



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

September 4, 2012

Mr. Mano Nazar  
Executive Vice President  
Nuclear and Chief Nuclear Officer  
Florida Power and Light Company  
P.O. Box 14000  
Juno Beach, FL 33408-0420

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR ST. LUCIE NUCLEAR PLANT UNIT  
1 AND UNIT 2 (NRC INSPECTION REPORT 05000335/2012006 AND  
05000389/2012006)**

Dear Mr. Nazar:

On August 15, 2012, the NRC completed its mid-cycle performance review of St. Lucie Nuclear Plant Unit 1 and Unit 2. The NRC reviewed the most recent quarterly performance indicators in addition to inspection results and enforcement actions from July 1, 2011, through June 30, 2012. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined that overall, St. Lucie Units 1 and 2 operated in a manner that preserved public health and safety and met all cornerstone objectives. The NRC determined that performance at St. Lucie Nuclear Plant Units 1 and 2 for the third and fourth quarters of 2011 were within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (Green) safety significance and all performance indicators indicated performance was within the nominal, expected range (Green). While performance at St. Lucie Unit 2 remained within the Licensee Response Column for the entire assessment period, performance at St. Lucie Unit 1 was in the Degraded Cornerstone Column of the ROP Action Matrix for the first and second quarters of 2012. As noted in the NRC's assessment follow-up letter dated May 10, 2012, (ML12132A352) St. Lucie Unit 1 performance indicators for Unplanned Scrams per 7000 Critical Hours and Unplanned Scrams with Complications both crossed the green-to-white threshold for the first quarter of 2012, and remained unchanged during the following quarter.

The NRC plans to conduct ROP baseline inspections at both units. Additionally, to review the actions taken to address the performance issues on Unit 1, the NRC plans to conduct a supplemental inspection on Unit 1 in accordance with Inspection Procedure 95002, "Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Performance Area." This inspection will be conducted to provide assurance that the root and contributing causes for these issues, both independently and collectively, are identified and understood, to determine if any safety culture components caused or contributed to the

performance issues, and to ensure the licensee's corrective actions for risk-significant performance issues are sufficient to address the root and contributing causes and prevent recurrence.

The NRC also plans on conducting Inspection Procedure 71004, Power Uprate, and initial operator licensing examinations.

The enclosed inspection plan lists the inspections scheduled through December 31, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. In addition to the baseline inspections, consistent with the Agency's actions related to Fukushima, the NRC will perform TI-187, "Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns," and TI-188, "Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns." The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Daniel W. Rich at (404) 997-4721 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Victor M. McCree  
Regional Administrator

Docket Nos.: 50-335, 50-389  
License Nos.: DPR-67, NPF-16

cc w/Encl: (See page 3)

Enclosure: St. Lucie Nuclear Plant Inspection/Activity Plan (09/01/12 - 12/31/13)

cc w/encl:

Joseph Jensen  
Site Vice President  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

Robert J. Hughes  
Plant General Manager  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

Gene St. Pierre  
Vice President, Fleet Support  
Florida Power & Light Company  
Electronic Mail Distribution

Daniel D. DeBoer  
Operations Site Director  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

Eric Katzman  
Licensing Manager  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

Larry Nicholson  
Director  
Licensing  
Florida Power & Light Company  
Electronic Mail Distribution

Alison Brown  
Nuclear Licensing  
Florida Power & Light Company  
Electronic Mail Distribution

Mitch S. Ross  
Vice President and General Counsel  
Nuclear  
Florida Power & Light Company  
Electronic Mail Distribution

Marjan Mashhadi  
Senior Attorney  
Florida Power & Light Company  
Electronic Mail Distribution

William A. Passetti  
Chief  
Florida Bureau of Radiation Control  
Department of Health  
Electronic Mail Distribution

Bryan Koon  
Director  
Florida Division of Emergency Management  
Electronic Mail Distribution

Donna Calabrese  
Emergency Preparedness Manager  
St. Lucie Plant  
Electronic Mail Distribution

J. Kammel  
Radiological Emergency Planning  
Administrator  
Department of Public Safety  
Electronic Mail Distribution

Senior Resident Inspector  
St. Lucie Nuclear Plant  
U.S. Nuclear Regulatory Commission  
P.O. Box 6090  
Jensen Beach, FL 34957-2010

Seth B. Duston  
Training Manager  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

Faye Outlaw  
County Administrator  
St. Lucie County  
Electronic Mail Distribution

Jack Southard  
Director  
Public Safety Department  
St. Lucie County  
Electronic Mail Distribution

**Saint Lucie**  
**Inspection / Activity Plan**  
**09/01/2012 - 12/31/2013**

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			<b>EPU INSP - EXTENDED POWER UPRATE INSPECTION</b>		<b>3</b>
2	06/27/2012	09/30/2012	IP 71004	Power Uprate	
			<b>95002 - 95002 SUPPLEMENTAL INSPECTION</b>		<b>3</b>
1	09/24/2012	09/28/2012	IP 95002	Supplemental Inspection for One Degraded Cornerstone or Any Three White Inputs in a Strategic Perfor	
			<b>EB3SGISI - UNIT 2 SG INSERVICE INSPECTION</b>		<b>1</b>
2	09/10/2012	09/14/2012	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>TI-188 - TI-188 P2 - NTTF 2.3 - SEISMIC WALKDOWNS</b>		<b>1</b>
1, 2	10/01/2012	10/05/2012	IP 2515/188	Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns	
			<b>CDBI - COMPONENT DESIGN BASES</b>		<b>7</b>
1, 2	10/01/2012	10/05/2012	IP 7111121	Component Design Bases Inspection	
1, 2	10/22/2012	10/26/2012	IP 7111121	Component Design Bases Inspection	
1, 2	11/05/2012	11/09/2012	IP 7111121	Component Design Bases Inspection	
1, 2	11/26/2012	11/30/2012	IP 7111121	Component Design Bases Inspection	
			<b>PSB1-RP - PUBLIC RADIATION SAFETY BASELINE</b>		<b>3</b>
1, 2	10/15/2012	10/19/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2	10/15/2012	10/19/2012	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2	10/15/2012	10/19/2012	IP 71151	Performance Indicator Verification	
			<b>OL EXAM - INITIAL EXAM PREP</b>		<b>2</b>
1	11/05/2012	11/09/2012	V23390	ST LUCIE/DECEMBER 2012 INITIAL EXAM AT POWER FACILITIES	
			<b>OL EXAM - INITIAL EXAM - WEEK 1</b>		<b>2</b>
1	12/03/2012	12/07/2012	V23390	ST LUCIE/DECEMBER 2012 INITIAL EXAM AT POWER FACILITIES	
			<b>OL EXAM - INITIAL EXAM - WEEK 2</b>		<b>2</b>
1	12/10/2012	12/14/2012	V23390	ST LUCIE/DECEMBER 2012 INITIAL EXAM AT POWER FACILITIES	
			<b>EP - EMERGENCY PREPAREDNESS INSPECTION</b>		<b>1</b>
1, 2	02/04/2013	02/08/2013	IP 7111402	Alert and Notification System Testing	
1, 2	02/04/2013	02/08/2013	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2	02/04/2013	02/08/2013	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2	02/04/2013	02/08/2013	IP 71151	Performance Indicator Verification	
			<b>STL TFPI - STL - TRIENNIAL FIRE PROTECTION INSP</b>		<b>4</b>
1, 2	02/19/2013	02/21/2013	IP 7111105T	Fire Protection [Triennial]	
1, 2	03/11/2013	03/15/2013	IP 7111105T	Fire Protection [Triennial]	
1, 2	03/25/2013	03/29/2013	IP 7111105T	Fire Protection [Triennial]	

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

Enclosure

**Saint Lucie**  
**Inspection / Activity Plan**  
**09/01/2012 - 12/31/2013**

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
<b>RESBASE - RES BASELINE 2</b>					<b>2</b>
1, 2	04/01/2013	06/30/2013	IP 2515/187	Inspection of Near-Term Task Force Recommendation 2.3 Flooding Walkdowns	
1, 2	04/01/2013	06/30/2013	IP 2515/188	Inspection of Near-Term Task Force Recommendation 2.3 Seismic Walkdowns	
1, 2	04/01/2013	06/30/2013	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
1, 2	04/01/2013	06/30/2013	IP 7111101	Adverse Weather Protection	
1, 2	04/01/2013	06/30/2013	IP 7111104	Equipment Alignment (Quarterly)	
1, 2	04/01/2013	06/30/2013	IP 7111104S	Equipment Alignment	
1, 2	04/01/2013	06/30/2013	IP 7111105A	Fire Protection - Annual	
1, 2	04/01/2013	06/30/2013	IP 7111105Q	Fire Protection - Quarterly	
1, 2	04/01/2013	06/30/2013	IP 7111106	Flood Protection Measures	
1, 2	04/01/2013	06/30/2013	IP 7111107A	Heat Sink Performance	
1, 2	04/01/2013	06/30/2013	IP 7111111Q	Licensed Operator Requalification Program	
1, 2	04/01/2013	06/30/2013	IP 7111112Q	Maintenance Effectiveness	
1, 2	04/01/2013	06/30/2013	IP 7111113	Maintenance Risk Assessments and Emergent Work Control	
1, 2	04/01/2013	06/30/2013	IP 7111115	Operability Determinations and Functionality Assessments	
1, 2	04/01/2013	06/30/2013	IP 7111118	Plant Modifications	
1, 2	04/01/2013	06/30/2013	IP 7111119	Post Maintenance Testing	
1, 2	04/01/2013	06/30/2013	IP 7111120	Refueling and Other Outage Activities	
1, 2	04/01/2013	06/30/2013	IP 7111122	Surveillance Testing	
1, 2	04/01/2013	06/30/2013	IP 71151	Performance Indicator Verification	
1, 2	04/01/2013	06/30/2013	IP 71152	Problem Identification and Resolution	
1	04/01/2013	06/30/2013	IP 71153	Followup of Events and Notices of Enforcement Discretion	
<b>HS - TRIENNIAL HEAT SINK PERFORMANCE</b>					<b>1</b>
1, 2	07/08/2013	07/12/2013	IP 7111107T	Heat Sink Performance	
<b>ISI - UNIT 1 INSERVICE INSPECTION</b>					<b>1</b>
1	09/16/2013	09/20/2013	IP 7111108P	Inservice Inspection Activities - PWR	
<b>PSB1-RP - RP OCCUPATIONAL BASELINE</b>					<b>3</b>
1, 2	09/16/2013	09/20/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	09/16/2013	09/20/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	09/16/2013	09/20/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	09/16/2013	09/20/2013	IP 71124.04	Occupational Dose Assessment	
1, 2	09/16/2013	09/20/2013	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	09/16/2013	09/20/2013	IP 71151	Performance Indicator Verification	

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			<b>OL REQ - REQUAL INSPECTION</b>		<b>2</b>
1, 2	09/23/2013	09/27/2013	IP 711111B	Licensed Operator Requalification Program	
			<b>SGISI - UNIT 1 SG INSERVICE INSPECTION</b>		<b>1</b>
1	09/23/2013	09/27/2013	IP 7111108P	Inservice Inspection Activities - PWR	
			<b>PSB1-RP - RP OCCUPATIONAL BASELINE WEEK2</b>		<b>2</b>
1, 2	09/30/2013	10/04/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2	09/30/2013	10/04/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2	09/30/2013	10/04/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2	09/30/2013	10/04/2013	IP 71124.04	Occupational Dose Assessment	
1, 2	09/30/2013	10/04/2013	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2	09/30/2013	10/04/2013	IP 71151	Performance Indicator Verification	

**Comments:**