



FPL

Enclosures 3 and 4 contain ~~Security Related Information~~  
~~Withhold Under 10 CFR 2.390~~. Upon removal of Enclosures 3 and 4,  
This document is decontrolled.

MAY 02 2017

L-2017-058  
10 CFR 50.90

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D.C. 20555-0001

Re: St. Lucie Units 1 and 2  
Renewed Facility Operating License Nos. DPR-67 and NPF-16  
Docket Nos. 50-335 and 50-389

Proposed License Amendment  
License Amendment Request to Revise the National Fire Protection  
Association Standard 805 Modifications

References:

1. NRC letter to FPL dated March 31, 2016: St. Lucie Plant, Unit Nos. 1 and 2 - Issuance of Amendments Regarding Transition to a Risk-Informed, Performance-Based Fire Protection Program in Accordance with Title 10 of the Code of Federal Regulations Section 50.48(c) (CAC Nos. MF1373 and MF1374) (ML15344A346)
2. FPL letter L-2013-099 dated March 22, 2013: Transition to 10 CFR 50.48(c) - NFPA 805 Performance-Based Standard for Fire Protection for Light Water Reactor Generating Plants (2001 Edition) (ML13088A173)
3. FPL letter L-2015-211 dated August 21, 2015: Response to Request for Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805 (ML15238B597)
4. NRC letter to NEI dated March 2, 2016: Recommended Content for License Amendment Requests that Seek Changes to License Conditions that were Established in Amendments to Adopt National Fire Protection Association Standard 805 but have yet to be Fully Implemented (ML16015A416)
5. FPL letter L-2015-251 dated October 22, 2015: Additional Information Regarding LAR for Transition to 10 CFR 50.48(c) - NFPA 805

In accordance with the provisions of 10 CFR 50.90, "Application for Amendment of License, Construction Permit, or Early Site Permit," Florida Power & Light Company (FPL) proposes to amend the Renewed Facility Operating Licenses (RFOL) listed above for St. Lucie Units 1 and 2. This license amendment request (LAR) requests Nuclear Regulatory Commission

ADD6  
NRR

(NRC) review and approval of revisions to the obligated NFPA-805 modifications that were previously approved by NRC in letter dated March 31, 2016 (Reference 1).

By letter dated March 22, 2013, FPL submitted a LAR for St. Lucie Units 1 and 2 (Reference 2). The LAR requested approval for adoption of a new fire protection licensing basis which complies with the requirements in 10 CFR 50.48(a) and (c) and the guidance in Revision 1 of Regulatory Guide (RG) 1.205, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants."

The original March 22, 2013, LAR submittal was supplemented by several responses to NRC requests for additional information (RAI). One of these RAI response letters was L-2015-211 dated August 21, 2015 (Reference 3) that provided the current revision to Attachment S, "Modification and Implementation Items," with Table S-1, "Plant Modifications Committed." The transition license conditions refer to L-2015-211 for the plant modifications that shall be implemented to complete the transition to full compliance with 10 CFR 50.48(c).

Table S-1 describes modification to Unit 1 and Unit 2 DOST overflow lines that were proposed to establish compliance with specific sections of NFPA 30, "Flammable and Combustible Liquids Code." FPL has evaluated alternative modification options for the DOSTs with respect to NFPA 30 compliance. This LAR provides justification for a revision to the proposed modification of the Unit 2A and 2B DOST overflow lines and for not performing the proposed modification of the Unit 1A and 1B DOST overflow lines described in Table S-1 of Attachment S.

The proposed changes revise the Unit 1 and Unit 2 Fire Protection Transition License Conditions to refer to a new Table S-1 provided by this LAR that supersedes the reference to Table S-1, "Plant Modifications Committed," in Attachment S, of L-2015-211, dated August 21, 2015.

This request follows Option A of the NRC guidance provided by letter to NEI (Reference 4). The streamlined approach of Option A is applicable since the obligated modifications that are being revised are compliance-based and not in the fire PRA. As such, the following information is provided in to this letter:

- i. A summary of all changes to the modifications  
Enclosure 1
- ii. A summary of all changes to the PRA models and explanation for each change  
There are no changes to the PRA models associated with this LAR.  
Supporting discussion is included within Enclosure 1.
- iii. New, updated versions in their entirety of: the License Condition (Attachment M), list of plant modifications (Table S-1) and the summarizing area wide change-in-risk result tables (Tables W-6 and W-7)  
Enclosure 2 to this letter provides the revision to Attachment M, License Condition Changes. The marked up and clean-typed pages of the RFOL are also included in Enclosure 2. Enclosures 3 and 4 to this letter provide

the revisions to Attachment S, "Modifications and Implementation Items."  
There are no changes to the PRA models associated with this LAR;  
therefore, the Attachment W tables W-6 and W-7 that were provided by L-  
2015-251 (Reference 5) are applicable to this LAR.

- iv. A statement that the defense-in-depth and safety margin evaluations associated with the original license amendment request (LAR) have been completed on the proposed changes

Enclosure 1

Enclosure 1 to this letter provides a summary of all changes to the modifications, the technical basis for the proposed changes, defense-in-depth statements, safety margin statements, significant hazards considerations and references. FPL has evaluated the proposed RFOL change and has determined that it does not involve a significant hazard as defined in 10 CFR 50.92. Enclosures 3 and 4 contain security-related information and should be withheld from public disclosure under 10 CFR 2.390.

Revised regulatory commitments are contained in this submittal. Once approved, the amendment will be implemented within 60 days from the date of issuance.

In accordance with 10 CFR 50.91(a)(1), "Notice for Public Comment," the analysis about the issue of no significant hazards consideration using the standards in 10 CFR 50.92 is being provided to the Commission in accordance with the distribution requirements in 10 CFR 50.4.

The Onsite Review Group has reviewed the proposed amendment. In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated official of the State of Florida.

If you should have any questions regarding this application, please contact Michael J Snyder, Licensing Manager, at 772-467-7036.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on **MAY 02 2017**

Respectfully submitted,



Daniel DeBoer  
Site Director  
St. Lucie Plant

DD/rcs

St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389

L-2017-058  
Page 4 of 4

Enclosures:

1. Summary of Proposed Changes
2. Attachment M, License Condition Changes
3. Markup pages of Attachment S
4. Attachment S, Table S-1, Plant Modifications Committed

cc: Ms. Cindy Becker, Florida Department of Health  
USNRC Regional Administrator, Region II  
USNRC Senior Resident Inspector, St. Lucie Units 1 and 2

## Enclosure 1

### Summary of Proposed Changes

#### Table of Contents

1. Background
2. Summary of All Changes to the Modifications
3. Technical Evaluation
4. Regulatory Evaluation
  - 4.1. Significant Hazards Consideration
  - 4.2. Applicable Regulatory Requirements / Criteria
  - 4.3. Conclusions
5. Environmental Consideration

## 1. Background

The original St Lucie NFPA 805 transition LAR (Reference 2) was supplemented by several responses to NRC requests for additional information (RAI). The RAI response, L-2015-211, dated August 21, 2015 (Reference 3) provided the current revision to Attachment S, "Modification and Implementation Items," with Table S-1, "Plant Modifications Committed." The transition license conditions refer to L-2015-211 for the plant modifications that shall be implemented to complete the transition to full compliance with 10 CFR 50.48(c).

Table S-1 describes modification to Unit 1 and Unit 2 DOST overflow lines that were proposed to establish compliance with specific sections of NFPA 30, Flammable and Combustible Liquids Code.

## 2. Summary of All Changes to the Modifications

The proposed amendment revises two of the obligated modifications described in L-2015-211, Table S-1 as follows:

### 2.1. Delete Unit 1 DOST Overflow Line Modification

Proposed Change: Delete the proposed modification of the Unit 1 DOST overflow lines described on page S-5 of Attachment S Table S-1, "Plant Modifications Committed," as:

Problem Statement:

The overflow vent lines are undersized per NFPA 30 - 1973 Edition.

Proposed Modification:

Modify Diesel Oil Storage Tank 1A and 1B Overflow Line Modification.

### 2.2. Revise the proposed modification for the Unit 2 DOST Overflow Lines

Proposed Change: Revise the proposed modification of the Unit 2 DOST overflow lines described on page S-5 of Attachment S Table S-1, "Plant Modifications Committed," as:

Problem Statement:

The overflow vent lines are undersized per NFPA 30 - 1973 Edition.

Proposed Modification:

Modify Diesel Oil Storage Tank 2A and 2B Overflow Line Modification.

FPL has evaluated alternative modification options for the Unit 2 DOSTs. This LAR proposes the following new wording for the Unit 2 DOST modification to comply with NFPA 30 section 2348:

**Problem Statement:**

The U2 DOST tanks are nonconforming with NFPA 30 Section 2348 due to not having a suitable device to prevent overflow.

**Solution Statement:**

An automatic shutoff valve will be implemented for use in conjunction with the U2 DOST fill skid.

All other modifications in Table S-1 have been completed or will be completed as previously committed. The markup pages of Attachment S are included in Enclosure 3. The new Attachment S, Table S-1, "Plant Modifications Committed," is included in Enclosure 4.

### 3. Technical Evaluation

#### 3.1. Basis for deleting the Unit 1 DOST overflow line modification:

This modification was originally proposed to establish compliance with section 2348 of NFPA 30, which applies to tanks storing Class I, Class II and Class IIIA liquids inside buildings. The Unit 1 DOSTs are outside and not located inside buildings. FPL has determined that the problem statement does not apply to the Unit 1 DOSTs, and modifications are not required to comply with section 2348 of NFPA 30, and the Diesel Oil Storage Tank 1A and 1B overflow lines are transitioning fully compliant "as-is."

#### 3.2. Basis for revising the proposed modification for the Unit 2 DOST overflow lines:

This modification was originally proposed to establish compliance with section 2348 of NFPA 30, which applies to tanks storing Class I, Class II and Class IIIA liquids inside buildings. Section 2348 requires that these tanks have a method to prevent overflow into the building. FPL has evaluated alternative modification options, and the revised Unit 2 DOST modification complies with NFPA 30 section 2348.

#### Risk Impact Discussion:

The obligated modifications that are being revised are compliance-based and not in the fire PRA. Therefore, the requested change to plant modifications does not involve a change in risk, a change to the PRA models or changes to accepted fire PRA methods

and approaches as summarized in the final safety evaluation accompanying the license amendment approving transition to NFPA 805.

Defense-in-Depth / Safety Margin Discussion:

The revised modifications described above comply with NFPA 30 section 2348. Revision of these modifications has no impact on any of the Defense-in-Depth echelons:

1. Prevent fires from starting.

Keeping the Unit 1 DOST overflow lines "as-is" has no impact on fire prevention. Adding an automatic shutoff valve to the Unit 2 DOST fill line has no impact on fire prevention.

2. Rapidly detect, control and extinguish promptly those fires that do occur thereby preventing fire damage.

Keeping the Unit 1 DOST overflow lines "as-is" has no impact on the ability to prevent fire damage. Adding an automatic shutoff valve to the Unit 2 DOST fill line has no impact on the ability to prevent fire damage.

3. Provide adequate level of fire protection for systems and structures so that a fire will not prevent essential safety functions from being performed.

Keeping the Unit 1 DOST overflow lines "as-is" has no impact on the performance of the essential safety functions of the Unit 1 DOST.

Adding an automatic shutoff valve to the Unit 2 DOST fill line has no impact on the performance of the essential safety functions of the Unit 2 DOST. The new valve will be on the outside of the building and only opened to fill the tank.

Adequate safety margins are maintained. The Unit 2 DOST modification will be completed to comply with section 2348 of NFPA 30. The Unit 1 DOST is compliant "as-is" with section 2348 of NFPA 30. This change does not impact any safety analysis acceptance criteria used in the licensing basis.



#### 4. Regulatory Evaluation

##### 4.1. Significant Hazards Consideration

FPL has evaluated the proposed changes to the RFOLs using the criteria in 10 CFR 50.92 and has determined that the proposed changes do not involve a significant hazards consideration. The information provided in this submittal does not impact the 10 CFR 50.92 evaluation of "No Significant Hazards Consideration" previously provided in FPL letter L-2013-099 (Reference 2) for the original NFPA 805 LAR.

Description of Amendment Request: The proposed changes revise the Unit 1 and Unit 2 Fire Protection Transition-License Conditions to refer to a new Table S-1 provided by this LAR that supersedes the reference to Table S-1, "Plant Modifications Committed," in Attachment S, of L-2015-211, dated August 21, 2015. The new Table S-1 revises the proposed modification of the Unit 2A and 2B DOST overflow lines and deletes the proposed modification of the Unit 1A and 1B DOST overflow lines described in Table S-1 of Attachment S.

Basis for no significant hazards consideration determination: The FPL analysis of no significant hazards consideration is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed changes are clarifications to methods applied to ensure compliance with NFPA 30, section 2348. The revised methods comply with NFPA 30, section 2348. This LAR is essentially an administrative change to revise the letter referenced by the Fire Protection Transition License Conditions. The actual design changes and any related procedural changes are being managed separately from this LAR per 10 CFR 50.59.

The proposed change does not adversely affect accident initiators or precursors nor alter the design assumptions, conditions, and configuration of the facility or the manner in which the plant is operated and maintained. The proposed changes do not adversely affect the ability of structures, systems and components (SSCs) to perform their intended safety function to mitigate the consequences of an initiating event within the assumed acceptance limits. The proposed change does not increase the probability or consequence of an accident.

Therefore, this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes are clarifications to methods applied to ensure compliance with NFPA 30, section 2348. The revised methods of compliance align with NFPA 30, section 2348, and will not result in new or different kinds of accidents. This LAR is essentially an administrative change to revise the letter referenced by the Fire Protection Transition License Conditions. The actual design changes and any related procedural changes are being managed separately from this LAR per 10 CFR 50.59.

The requirements in NFPA 30 address only fire protection. The impacts of fire effects on the plant have been evaluated. The proposed amendment does not involve new failure mechanisms or malfunctions that could initiate a new or different kind of accident beyond those already analyzed in the Unit 1 and Unit 2 UFSARs.

Therefore, this change does not create the possibility of a new or different kind of accident from an accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

Operation of Plant St. Lucie (PSL) in accordance with the proposed amendment does not involve a reduction in the margin of safety. The proposed amendment does not alter the manner in which safety limits, limiting safety system settings or limiting conditions for operation are determined. The safety analysis acceptance criteria are not affected by this change. The proposed amendment does not adversely affect existing plant safety margins or the reliability of equipment assumed to mitigate accidents in the UFSAR. The proposed amendment does not adversely affect the ability of SSCs to perform their design function. SSCs required to safely shut down the reactor and to maintain it in a safe shutdown condition remain capable of performing their design function.

Therefore, this change does not involve a significant reduction in a margin of safety.

Based upon the reasoning presented above, FPL concludes that the requested change involves no significant hazards consideration, as set forth in 10 CFR 50.92, Issuance of Amendment.

#### 4.2. Applicable Regulatory Requirements / Criteria

This letter, in its entirety, supports the continued transition of St. Lucie to NFPA-805, "Performance-Based Standard for Fire Protection for Light Water Reactor Electric Generating Plants, 2001 Edition," and complies with the requirements in fire protection regulation 10 CFR 50.48(a), 10 CFR 50.48(c), and the guidance in Regulatory Guide (RG) 1.205, "Risk-Informed Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants."

#### 4.3. Conclusions

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

### 5. Environmental Consideration

FPL has determined that the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluents that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

## **Enclosure 2**

### **Attachment M, License Condition Changes**

#### **Description of the Changes**

The proposed changes revise the Unit 1 and Unit 2 Fire Protection Transition License Conditions to refer to a new Table S-1 provided by this LAR that supersedes the reference to Table S-1, "Plant Modifications Committed," in Attachment S, of L-2015-211, dated August 21, 2015. This enclosure includes:

1. License Condition Changes
2. Marked Unit 1 License Condition
3. Marked Unit 2 License Condition
4. Clean retyped Unit 1 License Condition
5. Clean retyped Unit 2 License Condition

Replace the current PSL fire protection license conditions 3.E for Unit 1 and Unit 2 with the standard license condition based on Regulatory Position 3.1 of RG 1.205.

---

Florida Power & Light Company (FPL) St. Lucie Plant Unit 1[2] shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated March 22, 2013 as supplemented by letters dated June 14, 2013, February 24, 2014, March 25, 2014, April 25, 2014, July 14, 2014, August 27, 2014, September 10, 2014, October 10, 2014, March 10, 2015, April 1, 2015, April 20, 2015, May 12, 2015, August 21, 2015, and October 22, 2015, and April \_\_\_\_\_, 2017, and as approved in the safety evaluation (SE) dated March 31, 2016, and \_\_\_\_\_. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

#### **Risk-Informed Changes that May Be Made Without Prior NRC Approval**

A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods, and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk of the change may include methods that have been used in the peer-reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

- (a) Prior NRC review and approval is not required for changes that clearly result in a decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.
- (b) Prior NRC review and approval is not required for individual changes that result in a risk increase less than  $1 \times 10^{-7}$ /year (yr) for CDF and less than  $1 \times 10^{-8}$ /yr for LERF. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

**Other Changes that May Be Made Without Prior NRC Approval**

1. Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program.

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental fire protection program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. The licensee may use an engineering evaluation to demonstrate that a change to NFPA 805, Chapter 3 element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

The licensee may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3 elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard. The four specific sections of NFPA 805, Chapter 3, are as follows:

- "Fire Alarm and Detection Systems" (Section 3.8);
- "Automatic and Manual Water-Based Fire Suppression Systems" (Section 3.9);
- "Gaseous Fire Suppression Systems" (Section 3.10); and,
- "Passive Fire Protection Features" (Section 3.11)

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

2. Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as approved in the NRC SE dated March 31, 2016 to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection

defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

**Transition License Conditions**

- (1) Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) and (3) below, risk informed changes to Florida Power & Light Company fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in 2) above;
- (2) The licensee shall implement the modifications to its facility, as described in Table S-1 , "Plant Modifications Committed," Attachment S, of Florida Power & Light letter L-2015-211, dated August 21, 2015 L-2017-058, dated April 2017, to complete the transition to full compliance with 10 CFR 50.48(c) prior to startup of SL 1-28 (spring 2018) and SL2-24 (fall 2018) refueling outages after issuance of the SE. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications; and
- (3) The licensee shall implement the items listed in Attachment S, Table S-2, "Implementation Items," of FPL letter L-2015-211 dated August 21, 2015, with the exception of items 18 and 20, within 12 months after NRC approval unless that falls within a scheduled outage window, then in that case, completion will occur 60 days after startup from that scheduled outage. Implementation Item 18 is an exception because it is associated with modifications in Table S-1 and will be completed in accordance with Transition License Condition 2) above. Item 20 is also an exception because it is required to be completed prior to self-approval and will be completed prior to the startup of SL2-24 (fall 2018).

St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
NFPA 805 Modifications

L-2017-058  
Enclosure 2  
Attachment M  
Page 5 of 20

**Enclosure 2**

**Marked Unit 1 License Condition  
(3 Pages)**



applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

A. Maximum Power Level

FPL is authorized to operate the facility at steady state reactor core power levels not in excess of 3020 megawatts (thermal).

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 237 \_\_\_\_\_ are hereby incorporated in the renewed license. FPL shall operate the facility in accordance with the Technical Specifications.

Appendix B, the Environmental Protection Plan (Non-Radiological), contains environmental conditions of the renewed license. If significant detrimental effects or evidence of irreversible damage are detected by the monitoring programs required by Appendix B of this license, FPL will provide the Commission with an analysis of the problem and plan of action to be taken subject to Commission approval to eliminate or significantly reduce the detrimental effects or damage.

C. Updated Final Safety Analysis Report

The Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on March 28, 2003, describes certain future activities to be completed before the period of extended operation. FPL shall complete these activities no later than March 1, 2016, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on March 28, 2003, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71 (e)(4), following issuance of this renewed license. Until that update is complete, FPL may make changes to the programs described in such supplement without prior Commission approval, provided that FPL evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

D. Sustained Core Uncovery Actions

Procedural guidance shall be in place to instruct operators to implement actions that are designed to mitigate a small-break loss-of-coolant accident prior to a calculated time of sustained core uncovery.

E. Fire Protection

Florida Power & Light Company (FPL) St. Lucie Plant Unit 1 shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated March 22, 2013, as supplemented by letters dated June 14, 2013, February 24, 2014, March 25, 2014, April 25, 2014, July 14, 2014, August 27, 2014, September 10, 2014, October 10, 2014, March 10, 2015, April 1, 2015, April 20, 2015, May 12, 2015, August 21, 2015, and October 22, 2015, and April \_\_\_\_\_, 2017, and as approved in the safety evaluation report (SE) dated March 31, 2016, and \_\_\_\_\_. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

**Risk-Informed Changes that May Be Made Without Prior NRC Approval**

A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods, and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk of the change may include methods that have been used in the peer-reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

- (a) Prior NRC review and approval is not required for changes that clearly result in a decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.
- (b) Prior NRC review and approval is not required for individual changes that result in a risk increase less than  $1 \times 10^{-7}$ /year (yr) for CDF and less than  $1 \times 10^{-8}$ /yr for LERF. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

### Transition License Conditions

- (1) Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) and (3) below, risk informed changes to Florida Power & Light Company fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in 2) above;
- (2) The licensee shall implement the modifications to its facility, as described in Table S-1, "~~Plant Modifications Committed,~~" Attachment S, of Florida Power & Light letter ~~L-2015-211, dated August 21, 2015,~~ L-2017-058, dated April \_\_\_\_, 2017, to complete the transition to full compliance with 10 CFR 50.48(c) prior to startup of SL 1-28 (spring 2018) and SL2-24 (fall 2018) refueling outages after issuance of the SE. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications; and
- (3) The licensee shall implement the items listed in Attachment S, Table S-2, "Implementation Items," of FPL letter L-2015-211 dated August 21, 2015, with the exception of items 18 and 20, within 12 months after NRC approval unless that falls within a scheduled outage window, then in that case, completion will occur 60 days after startup from that scheduled outage. Implementation Item 18 is an exception because it is associated with modifications in Table S-1 and will be completed in accordance with Transition License Condition 2) above. Item 20 is also an exception because it is required to be completed prior to self-approval and will be completed prior to the startup of SL2-24 (fall 2018).

St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
NFPA 805 Modifications

L-2017-058  
Enclosure 2  
Attachment M  
Page 9 of 20

**Enclosure 2**

**Marked Unit 2 License Condition  
(3 Pages)**

|

neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;

- D. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FPL to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components; and
  - E. Pursuant to the Act and 10 CFR Parts 30, 40, and 70, FPL to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.
3. This renewed license shall be deemed to contain and is subject to the conditions specified in the following Commission's regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Section 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified below:

A. Maximum Power Level

FPL is authorized to operate the facility at steady state reactor core power levels not in excess of 3020 megawatts (thermal).

B. Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 487 \_\_\_\_\_ are hereby incorporated in the renewed license. FPL shall operate the facility in accordance with the Technical Specifications.

Appendix B, the Environmental Protection Plan (Non-Radiological), contains environmental conditions of the renewed license. If significant detrimental effects or evidence of irreversible damage are detected by the monitoring programs required by Appendix B of this license, FPL will provide the Commission with an analysis of the problem and plan of action to be taken subject to Commission approval to eliminate or significantly reduce the detrimental effects or damage.

C. Updated Final Safety Analysis Report

FPL's Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on March 28, 2003, describes certain future activities to be completed before the period of extended operation. FPL shall complete these activities no later than April 6, 2023, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on March 28, 2003, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71 (e)(4), following issuance of this renewed license. Until that update is complete, FPL may make changes to the programs described in such supplement without prior Commission approval, provided that FPL evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

D. Antitrust Conditions

FPL shall comply with the antitrust conditions in Appendices C and D to this renewed license.

E. Fire Protection

Florida Power & Light Company (FPL) St. Lucie Plant Unit 2 shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated March 22, 2013 as supplemented by letters dated June 14, 2013, February 24, 2014, March 25, 2014, April 25, 2014, July 14, 2014, August 27, 2014, September 10, 2014, October 10, 2014, March 10, 2015, April 1, 2015, April 20, 2015, May 12, 2015, August 21, 2015, and October 22, 2015, and April \_\_, 2017, and as approved in the safety evaluation (SE) dated March 31, 2016, and \_\_\_\_\_. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

arrangement, using a relevant technical requirement or standard. The four specific sections of NFPA 805, Chapter 3, are as follows:

- "Fire Alarm and Detection Systems" (Section 3.8);
- "Automatic and Manual Water-Based Fire Suppression Systems" (Section 3.9);
- "Gaseous Fire Suppression Systems" (Section 3.10); and,
- "Passive Fire Protection Features" (Section 3.11)

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

2. Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as approved in the NRC SE dated March 31, 2016 to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

**Transition License Conditions**

- (1) Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) and (3) below, risk informed changes to Florida Power & Light Company fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in 2) above;
- (2) The licensee shall implement the modifications to its facility, as described in Table S-1 "Plant Modifications Committed," Attachment S, of Florida Power & Light letter L-2015-211, dated August 21, 2015, L-2017-058, dated April, \_\_\_\_, 2017, to complete the transition to full compliance with 10 CFR 50.48(c) prior to startup of SL 1-28 (spring 2018) and SL2-24 (fall 2018) refueling outages after issuance of the SE. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications; and
- (3) The licensee shall implement the items listed in Attachment S, Table S-2, "Implementation Items," of FPL letter L-2015-211 dated August 21, 2015, with the exception of items 18 and 20, within 12 months after NRC approval unless that falls within a scheduled outage window, then in that case, completion will occur 60 days after startup from that scheduled outage. Implementation Item 18 is an exception because it is associated with modifications in Table S-1 and will be completed in accordance with Transition License Condition 2) above. Item 20 is also an exception because it is required to be completed prior to self-approval and will be completed prior to the startup of SL2-24 (fall 2018).

St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
NFPA 805 Modifications

L-2017-058  
Enclosure 2  
Attachment M  
Page 13 of 20

**Enclosure 2**

**Clean Retyped Unit 1 License Condition  
(3 Pages)**



E. Fire Protection

Florida Power & Light Company (FPL) St. Lucie Plant Unit 1 shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated March 22, 2013, as supplemented by letters dated June 14, 2013, February 24, 2014, March 25, 2014, April 25, 2014, July 14, 2014, August 27, 2014, September 10, 2014, October 10, 2014, March 10, 2015, April 1, 2015, April 20, 2015, May 12, 2015, August 21, 2015, October 22, 2015, and April \_\_\_\_\_, 2017, and as approved in the safety evaluation report (SE) dated March 31, 2016, and \_\_\_\_\_. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

**Risk-Informed Changes that May Be Made Without Prior NRC Approval**

A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods, and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk of the change may include methods that have been used in the peer-reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

- (a) Prior NRC review and approval is not required for changes that clearly result in a decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.
- (b) Prior NRC review and approval is not required for individual changes that result in a risk increase less than  $1 \times 10^{-7}$ /year (yr) for CDF and less than  $1 \times 10^{-8}$ /yr for LERF. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

### **Other Changes that May Be Made Without Prior NRC Approval**

1. Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program.

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental fire protection program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. The licensee may use an engineering evaluation to demonstrate that a change to NFPA 805, Chapter 3 element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

The licensee may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3 elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified, fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard. The four specific sections of NFPA 805, Chapter 3, are as follows:

- "Fire Alarm and Detection Systems" (Section 3.8);
- "Automatic and Manual Water-Based Fire Suppression Systems" (Section 3.9);
- "Gaseous Fire Suppression Systems" (Section 3.10); and,
- "Passive Fire Protection Features" (Section 3.11)

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

2. Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as approved in the NRC SE dated March 31, 2016 to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

### Transition License Conditions

- (1) Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) and (3) below, risk informed changes to Florida Power & Light Company fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in 2) above;
- (2) The licensee shall implement the modifications to its facility, as described in Table S-1 , "Plant Modifications Committed," Attachment S, of Florida Power & Light letter L-2017-058, dated April \_\_\_\_\_, 2017, to complete the transition to full compliance with 10 CFR 50.48(c) prior to startup of SL 1-28 (spring 2018) and SL2-24 (fall 2018) refueling outages after issuance of the SE. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications; and
- (3) The licensee shall implement the items listed in Attachment S , Table S-2, "Implementation Items," of FPL letter L-2015-211 dated August 21, 2015, with the exception of items 18 and 20, within 12 months after NRC approval unless that falls within a scheduled outage window, then in that case, completion will occur 60 days after startup from that scheduled outage. Implementation Item 18 is an exception because it is associated with modifications in Table S-1 and will be completed in accordance with Transition License Condition 2) above. Item 20 is also an exception because it is required to be completed prior to self-approval and will be completed prior to the startup of SL2-24 (fall 2018).

St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
NFPA 805 Modifications

L-2017-058  
Enclosure 2  
Attachment M  
Page 17 of 20

**Enclosure 2**

**Clean Retyped Unit 2 License Condition  
(3 Pages)**

Appendix B, the Environmental Protection Plan (Non-Radiological), contains environmental conditions of the renewed license. If significant detrimental effects or evidence of irreversible damage are detected by the monitoring programs required by Appendix B of this license, FPL will provide the Commission with an analysis of the problem and plan of action to be taken subject to Commission approval to eliminate or significantly reduce the detrimental effects or damage.

C. Updated Final Safety Analysis Report

FPL's Updated Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on March 28, 2003, describes certain future activities to be completed before the period of extended operation. FPL shall complete these activities no later than April 6, 2023, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement as revised on March 28, 2003, described above, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71 (e)(4), following issuance of this renewed license. Until that update is complete, FPL may make changes to the programs described in such supplement without prior Commission approval, provided that FPL evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

D. Antitrust Conditions

FPL shall comply with the antitrust conditions in Appendices C and D to this renewed license.

E. Fire Protection

Florida Power & Light Company (FPL) St. Lucie Plant Unit 2 shall implement and maintain in effect all provisions of the approved fire protection program that comply with 10 CFR 50.48(a) and 10 CFR 50.48(c), as specified in the licensee amendment request dated March 22, 2013 as supplemented by letters dated June 14, 2013, February 24, 2014, March 25, 2014, April 25, 2014, July 14, 2014, August 27, 2014, September 10, 2014, October 10, 2014, March 10, 2015, April 1, 2015, April 20, 2015, May 12, 2015, August 21, 2015, October 22, 2015, and April \_\_\_\_\_, 2017, and as approved in the safety evaluation (SE) dated March 31, 2016, and \_\_\_\_\_. Except where NRC approval for changes or deviations is required by 10 CFR 50.48(c), and provided no other regulation, technical specification, license condition or requirement would require prior NRC approval, the licensee may make changes to the fire protection program without prior approval of the Commission if those changes satisfy the provisions set forth in 10 CFR 50.48(a) and 10 CFR 50.48(c), the change does not require a change to a technical specification or a license condition, and the criteria listed below are satisfied.

### **Risk-Informed Changes that May Be Made Without Prior NRC Approval**

A risk assessment of the change must demonstrate that the acceptance criteria below are met. The risk assessment approach, methods, and data shall be acceptable to the NRC and shall be appropriate for the nature and scope of the change being evaluated; be based on the as-built, as-operated, and maintained plant; and reflect the operating experience at the plant. Acceptable methods to assess the risk of the change may include methods that have been used in the peer-reviewed fire PRA model, methods that have been approved by NRC through a plant-specific license amendment or NRC approval of generic methods specifically for use in NFPA 805 risk assessments, or methods that have been demonstrated to bound the risk impact.

- (a) Prior NRC review and approval is not required for changes that clearly result in a decrease in risk. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.
- (b) Prior NRC review and approval is not required for individual changes that result in a risk increase less than  $1 \times 10^{-7}$ /year (yr) for CDF and less than  $1 \times 10^{-8}$ /yr for LERF. The proposed change must also be consistent with the defense-in-depth philosophy and must maintain sufficient safety margins. The change may be implemented following completion of the plant change evaluation.

### **Other Changes that May Be Made Without Prior NRC Approval**

1. Changes to NFPA 805, Chapter 3, Fundamental Fire Protection Program.

Prior NRC review and approval are not required for changes to the NFPA 805, Chapter 3, fundamental fire protection program elements and design requirements for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is functionally equivalent or adequate for the hazard. The licensee may use an engineering evaluation to demonstrate that a change to NFPA 805, Chapter 3 element is functionally equivalent to the corresponding technical requirement. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical arrangement, using a relevant technical requirement or standard.

The licensee may use an engineering evaluation to demonstrate that changes to certain NFPA 805, Chapter 3 elements are acceptable because the alternative is "adequate for the hazard." Prior NRC review and approval would not be required for alternatives to four specific sections of NFPA 805, Chapter 3, for which an engineering evaluation demonstrates that the alternative to the Chapter 3 element is adequate for the hazard. A qualified fire protection engineer shall perform the engineering evaluation and conclude that the change has not affected the functionality of the component, system, procedure, or physical

arrangement, using a relevant technical requirement or standard. The four specific sections of NFPA 805, Chapter 3, are as follows:

- "Fire Alarm and Detection Systems" (Section 3.8);
- "Automatic and Manual Water-Based Fire Suppression Systems" (Section 3.9);
- "Gaseous Fire Suppression Systems" (Section 3.10); and,
- "Passive Fire Protection Features" (Section 3.11)

This License Condition does not apply to any demonstration of equivalency under Section 1.7 of NFPA 805.

2. Fire Protection Program Changes that Have No More than Minimal Risk Impact

Prior NRC review and approval are not required for changes to the licensee's fire protection program that have been demonstrated to have no more than a minimal risk impact. The licensee may use its screening process as approved in the NRC SE dated March 31, 2016 to determine that certain fire protection program changes meet the minimal criterion. The licensee shall ensure that fire protection defense-in-depth and safety margins are maintained when changes are made to the fire protection program.

**Transition License Conditions**

- (1) Before achieving full compliance with 10 CFR 50.48(c), as specified by (2) and (3) below, risk informed changes to Florida Power & Light Company fire protection program may not be made without prior NRC review and approval unless the change has been demonstrated to have no more than a minimal risk impact, as described in 2) above;
- (2) The licensee shall implement the modifications to its facility, as described in Table S-1, "Plant Modifications Committed," Attachment S, of Florida Power & Light letter L-2017-058, dated April \_\_\_\_\_, 2017, to complete the transition to full compliance with 10 CFR 50.48(c) prior to startup of SL 1-28 (spring 2018) and SL2-24 (fall 2018) refueling outages after issuance of the SE. The licensee shall maintain appropriate compensatory measures in place until completion of these modifications; and
- (3) The licensee shall implement the items listed in Attachment S, Table S-2, "Implementation Items," of FPL letter L-2015-211 dated August 21, 2015, with the exception of items 18 and 20, within 12 months after NRC approval unless that falls within a scheduled outage window, then in that case, completion will occur 60 days after startup from that scheduled outage. Implementation Item 18 is an exception because it is associated with modifications in Table S-1 and will be completed in accordance with Transition License Condition 2) above. Item 20 is also an exception because it is required to be completed prior to self-approval and will be completed prior to the startup of SL2-24 (fall 2018).