



**William P. Cox**  
**Senior Attorney**  
**Florida Power & Light Company**  
**700 Universe Boulevard**  
**Juno Beach, FL 33408-0420**  
**(561) 304-5662**  
**(561) 691-7135 (Facsimile)**  
**Will.Cox@fpl.com**

January 12, 2018

**-VIA ELECTRONIC FILING-**

Ms. Carlotta S. Stauffer  
Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850

Re: Docket No. 20170225-EI  
In re: Petition for Determination of Need for Dania Beach Clean Energy Center  
Unit 7, by Florida Power & Light Company

Dear Ms. Stauffer:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") is FPL's Response in Opposition to Sierra Club's Motion to Strike the Rebuttal Testimony of Witness Hector J. Sanchez.

Please contact me should you or your Staff have any questions regarding this filing.

Sincerely,

s/ William P. Cox  
William P. Cox  
Senior Attorney

cc: Counsel for Parties of Record (w/encl.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Florida Power & Light Company's  
Petition for Determination of Need for Dania  
Beach Clean Energy Center Unit No. 7.

DOCKET NO. 20170225-EI

Filed: January 12, 2018

**FLORIDA POWER & LIGHT COMPANY'S RESPONSE IN OPPOSITION TO SIERRA  
CLUB'S MOTION TO STRIKE THE REBUTTAL TESTIMONY OF WITNESS  
HECTOR J. SANCHEZ**

Pursuant to Rule 28-106.204, Florida Administrative Code ("F.A.C."), and the Order Establishing in this docket, Order No. PSC-2017-0426-PCO-EI ("OEP"), Florida Power & Light Company ("FPL" or the "Company"), responds in opposition to the motion to strike the rebuttal testimony of Hector J. Sanchez ("Motion") filed by Sierra Club on January 10, 2018. Sierra Club's Motion was filed untimely and fails to show good cause for consideration by the Florida Public Service Commission ("Commission"). The OEP mandates that "any motions to strike any portion of the prefiled testimony and related portions of exhibits of any witness **shall be made in writing no later than the Prehearing Conference,**" which was held on January 10, 2018 commencing at 9:30 am. The Motion was filed on January 10, 2018 at 4:33 p.m. FPL has timely provided and addressed in its prefiled testimony, numerous discovery responses, and numerous depositions all of the criteria and evidence required to meet the Commission's finding for a determination of need for the Dania Beach Clean Energy Center Unit 7 ("Project") under Section 403.519, Florida Statutes.

FPL opposes and requests that the Commission deny Sierra Club's Motion because it is legally deficient for the following reasons: (1) Sierra Club's filing of its Motion failed to comply with the Commission's OEP and has not established good cause for failing to file its Motion by the procedural deadline (*i.e.*, the Prehearing Conference); (2) Sierra Club's claim that Witness

Sanchez relied upon his reliability calculation is proper rebuttal testimony in this proceeding; (3) Sierra Club has otherwise not established any basis under Florida law, including any Commission order, regulation, or precedent, for the striking of Witness Sanchez's prefiled rebuttal testimony in its entirety, and (4) FPL properly submitted rebuttal testimony from Witness Sanchez to unequivocally rebut and refute the "magic number" and "arbitrary" delay claim of Dr. Hausman in his testimony.

Based upon the foregoing, FPL seeks an order denying Sierra Club's Motion and any other relief this Commission deems just and proper.

## **I. Background**

1. On October 20, 2017, FPL filed its petition and prefiled direct testimony and exhibits requesting and supporting an affirmative determination of need for the Project, which included the testimonies of Steven R. Sim, Richard Feldman, Jacqueline K. Kingston, and Heather C. Stubblefield. Among other things, FPL's Petition at pages 4, 10, and 13-14 and the direct testimony of witness Sim at pages 6-9, 11, and 17-20 addressed the need for the Project to address regional reliability including load to generation balance for Southeastern Florida.

2. This load to generation balance concept is generally defined as having two calculation components: (1) first account for all of the generation and transmission import capability in Southeastern Florida minus the load in that area, and then (2) examine numerous contingencies which could impact the result of part (1). Both parts of these calculation components are carried out in load flow analyses using sophisticated computer modeling as described in Witness Sim's direct testimony. This concept has been referred to in FPL's Ten Year Site Plan filings with the Commission as "regional balance" or "regional imbalance,"

dating back to at least 2003,<sup>1</sup> and FPL has addressed regional imbalance and margin for increased reliability and operational flexibility in Southeastern Florida in a prior need determination proceeding before the Commission.<sup>2</sup> Witness Sanchez's nomenclature for the part (1) calculation component described above is the "area reliability margin" calculation. Using the result of that calculation, he then applies his many years of experience to consider possible contingencies in his operation of the FPL system in real time on a second-to-second basis.

3. On November 6, 2017, the Commission issued the OEP for this docket, which included the deadline noted above for the filing of any motions to strike testimony, the Prehearing Conference, which took place on the morning of January 10, 2018.

4. On November 7, 2017, Sierra Club began serving discovery upon FPL even prior to the Commission's November 17, 2017 Order granting them intervention. On December 8, 2017, Sierra Club filed the testimony and exhibits of Dr. Ezra Hausman. On December 22, 2017, FPL filed the rebuttal testimonies of Steven R. Sim and Hector J. Sanchez. On January 8, 2018, as agreed to by the parties, Sierra Club, OPC, and Commission Staff deposed FPL Witnesses Sim and Sanchez. January 8, 2018 was the deadline for completion of discovery, as specified in the OEP. On January 10, 2018, at 9:30 am, the Prehearing Officer conducted the prehearing conference in this docket. On that same date at 4:33 pm, Sierra Club filed its motion to strike the rebuttal testimony of Hector J. Sanchez ("Motion").

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<sup>1</sup> See FPL's Ten Year Site Plans for 2003 (p.51), 2005 (p.50), 2008 (p.53), 2009 (p.260), 2011 (p.58, 250), 2012 (p.58, 232), 2013 (p.59, 232) 2014 (p.57, 195), 2016 (p.56, 220), and 2017 (p.57, 284).

<sup>2</sup> The concepts of both regional imbalance and margin for reliability in Southeastern Florida were presented to the Commission in prior FPL testimony in need determination proceedings before the Commission. See, e.g., Docket No. 11309-EI, *In Re: Florida Power & Light Company's Petition to Determine Need for Modernization of Port Everglades Plant*, Testimony of Rene Silva, pages 6-7 ("... a three year delay in adding generation in the Miami-Dade/Broward county area may not be feasible from a system reliability perspective due to the growing imbalance between demand and generation in that area ..."; Testimony of Pedro Modia at page 20 ("Generation located close to the load also adds a level of operating flexibility and margin that contributes to increased reliability. Operating flexibility allows for improved maintainability."))

5. Between November 7, 2017 and December 8, 2017, FPL responded to 31 interrogatories, 66 production of documents requests, and 24 requests for admissions from Sierra Club, which included questions about regional imbalance issues in Southeastern Florida addressed in FPL's petition and prefiled direct testimony. FPL also assisted in the negotiation of an attempted confidentiality agreement between the Sierra Club and the Florida Reliability Coordinating Council (FRCC) so that the Sierra Club could obtain information it sought in discovery that would allow it to have access to the load flow analyses (Siemens STI model) that FPL refers to in this docket. Sierra Club also deposed FPL Witness Sim twice during that time period (November 29, 2017 and December 4, 2017), with Sierra Club Witness Hausman listening in on the November 29 deposition.

6. At both depositions, Sierra Club counsel asked Witness Sim questions about his direct testimony and, in particular, page 36, line 17 through page 37, line 12, of his direct testimony, where Witness Sim addressed the question:

**“Did FPL consider a scenario in which the in-service date for DBEC Unit 7 is delayed?”** In response, Dr. Sim stated, “Yes. FPL considered scenarios of both a one-year delay and a two-year delay. In these scenarios, it was assumed that the in-service date of DBEC Unit 7 was delayed from mid-2022 to mid-2024 for the two-year delay scenario. *In both scenarios, the retirement of Lauderdale Units 4 & 5 was also assumed to be delayed by either one year or two years, respectively, to maintain the same roughly 4-year period in which a major Southeastern Florida generation component would be missing as is assumed in Plan 2. ...*” (*emphasis added*). See Attachment 1.

7. Specifically at his November 29 deposition, Witness Sim was asked by both counsel for Sierra Club (transcript pages 177-179) and Office of the Public Counsel (transcript pages 196-198) about guidance he received from FPL system operations, of which Witness Sanchez is the director, regarding this four-year period, and Witness Sim stated that maintaining the four-year period **was necessary to minimize risk of unforeseen circumstances and the impact they would have on reliability in Southeastern Florida.** See Attachment 2.

Subsequently, at his December 4 deposition (transcript pages 59 through 61), when questioned by Sierra Club's counsel, Dr. Sim again stated that you would not want a retirement period longer than four years from the date of retirement of Lauderdale Units 4 and 5 to add replacement/additional generation capacity in Southeastern Florida, and in fact you would want that period as short as possible **to minimize operational risk**. See Attachment 3.

8. In response to both Witness Sim's prefiled direct testimony and his deposition testimony, Dr. Hausman attaches as exhibit EDH-14, an excerpt from the Sim November 29 deposition which addresses the four-year period. Dr. Hausman claims at pages 22-23 of his December 8, 2017 testimony that the four-year period is a "magic number" and arbitrary, and there is no reason why the Dania Beach Project could not be delayed one or more years beyond the four years recommended by FPL, following the retirement of Lauderdale Units 4 and 5.

9. In direct response to Dr. Hausman's assertions regarding the four-year period, FPL filed rebuttal testimony on December 22, 2017. Specifically, Witness Sim addressed at page 37 of his rebuttal testimony Dr. Hausman's "magic number" claim and the guidance he received from FPL's system operators regarding the four-year period. Dr. Hausman was aware of witness Sim's prefiled and deposition testimony on the four year period and the system operations justification but simply chose to ignore it in his testimony.

10. Moreover, Witness Sanchez at pages 4-5 of his rebuttal testimony very clearly states that the purpose of his testimony is "... to rebut Sierra Club witness Dr. Hausman's claim on Page 22 of this direct testimony that '... there is no apparent reason why four years is any kind of 'magic number,' ...' for the time period from retirement and demolition of Lauderdale Units 4 and 5 to the commercial operation date of the Dania Beach Clean Energy Center ("DBEC Unit 7") and to explain how he fails with this contention to take into account important operational considerations for the FPL system." He speaks to the specific guidance he provided

as FPL's Director of System Operations to Witness Sim regarding delay of the Dania Beach Project and the need to minimize delay and maintain the maximum four-year period from retirement of the Lauderdale units to the commercial operation date of the new Dania Beach unit.

11. He further describes at pages 10-14 of his testimony his own calculation, the "area reliability margin" calculation, that he uses to operate the FPL system in a way that will minimize operational risk, and how bringing Dania Beach online as soon as practicable following retirement of the Lauderdale units will minimize that risk. In his deposition on January 10, 2018, he confirmed his rebuttal testimony that his work as director of operations for FPL addresses the load balance issue that Witness Sim addresses in his testimony.

## **II. Legal Argument**

### **A. Sierra Club failed to establish good cause for the Commission to consider Sierra Club's Motion**

12. Sierra Club has known the deadline (the Prehearing Conference on January 10, 2018) for filing any motions to strike testimony since the OEP was issued on November 6, 2017. Sierra Club did not file its Motion by that January 10 deadline. Sierra Club was also aware of the deadline and its interest in potentially filing such as motion, as evidenced by its January 2, 2018 filed prehearing statement where it stated, "The closure of discovery on January 8, 2018, including the scheduling of depositions on that date, also may present difficulties for Sierra Club to meet the deadline to file a potential motion to strike any portion of prefiled testimony and related portions of exhibits."

13. Yet when asked by the Prehearing Officer at the Prehearing Conference, Sierra Club's Counsel was unable to provide an answer as to whether it intended to file a motion to strike FPL's testimony. Nonetheless, at 4:33 p.m., that same afternoon, Sierra Club filed its ten-page Motion to Strike. Apparently, Sierra Club sometime between walking out of the Prehearing

Conference which ended at approximately 9:47 a.m., and 4:33 p.m., they decided to file this Motion, and then proceeded to draft and file a 10 page motion including specific testimony cites and references. But putting aside this remarkable effort in such a short period of time, there was nothing preventing Sierra Club from filing its Motion by the time of the Prehearing Conference as required by the OEP. Sierra Club failed to do so, or present any good cause shown. Accordingly, their Motion should be denied as untimely.

14. There is no basis for Sierra Club's claims as it relates to the issues presented in its Motion. FPL has been extremely forthcoming in being responsive to Sierra Club, including responding to numerous interrogatories, production of document requests, and requests for admissions, under the expedited time frames in this proceeding, as well as four depositions of FPL witnesses.<sup>3</sup>

15. Based on the background discussion above which clearly demonstrates that FPL properly provided rebuttal testimony to refute Witness Hausman's assertions, it is disingenuous for Sierra Club to now claim it has never heard of, or was somehow deliberately kept in the dark with regard to the load imbalance issue/concept addressed by Witness Sim and the related guidance he received from FPL Director of Operations Witness Sanchez regarding the operational risks caused by a delay of the Dania Beach Project beyond the four year period. This is the same issue/concept that Witness Sim addressed in his depositions on November 29 and December 4, and again in his rebuttal testimony, where he responded to Sierra Club Witness Hausman's claim that the four-year period was a "magic number" and "arbitrary".

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<sup>3</sup> In contrast, Sierra Club objected to FPL's deposition of Sierra Club's Florida Chapter Beyond Coal Campaign Senior Representative, Susannah Randolph, who was an affiant to its petition to intervene and copied on numerous pleadings served upon FPL in this proceeding. FPL ultimately agreed to depose Sierra Club's expert witness and a single corporate representative in Cincinnati, Ohio, who could not even confirm Sierra Club's positions on the issues in this proceeding

16. Witness Sanchez's rebuttal testimony directly responds to and rebuts the delay scenario offered by Dr. Hausman. Witness Sanchez emphasizes that the time from retirement of Lauderdale Units 4 and 5 to the commercial operation date of the Dania Beach Project should be kept to a minimum and no more than the four years required to dismantle the Lauderdale Units and construct the Project for operation. He supports this explanation by providing a calculation that he uses to operate the FPL system, which looks at the available generation and transmission import capability necessary to serve load requirements in Southeastern Florida.

17. Likewise, Witness Sim made it clear that while he relies on guidance from Witness Sanchez for input on any delay of a project such as Dania Beach, he is not, and FPL is not, relying on Witness Sanchez's area reliability margin calculation to support FPL's need and associated resource plan proposed in this proceeding. Witness Sanchez is simply providing support for his guidance to Witness Sim that any delay of the new unit should have a commensurate delay for the retirement of the old units to minimize operational risk.

18. Nothing is new, and nothing is hidden. All has been thoroughly explained by FPL and its witnesses, and Sierra Club has had opportunity to conduct discovery on these issues since it intervened in the case, which it clearly has, including discovery directed at Witness Sanchez on December 26, 2017, and his deposition on January 8, 2018. Sierra Club's contention that Witness Sanchez has created a novel reliability criterion is nothing more than a red herring for a concept that has been thoroughly discussed in this need proceeding and in prior proceedings and filings. FPL's rebuttal testimony discussed herein directly rebuts the "magical" and "arbitrary" four-year delay window theories floated by Dr. Hausman and are therefore proper rebuttal testimony.

19. Sierra Club takes their "advocacy" a step lower with their claim that FPL has engaged in trial by ambush and that it is waiting for documents related to Mr. Sanchez's

testimony, which it must apparently think are relevant to the case. In response to a request from Sierra Club counsel at 5:24 pm on January 9, 2018, FPL confirmed the morning of January 10, 2018, prior to the Prehearing Conference, that it has no further documents responsive to discovery in this proceeding relevant to Mr. Sanchez's testimony. In other words, FPL has provided all discovery documents related to Mr. Sanchez's testimony.

20. At that same date and time, upon further review, FPL determined it did have certain backup documents to Staff interrogatories that Witness Sim sponsored for which it would provide backup spreadsheets, and FPL has since provided that backup information related to UPLAN resource plan model runs and reserve margin spreadsheets, none of which relate at all to Mr. Sanchez's testimony. Also, FPL provided a CD to Sierra Club's counsel that same date, via hand delivery, containing FPL documents which Sierra Club states were previously "mistakenly destroyed" when produced by FPL to Sierra Club. There is nothing provided in discovery to Sierra Club that concludes that Witness Sanchez has provided improper rebuttal testimony.

21. None of those facts establish good cause for Sierra Club's late-filed motion. In a proceeding such as this where all parties are on a schedule with statutory timelines, the procedural schedule must be strictly adhered to short of a compelling justification. To allow Sierra Club to file its Motion after the deadline for consideration by the Commission is clearly an abuse of process, impedes FPL's preparation for the final hearing, and, at the end of the day, represents a desperate move by Sierra Club to unjustly and unreasonably impact the schedule and time and resources of the Commission and the parties in this proceeding.

**B. What Sierra Club calls a “novel reliability criteria” is actually proper rebuttal testimony that FPL has provided in response to Witness Hausman**

22. As discussed above, the concept of regional balance or imbalance and margin to meet the reliability needs of FPL and its customers in the Southeastern Florida region has been addressed from day one with the filing of the Petition and prefiled direct testimony in this docket and in prior Commission proceedings as well. Witness Sanchez provides testimony to simply address the single issue of why any delay of the Dania Beach Project beyond four years from its planned 2022 commercial operation date will increase risk for operations of FPL’s system in the Southeastern Florida region. His use of the area reliability margin calculation is really another way he, from an operational perspective, monitors the regional imbalance issue in Southeastern Florida, which he confirmed in his deposition, and it is simply something he uses as part of relying on his over thirty years of experience to keep the lights on successfully for FPL’s customers, as well as for the customers of other utilities in the FRCC region in his role as FRCC coordinator. It is not in any way, shape, or form a new reliability criterion that forms the basis of FPL’s resource planning and need advocated by FPL in this proceeding.

23. Through the depositions, FPL discovery responses, and prefiled direct and rebuttal testimonies in this proceeding, FPL has continued to utilize the three resource reliability criteria it has used in recent years and Commission proceedings, as noted in both the direct and rebuttal testimonies of Witness Sim, which are (1) the 20% minimum reserve margin, (2) the 10% minimum generation only reserve margin, and (3) the 0.1 Loss of Load Probability. While cost savings for FPL’s customers is a primary driver for the timing of Dania Beach Project, the Project will also serve to maintain system reliability by enhancing the 20% minimum reserve margin and deferring future capacity additions, which also enhances regional reliability with an

additional 279 MW in the Southeastern Florida region, as FPL has clearly stated in its petition and direct testimony filed in this docket.

**C. Sierra Club has not otherwise established any basis under Florida law for the striking of Witness Sanchez's rebuttal testimony in whole or in part**

24. Witness Sanchez's rebuttal testimony does just what Sierra Club claims it should do under Florida law as proper rebuttal testimony: The Sanchez testimony has been filed to : (1) “.. explain, repel, counteract, or disprove the evidence of an adverse party”; and (2) “refute a theory from an adverse part.” Motion at 2, citing Order No. PSC-2017-0086-PCO-EI, *In re: Petition for rate increase by Gulf Power Company 3* (Mar. 14, 2017) (quoting *United States v. Delk*, 586 F.2d 513, 516 (5th Cir. 1978)) and *Cozzie v. State*, 225 So.3d 717, 728 (Fla. 2017).

25. As discussed thoroughly above, Witness Sanchez's testimony unequivocally serves to rebut and refute the “magic number” and “arbitrary” claim of Dr. Hausman in his testimony. As Dr. Hausman himself admits in his testimony, he is aware of the four-year period from retirement to commercial operation date and the guidance FPL's system operators provided to Dr. Sim in that regard, but simply disregards it. After Dr. Hausman dismisses the specific guidance provided by FPL's system operators regarding a delay scenario, it can be no surprise that Witness Sanchez's testimony provides support for the guidance he provided to Witness Sim regarding system operations and a delay of the Dania Beach Project.

26. As it relates to the regional imbalance issue, which FPL stressed the importance of load flow analysis for determining, Sierra Club refused to sign the standard confidentiality agreement with the FRCC to obtain the necessary confidential data to analyze the regional imbalance issue and how the Dania Project meets that need. So apparently, Sierra Club did not have the interest and/or expertise to analyze the issue, and now it is making a final, desperate, and untimely attempt to strike relevant, pertinent testimony of Witness Sanchez that rebuts the

testimony of Dr. Hausman and further supports FPL's positions for this need determination request.

27. This Commission has denied similar Motions to Strike rebuttal testimony as the Sierra Club attempts to raise here. See Order No. PSC-2017-0096-PCO-EI, *Petition for increase in rates filed by Gulf Power Company*; Order No. PSC-2017-0147-WS, *Application for increase in water and wastewater rates in Charlotte, Highlands Counties*; *Delk*, 586 F.2d 513, 516 (5th Cir. 1978), quoting, *Luttrell v. United States*, 320 F.2d 462, 464 (5th Cir. 1963); Order No. PSC-11-0563-PCO-EI, issued December 8, 2011, in Docket No. 110138-EI, *In Re: Petition for increase in rates by Gulf Power Company*; Order No. PSC-10-0426-PCO-WS, issued July 2, 2010, in Docket No. 090478-WS, *In Re: Application for original certificates for proposed water and wastewater systems, in Hernando and Pasco Counties, and request for initial rates and charges, by Skyland Utilities, L.L.C.*; and Order No. PSC-04-0928-PCO-EI, issued September 22, 2004, in Docket No. 030623-EI, *In Re: Complaints by Ocean Properties, Ltd., J.C. Penney Corp., Target Stores, Inc., and Dillard's Department Stores, Inc. against Florida Power & Light Company concerning thermal demand meter error*. In addition, while "a trial court has broad discretion to admit rebuttal testimony," the court "abuses that discretion when it limits non-cumulative rebuttal that goes to the heart of the principal defense." *Mendez v. Caddell Construction Co.*, 700 So. 2d 439, 440-41 (3rd DCA 1997)

**WHEREFORE**, for the foregoing reasons, Florida Power & Light Company respectfully requests that the Commission deny Sierra Club's motion to strike the prefiled rebuttal testimony of Witness Hector Sanchez and associated portions of Witness Sim prefiled rebuttal testimony.

**DATED** this 12<sup>th</sup> day of January, 2018.

William Cox  
Senior Attorney – Regulatory  
Fla. Bar No. 0093531  
Kevin I.C. Donaldson  
Senior Attorney  
Fla. Bar No. 833401

Florida Power & Light Company  
700 Universe Boulevard  
Juno Beach, FL 33408  
Telephone: (561) 304-5170  
Facsimile: (561) 691-7135

By: s/ William P. Cox  
William P. Cox  
Florida Bar No. 0093531

**CERTIFICATE OF SERVICE**  
**Docket No. 20170225-EI**

**I HEREBY CERTIFY** that a true and correct copy of the foregoing has been furnished by electronic mail on this 12th day of January, 2018 to the following:

Charles W. Murphy, Esq.  
Stephanie Cuello, Esq.  
Division of Legal Services  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, Florida 32399-0850  
cmurphy@psc.state.fl.us  
scuello@psc.state.fl.us

Julie Kaplan, Esq.  
Diana Csank, Esq.  
Michael Lenoff  
Sierra Club  
50 F Street NW, 8<sup>th</sup> Floor  
Washington, DC 20001  
Julie.kaplan@sierraclub.org  
Diana.csank@sierraclub.org  
Michael.lenoff@sierraclub.org

Patricia A. Christensen  
Office of Public Counsel  
The Florida Legislature  
111 West Madison Street, Room 812  
Tallahassee, Florida 32399  
Christensen.patty@leg.state.fl.us

Michael Marcil, Esq.  
Gunster  
450 E. Las Olas Blvd.  
Fort Lauderdale, FL 33301  
MMarcil@gunster.com

By: s/ William P. Cox  
William P. Cox  
Florida Bar No. 0093531

# ATTACHMENT 1

Excerpt from October 20, 2017 Direct Testimony of Dr. Steven R. Sim

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**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
**FLORIDA POWER & LIGHT COMPANY**  
**PETITION FOR DETERMINATION OF NEED**  
**REGARDING THE DANIA BEACH CLEAN ENERGY CENTER UNIT 7**  
**DIRECT TESTIMONY OF DR. STEVEN R. SIM**  
**DOCKET NO. 2017 \_\_\_\_\_-EI**  
**OCTOBER 20, 2017**

1 the most economic plan. It is projected to be approximately \$337 million  
2 CPVRR less expensive than Plan 1 (the status quo scenario that assumes  
3 no retirement of the existing Lauderdale Units 4 & 5). Plan 2 is also  
4 projected to be approximately \$1,288 million CPVRR less expensive  
5 than Plan 3 (which also assumes the retirement of the existing  
6 Lauderdale Units 4 & 5 in late 2018 and the addition of 1,033 MW of  
7 PV and 755 MW of batteries in Southeastern Florida by mid-2022).

8

9 - Plan 2 is projected to result in cost savings for FPL's customers  
10 beginning almost immediately versus either Plan 1 or Plan 3 as shown  
11 on page 2 of this exhibit.

12

13 Based on the results of these analyses, FPL concluded that the most economic  
14 choice for its customers is to proceed with the scheduled retirement of the  
15 existing Lauderdale Units 4 & 5 in late 2018, then add the 2x1 CC unit,  
16 DBEC Unit 7, at the existing Lauderdale site in mid-2022.

17 **Q. Did FPL consider a scenario in which the in-service date for DBEC Unit 7**  
18 **is delayed?**

19 A. Yes. FPL considered scenarios of both a one-year delay and a two-year delay.  
20 In these scenarios, it was assumed that the in-service date of DBEC Unit 7  
21 was delayed from mid-2022 to mid-2023 for the one-year delay scenario, and  
22 delayed to mid-2024 for the two-year delay scenario. In both scenarios, the  
23 retirement of Lauderdale Units 4 & 5 was also assumed to be delayed by

1           either one year or two years, respectively, to maintain the same roughly 4-year  
2           period in which a major Southeastern Florida generation component would be  
3           missing as is assumed in Plan 2. Projections for operational costs for  
4           Lauderdale Units 4 & 5, and construction costs for DBEC Unit 7,  
5           commensurate with the one-year and two-year delay scenarios were  
6           developed and used in the analyses of the delay scenarios.

7  
8           The results of the economic analysis of the delay scenarios were that the  
9           delays were projected to increase CPVRR costs to FPL's customers by  
10          approximately \$12 million for a one-year delay, and by approximately \$38  
11          million for a two-year delay. Thus, a delay of the mid-2022 in-service date of  
12          DBEC Unit 7 is projected to be uneconomic for FPL's customers.

13   **Q.    Assuming a need determination is granted for DBEC Unit 7, will FPL**  
14   **continue to evaluate the new CC unit?**

15   A.    Yes. As explained in the testimony of FPL witness Kingston, FPL will  
16          competitively procure models for the CTs, the heat recovery steam generator  
17          (HRSG), the steam turbine (collectively, the "Power Train Components"), and  
18          other related equipment that will comprise DBEC Unit 7, and optimize the  
19          design as a part of FPL's continuing efforts to determine which technology  
20          will provide the greatest benefits to FPL's customers.

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# ATTACHMENT 2

Excerpt from November 29, 2017 Deposition Transcript of Dr. Steven R. Sim

1           BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

2

3 Re:   Petition for determination of need  
4       for Dania Beach Clean Energy Center  
5       Unit 7, by Florida Power & Light  
6       Company

7 \_\_\_\_\_/

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          DEPOSITION OF STEVEN R. SIM, D.ENV.

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          Taken on Behalf of the Sierra Club

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          DATE TAKEN:   Wednesday, November 29, 2017  
13           TIME:        8:57 a.m. - 4:17 a.m.  
14           PLACE:       4800 North Federal Highway  
                          Suite 301-E  
                          Boca Raton, Florida 33431

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          Examination of the witness taken before:

18

          Darline Marie West, Registered Professional Reporter  
                          Florida Professional Reporter

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1 capital replacement costs and the timing of them and  
2 the exceptions made?

3 A. I don't believe that's the case. The only  
4 other one who would come close would be  
5 Miss Kingston.

6 Q. Do you know whether she could speak to them  
7 with the same level of --

8 A. I don't believe that she could.

9 Q. Okay. So turning now to page 37 of your  
10 testimony, at the top of the page.

11 A. I'm there.

12 Q. You describe these additional delay --  
13 delayed resource plans in 2017, and specifically you  
14 explain that the way those plans were set up was to  
15 maintain the same, roughly, four-year period in which  
16 a major Southeastern Florida generation component  
17 would be missing, as is assumed in Plan 2.

18 What was the basis for that assumption?

19 A. The basis for that is, when you remove the  
20 884 megawatts from Lauderdale 4 and 5, that  
21 constitutes, roughly, 1/7 of our generating capacity  
22 in that region. All else equal, our system operators  
23 would prefer to have that generation replaced earlier  
24 rather than later; and therefore, the preference  
25 would be, do not let that drag on before you go in

1 and you replace the generating capacity. So don't  
2 put us at any more risk than what you're already  
3 doing in regard to meeting unforeseen circumstances.  
4 We had, roughly, a four-year window, let's keep it at  
5 that.

6 Q. Why is four years the magic number of  
7 years?

8 A. We're taking the units out, Lauderdale 4  
9 and 5, in late 2018 and the Dania Beach unit would be  
10 in midyear of 2022, roughly, four years. So that is  
11 just the general time frame I used here in this  
12 discussion.

13 Q. So you didn't analyze any other  
14 arrangements in terms of when the retirements would  
15 occur as compared to when new generation would be  
16 added in 2017?

17 A. I don't believe that's what I said. I  
18 discussed it with our system operators, and their  
19 preference would be, let's not extend the four-year  
20 window beyond what it currently is. Let's try to  
21 maintain that constant to minimize risk as unforeseen  
22 circumstances.

23 Q. What forms their preference?

24 A. Decades and decades of operating the  
25 system.

1 Q. Besides their wisdom and experience, is  
2 there any other documented analytical basis for their  
3 preference?

4 A. I do not know. I rely upon their input in  
5 matters such as this.

6 Q. Did they --

7 A. But I -- but I certainly trust their  
8 experience, because they have to operate the system  
9 day in day out, 365 days a year. And it may help to  
10 remind folks that we operate the grid not just for  
11 FPL, we operate the grid for the entire peninsula of  
12 Florida. So they have the responsibility not just  
13 for FPL and its customers, but for the state.

14 Q. Turning back to another assumption that you  
15 discussed with my colleague. You said that  
16 74.5 megawatts solar -- large scale solar is the  
17 sweet spot for FPL.

18 What informs that sizing?

19 A. I think there are a couple of  
20 considerations there: One is that above a certain  
21 level of megawatts within a range, the economics for  
22 universal solar have been analyzed and have been set  
23 as being -- as it falls within this window, that  
24 is -- you're gaining the economies of scale. 74.5 is  
25 within that range.

1 projected.

2 MR. COX: Thank you, Dr. Sim. I don't  
3 have any further questions.

4 MS. CSANK: Thank you, Dr. Sim.

5 MR. COX: Again, I guess we're  
6 continuing the deposition to this date or  
7 potentially?

8 MS. CSANK: Potentially. I think what  
9 we'll do is, we will confer with you. We'll  
10 see what you provide us and --

11 Should we go off the record?

12 MR. COX: Sure.

13 (A discussion was held off the record.)

14 MS. CSANK: We're back on the record.  
15 My understanding is that Patty has a quick  
16 clarification.

17 So go ahead, Patty.

18 MS. CHRISTENSEN: Yes, I do. Thanks.

19 CROSS-EXAMINATION

20 BY MS. CHRISTENSEN:

21 Q. FPL had asked what the cost was -- if there  
22 was -- the cost of delaying the project one year or  
23 two years were. I believe, Dr. Sims, you responded  
24 it would be 12 million, present value, and 38 million  
25 net present value.

1           Can you explain what those numbers -- what  
2 assumptions those numbers are based on?

3           A.   They're based on a number of assumptions.  
4 Some of the key assumptions were that there would be  
5 a change in the installed cost of the Dania Beach  
6 unit if we moved the unit back from 22 to first 23  
7 and then to 24. There was also a change in the  
8 operational costs.

9           We had discussed earlier that we assumed  
10 that there would be -- we would maintain a four-year  
11 window from the time of retirement. So in the  
12 original analysis with a mid '22 Dania Beach  
13 in-service date, the Lauderdale 4 and 5 units were  
14 projected to cease operation and be retired in late  
15 2018. We assumed that in the one year delay, they  
16 would continue to operate until late 2019 along with  
17 associated operating costs for that additional year.  
18 And in the two-year delay, the same thing. They  
19 would continuing operating not -- out to late 2020  
20 with one more year of operational cost. And then  
21 there are fuel impacts on the system from the delay  
22 in bringing in the Dania Beach unit. So those are  
23 the three primary drivers.

24           Q.   I'm sorry. I was just going to ask -- and  
25 based on your answer, I assume you did not do an

1 analysis with looking at continuing to retire the  
2 Fort Lauderdale 4 and 5 units in '18 and bringing in  
3 the Dania units a year later or two years later? Is  
4 that my understanding from your response?

5 A. That is correct. And as we had discussed  
6 earlier, that was based on system operators'  
7 guidance, in that they did not wish to be without  
8 that amount of generating capacity in the region for  
9 more than four years. They thought that was placing  
10 both additional risk on the system, both FPL and  
11 peninsula of Florida.

12 Q. Is that's the Southeastern regional low  
13 risk?

14 A. It is both a -- I would say primarily --  
15 no. I would say first a Southeast Florida risk. And  
16 if they were to have transmission system difficulties  
17 in such a large load pocket, those transmission  
18 difficulties -- system difficulties could spread  
19 northward.

20 MS. CHRISTENSEN: Okay. All right. I  
21 think that answered or clarified my  
22 understanding of the numbers. So I  
23 appreciate it. Thank you, Dr. Sim.

24 THE WITNESS: You're welcome.

25 MS. CSANK: May I, following up on

# ATTACHMENT 3

Excerpt from December 4, 2017 Deposition Transcript of Dr. Steven R. Sim

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

RE: PETITION FOR DETERMINATION  
OF NEED FOR DANIA BEACH CLEAN  
ENERGY CENTER UNIT 7, BY FLORIDA  
POWER & LIGHT COMPANY

Docket No. 20170225-EI  
Served: Dec. 1, 2017

DEPOSITION OF DR. STEVEN R. SIM

Pages 1 through 80

Monday, December 4, 2017  
10:12 a.m. - 12:31 p.m.

FLORIDA POWER & LIGHT COMPANY  
700 Universe Boulevard  
Juno Beach, Florida 33408

Stenographically Reported By:  
WANDA D. GOOD, CERTIFIED COURT REPORTER

1 reliability analyses, and there were numerous  
2 discussions with our system operators regarding whether  
3 or not that was an acceptable timeframe.

4 Q. Did you discuss the possibility of  
5 contingencies in case you needed to extend that  
6 timeframe how you would manage any risks associated  
7 with doing so?

8 A. There were discussions along those lines,  
9 which among other things pointed back to the concern on  
10 our system operators and their desire to have the  
11 window as short as possible between when the existing  
12 unit would be retired, the process would begin and the  
13 replacement capacity in place, and that was why in our  
14 delay scenarios we kept that roughly four-year window  
15 constant in looking at the one- and two-year delay  
16 scenarios.

17 Q. And -- and I guess I -- I just still don't  
18 quite understand. I just want to make sure I'm -- I'm  
19 putting this to you as specifically and clearly as I  
20 can.

21 What are the factors that would create  
22 additional risks from going beyond four -- that  
23 four-year period; in other words, having a longer  
24 period between the retirement of Lauderdale Units 4 and  
25 5 and the addition of generation capacity in Southeast

1 Florida?

2 A. I think we're back to the previous discussion  
3 both last week and earlier today in which we could have  
4 lower amounts of available capacity for our system  
5 operators in the Southeast Florida region due to  
6 unexpected circumstances or we could have higher --  
7 and/or higher load in the Southeast Florida area.  
8 Those risks are what we are evaluating in terms of why  
9 you would want this window between retirement and  
10 in-service of the new capacity to be as short as  
11 possible.

12 Q. So, I understand that's a possibility, but  
13 did FP&L analyze and try to quantify the probability of  
14 there being risks associated? In other words, let  
15 me -- let me -- let me step back.

16 Was there any affirmative documented analysis  
17 of extending the period from between when the  
18 Lauderdale Units 4 and 5 are retired and the date when  
19 additional generation capacity comes into service?

20 A. I understand your question to be did we  
21 project the probability of such an occurrence, and the  
22 answer would be no. We typically do not do such a  
23 thing.

24 Q. Is there any other way for a third party to  
25 independently verify whether that four-year period is

1 appropriate or whether longer periods are appropriate?

2 A. I would have to say that on a qualitative  
3 basis, any third party should be able to look and see  
4 that the longer you go without generation in such a  
5 vital area of our system, the more risk one is likely  
6 to assume. Whether the third party wishes to try to  
7 come up with their own quantification of probability,  
8 I'll leave that to the third party.

9 MS. CSANK: So, I'd like to just request  
10 another two-minute break. Just so that FP&L  
11 counsel is aware, I'm -- I'm nearing the end of my  
12 questions. I just want to take a minute and/or  
13 two, so if we can resume at 12:05, but I -- I  
14 expect only to have a couple more questions.

15 MR. COX: Okay. I think we'll need to wrap  
16 up, you know, within the lunch hour. People have  
17 places to be, so hopefully we can do that after we  
18 take a short break.

19 MS. CSANK: Absolutely, okay.

20 MR. COX: Thank you.

21 MS. CSANK: Let's break until 12:05. Thank  
22 you for your indulgence.

23 (Thereupon, an off-the-record recess was had  
24 from 12:04 until 12:08 p.m.)

25 MS. CSANK: So then, let's go back on the