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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
2 **FLORIDA POWER & LIGHT COMPANY**
3 **AMENDED REBUTTAL TESTIMONY OF TERRY O. JONES**
4 **DOCKET NO. 130009-EI**
5 **JULY 26, 2013**

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

8 A. My name is Terry Jones and my business address is 700 Universe Boulevard, Juno
9 Beach, FL 33408. I am employed by Florida Power & Light Company ("FPL" or "the
10 Company") as Vice President, Nuclear Power Uprate.

11 **Q. Have you previously provided testimony in this docket?**

12 A. Yes.

13 **Q. What is the purpose of your rebuttal testimony?**

14 A. My rebuttal testimony addresses the direct testimony provided by the Office of Public
15 Counsel's (OPC's) Witness William Jacobs.

16 **Q. Please summarize your rebuttal testimony.**

17 A. The Extended Power Uprate (EPU) project has been a large and complex project,
18 involving millions of pages of data, spreadsheets, engineering drawings, schedules, work
19 orders, and other project information. The project is coming to a successful close,
20 presently delivering 522 megawatts electric (MWe) of incremental nuclear capacity and
21 energy to FPL's customers. In the course of the project and the Nuclear Cost Recovery
22 (NCR) proceeding, FPL has made all of this information available to the parties, Florida
23 Public Service Commission (Commission) staff, and Commissioners, and has done so in
24 a forthright and transparent manner.

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1 Witness Jacobs's arguments stem from his repeated (and repeatedly rejected) attempt to
2 split the EPU project into two pieces – one at St. Lucie and one at Turkey Point – when it
3 was proposed, approved, and pursued as one project. In fact, FPL could not have
4 delivered the over 400 MWe it was commissioned to provide by performing only half the
5 project.

6
7 Once again, Witness Jacobs has not identified a single imprudent management action or
8 decision in the year subject to review that caused the project costs to increase. It is clear
9 that OPC Witness Jacobs's requested "remedy" should be rejected by the Commission.

10 **Q. Does the Nuclear Cost Recovery process anticipate a lapse in time between the**
11 **utility's pre-filed current year estimates and the hearing?**

12 A. Yes. The Nuclear Cost Recovery Rule, Rule 25-6.0423, requires the utility to file prior-
13 year costs by March 1st, current and subsequent year costs by May 1st, and requires the
14 Commission to conduct a hearing and make its determinations by October 1st of each
15 year. Obviously the utility's current and subsequent year projections reflect a snapshot in
16 time that is clearly identified as such and then moved into the record at the time of the
17 hearing. This is also true in the other clause dockets. OPC's witness should be familiar
18 with the clause true-up process and appears to be blaming FPL for not perfectly
19 predicting its costs. Of course, if any utility could do that, there would be no need for the
20 true-up process that occurs in the following year in every clause.

21 **Q. Please describe FPL's overall approach with respect to providing information to the**
22 **Commission and to NCR parties.**

1 A. The EPU project has always been an open book, transparent to the Commission and the
2 parties of the NCR process. Each year FPL has provided copies of cost forecasts,
3 monthly cost reports, monthly operating performance reports, contracts, invoices,
4 correspondence, and many other documents requested by the parties. In 2012, FPL
5 produced 63,906 pages of information to Commission Audit staff and 35,581 pages of
6 information to parties in discovery. Additionally, EPU personnel including me are
7 interviewed by Audit Staff each year. I have also been available for deposition each year.
8 These, in addition to my testimony each year, are the numerous avenues by which the
9 Company provides information to the Commission and parties concerning the EPU
10 project.

11
12 **Witness Jacobs's Incorrect Attempt to Evaluate Turkey Point in Isolation (Again)**

13
14 **Q. Witness Jacobs begins by attempting to quantify the cost of the Turkey Point**
15 **portion of the EPU project and points to the differences between the Turkey Point**
16 **and the St. Lucie plants. Please respond.**

17 A. For three years now, OPC has attempted to examine the Turkey Point portion of the EPU
18 project in isolation. For three years, I and other FPL witnesses have explained why such
19 an exercise is inappropriate. To summarize:

- 20 • In 2007, FPL proposed and the Commission approved the EPU project as a single
21 project to meet the need for 400 MWe by 2012.

- 1 • The objective of the project was to produce an additional 400 MWe using nuclear
2 fuel that required four reactors to be uprated at two sites, as it could not have been
3 done with only two reactors at one site.
- 4 • Efficiencies and cost savings have been realized in contract negotiations and
5 through resource sharing by working the uprate of all four units as a single
6 project.
- 7 • Since the beginning, FPL has acknowledged the differences between the Turkey
8 Point and St. Lucie portions of the EPU project. FPL has never claimed each site
9 would represent 50% of the project cost.
- 10 • The feasibility of the EPU project has always been based on the total cost and
11 total benefits of the project, and not on just a portion of the project.

12 Dr. Sim responds to Witness Jacobs's faulty claim that the cost of the Turkey Point
13 portion, when viewed in isolation, is "uneconomic."

14 **Q. Has such an attempt to split the EPU project into two pieces been rejected in the**
15 **past?**

16 A. Yes. In 2011, Witness Jacobs recommended, "[t]he St. Lucie and Turkey Point projects
17 should be looked at separately in the analysis, with a break-even cost identified for each
18 project." (2011 NCR Hearing Transcript p. 1031) His reasoning, as summarized by the
19 Commission, was that "the project should be broken up into two separate analyses due to
20 the higher estimated capital costs of the Turkey Point plant portion of the uprate project"
21 (Order No. PSC-11-0547-FOF-EI, p. 40) – the same reasoning Witness Jacobs presents
22 this year. In 2012, Witness Jacobs recommended, "[t]he Commission should revisit the
23 decision to permit FPL to continue to treat the economics of the EPU projects on a

1 consolidated basis[.]” (2012 NCR Hearing Transcript, p. 1296-1297) In both cases the
2 Commission rejected Witness Jacobs’s recommendations.

3 **Q. Did the Commission’s order explain why it rejected Witness Jacobs’s**
4 **recommendations?**

5 A. Yes. In 2011, the Commission concluded:

6 “We agree with FPL that a separate economic analysis for each of the EPU
7 project plant is unnecessary, and would be difficult to calculate. While a
8 mathematical average of the benefits derived from lessons learned and equipment
9 bulk orders can be developed, it is not known if these would have materialized if
10 only one plant was upgraded. Therefore, completing separate analyses would
11 incorrectly attribute to the individual plants the benefits gained from performing
12 uprates at both plants simultaneously.” (Order No. PSC-11-0547-FOF-EI, p. 40)

13 In 2012, the Commission rejected Witness Jacobs’s attempt to split the project into two
14 pieces for similar reasons, quoting its 2011 order. (Order No. PSC-12-0650-FOF-EI, p.
15 66)

16
17 Because the Commission repeatedly rejected the premise for separately analyzing the
18 Turkey Point costs, it is wrong for Witness Jacobs to assert that knowledge of higher
19 Turkey Point costs in 2012 would have somehow supported a different Commission
20 conclusion on this point.

21 **Q. Are there benefits unique to the Turkey Point portion of the EPU project ignored by**
22 **Witness Jacobs?**

1 A. Yes, the 242 additional MWe that are being provided by the Turkey Point portion of the
2 EPU are most valuable since they are generated very near where FPL's customers have
3 the highest demand for electricity in FPL's service territory as indicated in Exhibit TOJ-
4 17. In addition, the Turkey Point portion of the EPU project has significantly improved
5 FPL's grid stability and reliability, thereby further benefitting FPL's customers.
6

7 **Witness Jacobs's Incorrect Criticisms Regarding Prior Testimony**
8

9 **Q. On page 19, Witness Jacobs criticizes your 2011 characterization of FPL's 2011**
10 **non-binding cost-estimate as "highly informed." Please respond.**

11 A. In my July 25, 2011 rebuttal testimony, I characterized the 2011 non-binding cost
12 estimate as "highly informed." However, Witness Jacobs has taken my statement out of
13 context. The full context of my statement was that the 2011 non-binding cost estimate
14 was highly informed *relative to the non-binding cost estimates of previous years.* (2011
15 NCR Hearing Transcript, p. 1208-1209) This was the case because FPL had achieved the
16 completion of LAR engineering, achieved the completion of about 70% of the design
17 engineering, and had information learned from the early stages of implementation. In
18 April 2011, we knew what modifications needed to be implemented to accomplish the
19 EPU project. Accordingly, I stand by my statement that the 2011 non-binding cost
20 estimate range was "highly informed" in comparison to the previous years' non-binding
21 cost estimate.
22

1 Exhibit TOJ-7 provides a detailed description of the complexities and discovery
2 encountered during the 2012 EPU implementation outages.

3 **Q. Please respond to the claim that your detailed descriptions and justifications of**
4 **scope increases (and resulting cost increases) demonstrate imprudence of “failing**
5 **to... accomplish advanced engineering at the outset” or incorporate an adequate**
6 **contingency, at page 20.**

7 A. These two theories were raised by Witness Jacobs in the 2011 and 2012 NCR dockets,
8 respectively, and rejected by the Commission. As I have indicated previously on
9 numerous occasions, the EPU project was initiated and approved to deliver
10 approximately 400 MWe by 2012. Therefore, it was necessary to perform the project in
11 four overlapping phases. Had the four phases been performed in series, the project would
12 have taken much longer thus delaying the benefits to customers, and the total cost to
13 customers would have been greater. Therefore, it was entirely prudent to complete the
14 project in four overlapping phases and deliver the megawatts to our customers as
15 planned.

16 **Q. Did FPL include an adequate contingency during the course of the EPU project?**

17 A. Yes. Throughout the EPU project, FPL has maintained a goal to provide a reasonable
18 amount of contingency in order to control project costs. FPL believes that if a very large
19 contingency is established, such as the level of contingency that a contractor would
20 include in a fixed price proposal for a scope of work with many uncertainties, then the
21 ability to control project costs would be diminished. In April 2012, FPL established a
22 reasonable contingency of \$100 million (\$90 million for PTN and \$10 million for PSL)

1 with a to-go estimate of \$978 million (\$743 million at PTN and \$235 million at PSL).

2 Thus the total contingency was approximately 10% of the to-go estimate.

3 **Q. Turning to 2012, Witness Jacobs states that FPL estimated it would spend \$688**
4 **million on the Turkey Point portion of the EPU project in 2012, when it actually**
5 **spent \$975 million on the Turkey Point portion of the EPU project in 2012. Please**
6 **explain the vintage of and basis for FPL's \$688 million estimate.**

7 A. My testimony filed on April 27, 2012 included Actual Estimated (AE) 2012 costs which
8 were based on actual costs through February 2012 and estimated costs for March through
9 December 2012. As I explained in my April 27, 2012 testimony, these costs were based
10 on a number of forecasts. Specifically, I testified as follows:

11 "The estimated project costs were developed from Project Controls forecasts
12 derived from the best available information for all known project activities in
13 2012. Included in the forecasts are the vendor long lead material contracts that
14 have scheduled milestone payments in 2012. Cash flows are based upon the latest
15 fabrication and delivery schedule information. Each major labor related services
16 vendor forecast is based upon the original awarded value and all approved
17 changes. Added to this, where applicable, would be an estimate of any known
18 pending changes to arrive at a best forecast at completion for each vendor. Owner
19 engineering and project management support forecasts are derived from approved
20 detailed staffing plans. Cash flows are developed for each approved position
21 based on the expected assignment duration and expected overtime, where
22 applicable. The large construction related vendor forecasts are based upon
23 previous experience, known scope(s) of work, productivity factors related to

1 outage conditions and prevailing pertinent wage rates. Cash flow projections for
2 items identified in the Risk Register are based upon anticipated engineering,
3 material procurement, and outage implementation time horizons.” (2012 NCR
4 Hearing Transcript, p. 1059)

5 FPL recognizes, with the benefit of hindsight, that it underestimated its 2012 EPU costs,
6 including those it estimated for Turkey Point. Contrary to Witness Jacobs’s claim (at
7 page 20) that I have not “justified the discrepancy” between estimated and actual 2012
8 costs, the reasons for the variance are fully explained in my March 1, 2013 testimony,
9 particularly Exhibit TOJ-7, which details the numerous complexities and discovery issues
10 encountered during EPU implementation after preparation of the April 27, 2012 filing.
11 Additionally, approximately \$75 million of the 2012 PTN EPU cost was not an increase
12 in total project cost and was due to two accelerated vendor payments which were moved
13 from 2013 to 2012 and were not included in the April 27, 2012 estimate of 2012 costs.

14
15 It is also important to recognize that both the \$688 million figure and the \$975 million
16 figure cited by Witness Jacobs exclude removal costs, EPU recoverable O&M costs,
17 transmission capital costs, and transmission recoverable O&M costs.

18 **Q. When you testified at the Nuclear Cost Recovery hearing in September of 2012, did**
19 **you indicate that the \$688 million estimate included in your prefiled testimony was**
20 **FPL’s current or final estimate of Turkey Point costs?**

21 **A.** No. To the contrary, I was very clear in indicating that total project costs – which
22 included 2013 Turkey Point estimates – remained subject to change. Specifically, I
23 testified as follows:

1 “As I have stated before, this [non-binding cost estimate] range is subject to
2 change, especially as we incorporate our lessons learned from the recently
3 completed Unit 3 construction effort and finalize our plan for our fourth and final
4 reactor. I expect to complete that effort by the end of October[.]” (2012 NCR
5 Hearing Transcript, p. 1078)

6 During cross examination, OPC specifically asked me whether the total project cost
7 increase presented in 2012 was the “final refinement” of project costs, and I answered
8 that it was not. (2012 NCR Hearing Transcript, p. 1351) These statements were made to
9 communicate that project costs could increase and I believe OPC took them as such.

10 **Q. What was the status of FPL’s total project cost forecast compared to its non-binding**
11 **cost estimate as of September 2012?**

12 A. As of September 2012, FPL’s total EPU project cost forecast had been increasing and
13 remained within the non-binding cost estimate range filed on April 27, 2012. For that
14 reason, I made it clear during the 2012 hearing that FPL’s non-binding cost estimate was
15 still subject to change, as discussed earlier in this testimony.

16
17 Additionally, during the 2012 hearing, I testified that I expected the total installed cost
18 per kilowatt, upon completion of the EPU project, to be about the same as that reflected
19 in the company’s 2012 filing. Now that implementation work is complete, I can report
20 that the total installed cost per kilowatt is in fact about the same as it was estimated to be
21 last year. Using the upper end of last year’s non-binding cost estimate range, the cost per
22 kilowatt was estimated to be \$6,429. Using the mid-point of the range (the cost assumed
23 for feasibility purposes), the cost per kilowatt was estimated to be \$6,224. This year, the

1 installed cost per kilowatt is estimated to be \$6,510 which is only about 1.3% higher than
2 last year's estimate using the high end of that range, and about 4.6% higher than last
3 year's estimate using the mid-point of that range.

4 **Q. What is the total MWe output of the EPU project reflected in this installed cost per**
5 **kilowatt calculation?**

6 A. The EPU project is now providing 522 MWe to FPL's customers, based on recently
7 completed testing. This reflects an additional 10 MWe as compared to my May 1, 2013,
8 testimony, all of which has been obtained from Turkey Point Unit 4.

9 **Q. Does Witness Jacobs identify any imprudent project management actions or**
10 **decisions in 2012 that caused the EPU project cost to increase?**

11 A. No. Witness Jacobs has not identified a single imprudent management action or decision
12 in 2012, nor does he claim the disallowance he recommends was caused by any
13 imprudent action or decision in 2012.

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

15 A. Yes.