



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
245 PEACHTREE CENTER AVENUE N.E., SUITE 1200  
ATLANTA, GEORGIA 30303-1200

August 20, 2019

Mr. Don Moul  
Vice President, Nuclear Division and Chief  
Nuclear Officer  
Florida Power & Light Company  
Mail Stop: NT3/JW  
15430 Endeavor Drive  
Jupiter, FL 33478

SUBJECT: SAINT LUCIE UNITS 1 AND 2 – TRIENNIAL FIRE PROTECTION INSPECTION  
REPORT 05000335/2019011 AND 05000389/2019011

Dear Mr. Moul:

On July 11, 2019, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at Saint Lucie Units 1 and 2 and discussed the results of this inspection with Mr. Boyd Beltz and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspectors did not identify any finding or violation of more than minor significance.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

**/RA/**

Scott M. Shaeffer, Chief  
Engineering Branch 2  
Division of Reactor Safety

Docket Nos. 05000335 and 05000389  
License Nos. DPR-67 and NPF-16

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV®

SUBJECT: SAINT LUCIE UNITS 1 AND 2 – TRIENNIAL FIRE PROTECTION INSPECTION REPORT 05000335/2019011 AND 05000389/2019011 dated August 20, 2019

**DISTRIBUTION:**

- P. Braaten, RII, DRS
- J. Dymek, RII, DRS
- L. Jones, RII, DRS
- M. Singletary, RII, DRS
- R. Musser, RII, DRS

\*See previous page for concurrence

DOCUMENT NAME: S:\DRS New\Eng Branch 2\REPORTS\TFPI Reactor Inspection Reports\St. Lucie\Inspection Report\Report 2019011.docx  
 ADAMS ACCESSION NUMBER: **ML 19232A176**

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NAME	P. Braaten	M. Singletary	L. Jones	L. Dymek	S. Shaeffer
DATE	08/ 14 /2019	08/ 14 /2019	08/ 20 /2019	08/ 14 /2019	08/20 /2019

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**U.S. NUCLEAR REGULATORY COMMISSION**

**Inspection Report**

Docket Numbers: 05000335 and 05000389

License Numbers: DPR-67 and NPF-16

Report Numbers: 05000335/2019011 and 05000389/2019011

Enterprise Identifier: I-2019-011-0038

Licensee: Florida Power & Light

Facility: Saint Lucie, Units 1 and 2

Location: Jensen Beach, FL 34957

Inspection Dates: June 17, 2019 to July 12, 2019

Inspectors: P. Braaten, Reactor Inspector  
J. Dymek, Reactor Inspector  
L. Jones, Senior Reactor Inspector  
M. Singletary, Reactor Inspector

Approved By: Scott M. Shaeffer, Chief  
Engineering Branch 2  
Division of Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a triennial fire protection inspection at Saint Lucie Units 1 and 2 in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified.

### **Additional Tracking Items**

None.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## REACTOR SAFETY

### 71111.05XT - Fire Protection - NFPA 805

#### B.5.b Inspection Activities (IP Section 02.03) (1 Sample)

The inspectors evaluated the following B.5.b Mitigating Strategies:

- (1) Manually Depressurize Steam Generators and Makeup with Portable Pump

#### Fire Protection Inspection Requirements (IP Section 02.01a) (4 Samples)

The inspectors evaluated fire protection program implementation in the following selected areas and/or fire zones, including analyzed electrical circuits:

- (1) Fire Area 1B - Unit 1 Cable Spreading Room

Analyzed Circuits:

- Switchgear 1B3
- 1-AFW PP-1B

- (2) Fire Area 1O - Unit 1 RAB Hallway, -0.05' Elevation

Analyzed Circuits:

- Train A Pressurizer PORV

- (3) Fire Area 2C - Unit 2 "B" Switchgear Room

Analyzed Circuits:

- MV 08-13, 2A S/G to 2C AFW
- MV 14-13, CCW to Containment Cooler
- MV 14-14, CCW to Containment Cooler
- MV 09-10/ SE 09-3, AFW Pump Discharge to 2B S/G

- (4) Fire Area 2D - Unit 2 "A" DC Equipment Room

## **INSPECTION RESULTS**

No findings were identified.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

- On July 11, 2019, the inspectors presented the triennial fire protection inspection results to Mr. Boyd Beltz and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71111.05XT	Calculations	DBD-FP-1	Fire Protection System NFPA 805 Design Basis	Rev. 5
		PSL-ARCPLUS-001	Nuclear Safety Capabilities Assessment	Rev. 1
		PSL-BFJR-16-043	St. Lucie NFPA 805 - Summary Report	Rev. 4
71111.05XT	Corrective Action Documents	00552283, 00581639, 02311916, 97-2521-1, 97-2529-2		
71111.05XT	Corrective Action Documents Resulting from Inspection	2318513, 2318397, 2318541, 2318656, 2318742, 2320738, 2320739		
71111.05XT	Drawings	2998-B-327	Auxiliary Feedwater Pump 2A	Rev. 26
		2998-B-327	Charging Pump 2A	Rev. 26
		2998-B-327	Pressurizer Pressure and Level	Rev. 14
		2998-G-275_Sh16	U2 One-Line 6.9KV Busses 2A1 & 2B1	Rev. 14
		2998-G-275_Sh2	U2 One-Line 125VDC Bus 2B & 2BB	Rev. 9
		2998-G-275_Sh31	U2 One-Line 480V MCC 2A5	Rev. 16
		8770-B-054	Fire Protection Penetration Schedule	
		8770-B-327 Sh. 178	Charging Pump 1B	Rev. 27
		8770-B-327 Sh. 630	Auxiliary Feedwater Pump 1B	Rev. 30
		8770-B-327 Sheet 138	Pressurizer Level Ch. L-1110-1	Rev. 27
		8770-B-327, Sh 98	Pressurizer Pressure CH. P-1100Y	Rev. 16
		8770-G-165	Reactor Auxiliary Building Fire Dampers, Fire Doors, and Halon Suppression Areas, El. 43'-0"	
		8770-G-274	U1 One-Line 480V Swgr & MCCs	R025
		8770-G-274	Auxiliary One Line Diagram	Rev. 25
8770-G-594	Composite Penetrations Interior Fire Walls, El. 0.50'			
8770-G-784	Doors and Windows Schedule			

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		8770-G-820	Safety/Non-Safety Related Block Walls, Reactor Auxiliary Building, El. -0.50'	
		8770-G-881	HVAC Equipment Schedule and Details	
71111.05XT	Engineering Evaluations	0027-0009-003-001	MSO expert panel report	Rev. 001
		027071-RPT-01	PSL Fire Risk Evaluation Expert Panel	1
		PSL-2FSE-08-001_001	Breaker Coordination Evaluation	Rev. 01
		PSL-BFJR-16-044	St. Lucie NFPA 805 - Hot Gas Layer and Multi-Compartment Analysis	Rev. 2
		PSL-FPER-09-037	NFPA Code 90A-1978 Conformance Review	
		PSL-FPER-09-046	NFPA 805 Non-Power Operations Review	Rev. 2
		PSL-FPER-11-002	NFPA 805 Recovery Action Feasibility Evaluation	Rev. 2
		PSL-FPER-11-010	NFPA 805 Fire Area Transition Review	Rev. 1
71111.05XT	Fire Plans	PFP-1-RAB -0.50' St. Lucie Unit 1	Fire Pre-Plan West Main Hallway	Rev. 1
		PFP-1-RAB 43' St. Lucie Unit 1	Fire Pre-Plan Cable Spreading Room, Static Inverter Room, RAB West Stairwell	Rev. 1
		PFP-2-RAB 43' St. Lucie Unit 2	Fire Pre-Plan B Switchgear Room, A DC Equipment Room	Rev. 1
71111.05XT	Miscellaneous		Plant Fire Protection Program Impairment Log	06/17/2019
			Plant Fire Protection Program Impairment Log	06/19/2019
		0033007-RPT-002	NFPA Monitoring Program Scoping Report	Rev. 1
		2998-18487	Installation and Maintenance Manual for Pullman Fire Dampers	Rev. 1
71111.05XT	Procedures	1-ADM-09.23	Time Critical Operator Actions and Time Sensitive Actions Program	16
		1-AOP-100.01	Response to Fire	6
		1-AOP-100.02	Control Room Inaccessibility	1
		1-FMM-99.07	Fire House and Equipment Inventory	Rev. 5
		2-FMM-99.11	Unit 2 Fire Damper Inspection	Rev. 3
		2-FMM-99.11	Unit 2 Fire Damper Inspection	Rev. 4
	2-FMM-99.12	Unit 2 Fire Door Inspection	Rev. 6	



Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		2-OSP-15.11	Unit 2 Fire Door Surveillance	Rev. 12
71111.05XT	Procedures	ADM-11.01	Standardized Terminology	Rev. 35
		ADM-19.00	Fire Protection Plan	Rev. 9
		ADM-19.03	Transient Combustible Control	Rev. 8
		ADM-19.04	Implementation of the NFPA 805 Monitoring Program	Rev. 2
		EN-AA-202-1004	Fire Protection Screening	Rev. 9
		MA-AA-203-1000	Maintenance Testing	Rev. 10
		PSL-ENG-SEMS-98-035	Nuclear Safety Capability Assessment Basis Document	7
71111.05XT	Work Orders	40477425-01	Unit 2, FDPR-25-19 Has Broken Springs	11/16/2017
		40489651-01	Unit 2, FDPR-25-109 Has Broken Springs	10/04/2018
		40523893-01	Fire Damper Inspections	06/08/2018
		40578241-61	DSC Welding Hot Work Permit	06/17/2019
		40604312-01	Unit 2, FDPR-25-129 Has Broken Springs	11/28/2018
		40620357-01	Fire Pump 1B Monthly Operability Test	06/19/2019
		40632812-01	Unit 1, FDPR-25-117 Has Broken Spring	11/17/2018