

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 120009-EI  
FLORIDA POWER & LIGHT COMPANY

IN RE: NUCLEAR POWER PLANT COST RECOVERY AMOUNT  
TO BE RECOVERED DURING THE PERIOD  
JANUARY - DECEMBER 2013

REBUTTAL TESTIMONY OF:

NILS J. DIAZ

ECO	<u>1</u>
ENG	<u>1</u>
IDM	<u>1</u>
AFD	<u>4</u>
COM	<u>5</u>
APA	<u>1</u>
ECR	<u>   </u>
GCL	<u>1</u>
RAD	<u>   </u>
SRC	<u>   </u>
ADM	<u>   </u>
OPC	<u>   </u>
CLK	<u>   </u>
Ct Rep	<u>1</u>

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5                   **July 9, 2012**

6

7   **Q.    Please state your name and business address.**

8    A.    My name is Nils J. Diaz. My business address is 2508 Sunset Way,  
9           St. Petersburg Beach, Florida, 33706.

10 **Q.    Have you previously submitted direct testimony in this**  
11 **proceeding?**

12 A.    Yes.

13 **Q.    What is the purpose of your rebuttal testimony in this**  
14 **proceeding?**

15 A.    The purpose of my testimony is to address two issues raised in the  
16 Commission Staff's Audit Report in this docket: Staff's use of a speech  
17 I gave in 2004 and Staff's use of a Root Cause Evaluation (RCE) with  
18 respect to Staff's recommended disallowance of costs incurred for  
19 FPL's EPU project.

20 **Q.    Can you comment on the Commission Staff's reference in their**  
21 **Audit Report to a speech that you gave in 2004 as applied to the**  
22 **Siemens stator work performed at St. Lucie Unit 2 in 2011?**

1 A. The reference to my 2004 speech on page 34 of the Audit Report does  
2 not support the proposed disallowance relating to the Siemens stator  
3 work. The exclusive focus of my 2004 speech, given when I was the  
4 Chairman of the U.S. Nuclear Regulatory Commission (NRC), was  
5 from a nuclear regulator's perspective that a nuclear power plant  
6 applicant and/or licensee is responsible for contractor activities at a  
7 nuclear plant site, specifically on safety management and operational  
8 safety. Nowhere did I ever suggest or indicate that this fundamental  
9 principle of nuclear regulation should be extended to change the  
10 prudence standard applied by state economic regulators, such as this  
11 Commission, in determining whether costs incurred by the Company  
12 should be recovered from customers. For these reasons, my 2004  
13 speech is not a valid basis for supporting disallowance of costs relating  
14 to the Siemens 2011 stator work.

15 **Q. What is a Root Cause Evaluation?**

16 A. A Root Cause Evaluation (RCE) is an after-the-fact evaluation that the  
17 NRC requires be conducted by its licensees to determine what caused  
18 unexpected circumstances or events to occur. The purpose of a RCE  
19 is to identify and implement corrective actions to prevent recurrence of  
20 an analyzed event. Specifically, a RCE is intended to identify the  
21 factors that resulted in the nature, the magnitude, the location, and the  
22 timing of the consequences of past events. Using these factors, the  
23 RCE identifies the behaviors, actions, inactions, or conditions that

1           existed and that need to be changed, as appropriate, to prevent  
2           recurrence. RCEs are conducted in strict accordance with a plant-  
3           specific manual or procedure that is consistent with best industry  
4           practices.

5  
6           RCEs are expected to use all the information available, including  
7           hindsight and knowledge of the outcome of the event or  
8           circumstances. RCEs are part of the nuclear industry's long-standing  
9           practice of striving for continuous improvement in nuclear power plant  
10          operational safety. NRC requires such evaluations to be self-critical.  
11          Such evaluations do not inquire whether a reasonably prudent  
12          operator, knowing what it knew at the time, should have taken  
13          advantage of all that was known after the fact.

14  
15          A RCE does not assess whether the causes of failure should have  
16          been known or whether processes should have been in place to  
17          prevent them, but rather focuses on the causes and corrective actions  
18          necessary to prevent the re-occurrence of the failures. The  
19          identification and correction of the specific causes of failures helps  
20          prevent repetitive or similar equipment and human performance  
21          problems, thereby improving plant safety and reliability.

22          **Q. Are root cause analyses mandated by any specific regulatory**  
23          **requirement?**

1 A. Yes. RCEs are a creature of NRC regulation of the U.S. nuclear power  
2 industry. NRC regulations (10 CFR Part 50, Appendix B, Criterion XVI)  
3 provide that “in the case of significant conditions adverse to quality, the  
4 measures shall assure that the cause of the condition is determined  
5 and corrective action taken to preclude repetition.”

6 **Q. Do you believe that it is appropriate that FPL’s performance of the**  
7 **EPU project be judged in hindsight using a Root Cause**  
8 **Evaluation?**

9 A. No, I do not. RCEs are unique, and their application should be limited  
10 to circumstances for which they were intended by the NRC. Unlike  
11 other industries (including other types of electric power generation), the  
12 standards of performance for nuclear power operations are adherence  
13 to safety procedures and excellence of human practices. The goal is  
14 elimination of recurrence.

15  
16 The findings and conclusions presented in nuclear industry RCEs are  
17 not appropriate for application in circumstances where the  
18 reasonableness and prudence of actions are being judged. As  
19 performed by U.S. nuclear plant operators, RCEs for potentially  
20 significant events are in-depth, highly self-critical investigations using  
21 hindsight. Care must be exercised in interpreting the reports of RCEs  
22 to separate what management should have known at the time a  
23 decision was made from what management later learned with the

1 benefit of hindsight. For these reasons, it is not appropriate to use a  
2 RCE to perform a hindsight review of the execution of a project at a  
3 nuclear power plant to evaluate the reasonableness of a nuclear  
4 manager's decisions and actions prior to an event.

5 **Q. Does this conclude your rebuttal testimony?**

6 **A. Yes.**