the licensee's assessment of the technical adequacy of the probabilistic risk assessment (PRA) model used for any risk evaluations required to transition to an RI/PB FPP, including resolution of peer review findings and licensee self-assessments. This effort may include auditing a sample of logic models and calculations in the fire PRA (FPRA) model, as well as the internal events PRA model. The review will include, as necessary, the

licensee's process that has or will be implemented to maintain the quality of the internal events PRA and FPRA models to support self-approval of risk-informed change evaluation after transition is completed.

The scope may also include the licensee's NFPA 805 monitoring program, which is to establish and monitor acceptable levels of availability, reliability, and performance of fire protection systems and features relied upon for NFPA 805 compliance.

The scope may also include, as appropriate, selected plant modifications to confirm they have been appropriately characterized in the LAR. The team may review the process for controlling compensatory measures to confirm their adequacy while they remain in effect until the modifications are completed.

In addition, the audit team may review program documentation, configuration control, and the FPP quality assurance program. The FPP design basis document may be reviewed, as well as other documentation of fire hazards identification and nuclear safety capability assessments. The review may include configuration control of the FPP design basis document, the FPRA methods and model, and other relevant documentation as necessary. The team may also review the FPP quality assurance program, sample fire models, and fire model calculations. Plant walkdowns may be performed, as necessary, to observe features of the licensee's FPP and design elements of buildings within the power block.

IV. INFORMATION AND OTHER MATERIAL NECESSARY FOR THE AUDIT

The NRC audit team will require access to licensee personnel knowledgeable on the technical aspects of the St. Lucie NFPA 805 LAR. At a minimum, a hard copy and electronic copy of the following documentation should be available to the audit team:

- Calculation models and supporting documentation for PRA models used in support of the LAR, including peer review history and resolution of peer review significant findings;
- Calculation models and supporting documentation for fire models used in support of the LAR;
- Procedures that have been modified or developed to transition to the NFPA 805 licensing basis;
- Procedures that have been modified or developed to maintain the NFPA 805 licensing basis after transition is completed;
- Documentation of changes made to PRA models in support of change analysis;
- Documentation about PRA configuration control and procedures to support self-approval of risk-informed plant changes after transition;
- Documentation of plant modifications or operational changes identified, screened, and considered (or planned for) during the licensee's transition to NFPA 805;

- Calculations and evaluations used to transition to NFPA 805, such as plant change evaluations, engineering equivalency evaluations, and risk assessment evaluations; and

- Other documents that the licensee deems necessary to support the NRC staff's audit team as outlined under audit activities.

V. TEAM ASSIGNMENTS

The audit will be conducted by NRC staff from the Office of Nuclear Reactor Regulation (NRR). Division of Risk Assessment, Fire Protection Branch and the PRA Licensing Branch staff knowledgeable in PRA, safe shutdown and circuit analysis, and fire protection engineering, will comprise the audit team. Contractors from the Pacific Northwest National Laboratories and the Center for Nuclear Waste Regulatory Analysis may be utilized to augment the technical audit team members. NRC staff from other organizations may be assigned to the team, as appropriate, and others may participate as observers. Observers at the audit may include NRR program managers and various regional inspectors.

The NRC audit team leader will be Leslie Fields and the NRC technical lead will be Paul Lain. The team leader will conduct daily briefings on the status of the review and coordinate audit activities while on site. The tables below show (1) audit milestones and schedule, and (2) planned audit team composition and their assigned areas for review during the audit.

Audit Milestones and Schedule		
Activity	Timeframe	Comments
Technical Presentations via GoTo Meetings	10/1/13 - 10/3/13	NRC will host GoTo meeting sessions for up to 3 days, as needed, the week prior to the audit. Licensee is requested to provide overview presentations with site-specific information.
Onsite Audit Kick-Off Meeting	10/7/13	NRC will conduct a brief introduction and scope of the audit. Licensee will provide NFPA 805 LAR overview presentations with important site-specific information.
Onsite Escorted Tour	10/8/13	Tours of risk significant power block areas. Second day, if needed.
End of Day Summary Briefing	10/7/13 - 10/11/13	Meet with licensee to provide a summary of any significant findings and requests for additional assistance.
Provide Break-out Areas	10/7/13 - 10/11/13	Facilitate discussion between site and staff technical areas.
Onsite Audit Exit Meeting	10/11/13	NRC staff will hold a short exit meeting with licensee staff to cover audit success.
Audit Summary (see VIII)	11/15/13	Document the audit.

Regulatory Audit Team and Assignments			
Standard Review Plan 9.5.1.2 Section	Audit Plan Review Areas	Lead	Support
III.1.2	Modifications	Team	Team
III.1.3	Licensee self-approval	J. Robinson	R. Fosdick
III.2	Fundamental FPP and design elements	A. Pearson	R. Layton
III.3.1.2	Multiple spurious operation	G. Cooper	R. Layton
III.3.2	Engineering evaluations, previous approval	Team	Team
III.3.2.2	Operations guidance for fire modeling PB method	N. Iqbal	M. Janssens, K. Das
III.3.2.2	Recovery actions	Team	Team
III.3.3	Non-power operation	P. Lain	R. Layton
III.5.3-5.6	Risk assessments	R. Gallucci	S. Short, W. Ivans
III.5.1	PRA technical adequacy	R. Gallucci	S. Short, W. Ivans
III.5.2	DID and safety margins	Team	Team
III.6	Monitoring program	J. Robinson	R. Fosdick
III.7.1-7.3	Documentation, configuration control, quality	J. Robinson	R. Fosdick
	Plant walkdowns	As needed	As needed

VI. LOGISTICS

This regulatory audit is planned for the week of October 7, 2013, and will last approximately 5 days. We will reserve a few days the week before (October 1 - 3, 2013), to review technical presentations and general topics that can be conducted via GoTo Meeting. These dates are subject to change based on mutual agreement between the licensee and the NRC. An entrance meeting for this audit will be held on the first day at 9:30 a.m., and an exit meeting will be held the final audit day at 8:00 a.m. to provide preliminary feedback to the licensee. The NRC audit leader will provide daily progress to licensee personnel on the second, third, and fourth days of the audit.

The audit will take place at a location agreed upon by the licensee and NRC audit leader where (1) the necessary reference material, and (2) appropriate analysts will be available to support the review. Because the audit scope includes NRC staff walkdowns of selected fire areas in the power block, the regulatory audit must be conducted in a location that allows for travel to the plant's protected area for escorted access.

VII. SPECIAL REQUESTS

The regulatory audit team will require the following to support the regulatory audit:

- Escorted access to fire areas within the protected area.
- Two printers and six computers with internet access, access to the site portal, and printing capability. Wired or wireless internet access.

- Private conference room(s) (preferably outside the protected area) to support document review, breakout sessions, and audit team meetings.

- Access to the FPP documentation, including but not limited to, plant drawings depicting fire area boundaries, the fire hazards analysis, safe shutdown analysis, and the internal events PRA and FPRA.

- Access to licensee personnel knowledgeable in the FPP, fire modeling, safe shutdown and circuit analysis, FPRA and internal events PRA, non-power operations, radiological release analysis, and the NFPA 805 fire protection design-basis document.

VIII. DELIVERABLES

A regulatory audit summary will be issued within approximately 30 days of the completion of the audit. The summary will use the guidance of NRR Office Instruction LIC-111 for content. Since this audit will likely result in formal RAIs for the licensee regarding the LAR, the summary itself is expected to be an internal memorandum from the audit team leader to the responsible supervisors. The audit summary will be placed in the Agencywide Documents Access and Management System (ADAMS).

IX. REFERENCES

1. Letter from Joseph Jensen, Florida Power & Light Company, St. Lucie Plant, Units 1 and 2, to U.S. Nuclear Regulatory Commission, "Transition to 10 CFR 50.48(c) – NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition)," March 22, 2013 (ADAMS Accession No. ML13088A173).

2. U.S. NRC, Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants, NUREG-0800, Section 9.5.1.2, "Risk-Informed, Performance-Based Fire Protection Program" (ADAMS Accession No. ML092590527).

3. Title 10 of the *Code of Federal Regulations*, Part 50, Section 48 (10 CFR 50.48), "Fire Protection."

4. NFPA 805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Stations," 2001 Edition.

5. Regulatory Guide 1.205, Revision 1, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants," December 2009 (ADAMS Accession No. ML092730314).

6. Nuclear Energy Institute, NEI 04-02, "Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program Under 10 CFR 50.48(c)," Revision 2, April 2008 (ADAMS Accession No. ML081130188).

7. Nuclear Energy Institute, NEI 00-01, Guidance for Post-Fire Safe Shutdown Circuit Analysis, Revision 2, June 5, 2009 (ADAMS Accession No. ML091770265).

NRC NFPA 805 Audit Exit Meeting Attendance

NFPA 805 Audit:	St. Lucie Plant Entrance Meeting
Date:	November 21, 2013
Time:	4:00 p.m.

U.S. Nuclear Regulatory Commission	
Leslie Fields	
Alex Klein	
Hossein Hamzehee	
Jay Robinson	
Harold Barrett	
Naeem Iqbal	
Alayna Pearson	
Ray Gallucci	
Pacific Northwest National Laboratories (NRC Contractors)	
Robert Layton	
Steve Short	
William Ivans	
Center for Nuclear Waste Regulatory Analyses (NRC Contractors)	
Marc Janssens	Fire Modeling/Lead
Kaushik Das	Fire Modeling
Robert Fosdick	Programmatic/Lead
Florida Power & Light Company (St. Lucie)	
Vinny Rubano	
Anil Julka	
Mahmoud Heiba	
William A. Cross	
Alex Panagos	
Roseann Conrad	
Ken Frehafer	
Andy Terezakis	
Don Grissette	
Hughes Associates Inc. (FPL Contractors)	
Liz Kleinsorg	
Andy Ratchford	
Rob Jackson	
Jeff Gromatzky	
Bill Lamb	
Ashton Williams	
Kiang Zee	
Usama Farradj	
Brandon Jamar	

April 28, 2015

Mr. Mano Nazar
President and Chief Nuclear Officer
Nuclear Division
NextEra Energy
P.O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: ST. LUCIE PLANT, UNIT NOS. 1 AND 2 – AUDIT REPORT TO SUPPORT PROPOSED AMENDMENT TO TRANSITION TO THE NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 805 FIRE PROTECTION LICENSING BASIS (TAC NOS. MF1373 AND MF1374)

Dear Mr. Nazar:

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Enclosed please find the NRC staff's audit report, documenting completion of the audit. The NRC staff's review of the subject application for amendment is still ongoing.

If you have any questions regarding this matter, please contact me at 301-415-1447 or Farideh.Saba@nrc.gov.

Sincerely,

/RA by PTam for/
Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operator Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-335 and 50-389

Enclosure:
Audit Report

cc w/enclosure: Distribution via Listserv

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RidsOgcMailCenter			

ADAMS Accession No.: ML15086A054 *by memo

OFFICE	LPL4-1/PM	LPL2-2/PM	LPL2-2/LAiT	LPL2-2/LA	DRA/AFPB/BC*	DRA/APLA/BC*	LPL2-2/BC	LPL2-2/PM
NAME	PTam	FSaba	LRonewicz	BClayton	AKlein	HHamzehee	SHelton	FSaba (PTam for)
DATE	3/27/15	4/7/15	3/31/15	3/31/15	3/6/15	3/16/15	4/24/15	4/28/15

OFFICIAL RECORD COPY