



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

April 25, 2022

-VIA ELECTRONIC FILING-

Adam Teitzman Commission Clerk Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

RE: Docket No. 20220045-EI

Petition for Determination of Need for Sweatt-Whidden 230 kV Transmission Line in Okeechobee, DeSoto, Highlands, and Glades Counties, by Florida Power & Light Company

Dear Mr. Teitzman:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") in the above-referenced docket is FPL's Prehearing Statement.

If there are any questions regarding this transmittal, please contact me at (561) 304-5662.

Sincerely,

/s/ William P. Cox William P. Cox Senior Attorney Fla. Bar No. 00093531

WPC:ec Enclosure

cc: Ashley Weisenfeld, Senior Attorney, Office of the General Counsel Matthew Jones, Attorney, Office of the General Counsel

Florida Power & Light Company

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination of Need for Sweatt-Whidden 230 kV Transmission Line in Okeechobee, DeSoto, Highlands, and Glades Counties, by Florida Power & Light Company. Docket No. 20220045-EI

Filed: April 25, 2022

FLORIDA POWER & LIGHT COMPANY'S PREHEARING STATEMENT

Pursuant to Florida Public Service Commission ("FPSC" or the "Commission") Order No. PSC-2022-0123-PCO-EI, Florida Power & Light Company ("FPL" or the "Company") hereby submits its Prehearing Statement regarding the issues to be addressed at the hearing scheduled for May 16, 2022.

1) WITNESS

Direct

<u>WITNESS</u> <u>SUBJECT MATTER</u> <u>ISSUE #</u>

Francisco Prieto

Provides an overview of the FPL transmission system; describes the Sweatt-Whidden 230 kV transmission line project ("SWP"), including the design and operating voltage of the proposed transmission line, the starting and ending points of the line, the approximate cost of the SWP, and the projected in-service date; addresses the specific conditions, contingencies, and factors which demonstrate the need for the SWP, including a discussion of FPL's transmission planning process and the reliability benefits of the SWP; presents the major transmission alternatives to the SWP that were evaluated and rejected by FPL in favor of the SWP; and discusses the adverse consequences to FPL's electric system and customers if the SWP is delayed or denied.

1, 2, 3, 4

2) EXHIBITS

Witness	Proffered By	Exhibit No.	Description	Issue #
None	FPL	None	Notices of Final Hearing and Affidavits of Publication	1, 2, 3, 4
Francisco Prieto	FPL	None	Exhibit "A" to the Petition to Determine Need for the Sweatt-Whidden 230 kV transmission line in Okeechobee, DeSoto, Highlands, and Glades Counties	1, 2, 3, 4
Francisco Prieto	FPL	FP-1	FPL Electric Facilities Map (FPL General Map)	1, 2, 3, 4
Francisco Prieto	FPL	FP-2	Map of Study Area with Existing Facilities and SWP	1, 2, 3, 4
Francisco Prieto	FPL	FP-3	Sweatt-Whidden Expected Construction Schedule	1, 2, 3, 4
Francisco Prieto	FPL	FP-4	List of Contingencies	1, 2, 3, 4

In addition to the above prefiled exhibits, FPL reserves the right to utilize any exhibit introduced by any other party. FPL additionally reserves the right to introduce any additional exhibit necessary for rebuttal, cross-examination, or impeachment at the final hearing.

3) STATEMENT OF BASIC POSITION

FPL has petitioned the Commission for an affirmative determination of need for the construction and operation of an electrical transmission line, the Sweatt-Whidden 230 kV Project ("SWP"). The SWP will maximize system reliability, increase power transfer capability, and meet local area load requirements by (1) improving reliability for FPL customers served from the existing 69kV circuit between Okeechobee and Whidden substations; (2) increasing the east to west power transfer capabilities of the transmission network by providing a resilient, hardened 230kV circuit between the east and west areas of FPL's territory north of Lake Okeechobee; (3) relieving potential overloads and low voltage conditions under contingency events; and (4) reducing line loading on existing transmission circuits. The SWP will consist of a new 230kV

transmission line extending from FPL's Sweatt substation in Okeechobee County to FPL's Whidden substation in DeSoto County. It includes the construction of approximately 21 miles of a new single circuit 230 kV transmission line in Okeechobee County and the conversion of approximately 59 miles of 69kV transmission line to 230kV transmission lines in Okeechobee, Highlands, and DeSoto Counties (subject to final certification under the Florida Transmission Line Siting Act or "TLSA"). It will also include the rebuild/conversion from 69kV to 230kV of two FPL and two Glades Electric Cooperative, Inc. substations.

The need for the SWP is based on the following considerations:

- The need to improve reliability for FPL customers served from the existing 69kV circuit between Okeechobee and Whidden substations;
- The need to provide an additional transmission path to increase east to west power transfer capabilities; and
- The need to mitigate potential overloads and low voltage conditions under contingency events.

Over the past six years (2015-2021), the FPL West Region has reported winter peak loads between 4000 MW and 5400 MW. FPL is forecasting that by 2031, the winter load in the West Region, an area that includes Collier, Lee, Hendry, Charlotte, Glades, Sarasota, DeSoto and Manatee Counties, will be approximately 5800 MW. Transmission assessment studies conducted by FPL in 2021 have identified potential system limitations that will require reliability improvements for Okeechobee, Highlands, DeSoto, Collier, Lee, Sarasota, and Manatee Counties. The studies also identified that by 2025, the load to generation imbalance in the West Region continues to grow, and the system would benefit from an increase in transfer capability into the area.

FPL evaluated multiple transmission alternatives for meeting this identified need, which resulted in the selection of the SWP. The SWP presents the best alternative, taking into account

the demand for electricity, enhancing electric system reliability and integrity, and addressing the need for abundant, low-cost electrical energy to assure the economic well-being of the citizens of this state. Furthermore, the project meets area load requirements by serving potential future industrial, commercial and residential load, while maximizing system reliability and minimizing cost to customers.

In summary, the SWP presents the best alternative for satisfying the need for a reliable and cost-effective supply of power to FPL's existing and future customers within Okeechobee, DeSoto, Glades, and Highlands Counties. FPL's petition, prefiled testimony, and exhibits demonstrate the need for SWP in the proposed time frame as the most cost-effective alternative available, taking into account the demand for electricity, the need for electric system reliability and integrity, the need for abundant, low-cost electrical energy to assure the economic well-being of the residents of this state, the location of the project (starting and ending points of the line), and other relevant matters pursuant to Section 403.537(1)(c), Florida Statutes (2021).

For these reasons, and those set forth more fully in FPL's Petition and prefiled testimony and exhibits, FPL satisfies the statutory elements for granting an affirmative determination of need for SWP pursuant to Section 403.537, Florida Statutes.

4) STATEMENT OF ISSUES AND POSITIONS

- ISSUE 1: Is there a need for Florida Power & Light Company's proposed Sweatt-Whidden 230 kV transmission line, taking into account the need for electric system reliability and integrity, as prescribed in Section 403.537, Florida Statutes?
 - **FPL:** Yes. There is a need for FPL's proposed Sweatt-Whidden 230 kV transmission line project, taking into account the need for electric system reliability and integrity. This transmission line is needed to: (a) improve the reliability for FPL customers served from the existing 69kV circuit between Okeechobee and Whidden substations; (b) increase the east to west power transfer capabilities of the transmission network by providing a resilient, hardened 230kV circuit between the east and west areas of FPL's territory north of Lake Okeechobee; (c) relieve potential overloads and low voltage conditions under contingency events; and (d) reduce line loading on existing transmission circuits. FPL's studies estimate that

the proposed SWP project would reduce transmission losses by approximately 3 MW at peak load levels and approximately 2 MW at off peak load levels. Therefore, the proposed Sweatt-Whidden 230kV transmission line project should maintain and improve reliability and improve the power transfer capability to FPL's customers in the area.

The record in this case demonstrates that if FPL does not add or improve transmission in the SWP project service area by December 2025, then sufficient transmission capacity would not be available to serve the existing and future industrial, commercial, and residential customers in the SWP project service area and, by virtue of the current radial transmission service configuration, system reliability would not be at the same level delivered to other FPL customers that have normal looped transmission service. (Prieto)

ISSUE 2: Is there a need for Florida Power & Light Company's proposed Sweatt-Whidden 230 kV transmission line, taking into account the need for abundant, low cost electrical energy to assure the economic well-being of the citizens of the State, as prescribed in Section 403.537, Florida Statutes?

FPL: Yes. There is a need for FPL's proposed Sweatt-Whidden 230 kV transmission line project, taking into account the need for abundant, low cost electrical energy to assure the economic well-being of the citizens of the State. A study of transmission improvements for this part of the State evaluated various alternatives which resulted in the selection of the SWP as the most cost-effective and efficient means to efficiently and effectively improve reliability for customers served from FPL's existing 69kV circuit between Okeechobee and Whidden substations, provide a transmission route to increase east to west power transfer capability, mitigate potential overloads and low voltage conditions under contingency events, and reduce line loading on existing transmission circuits.

The estimated cost of the proposed Sweatt-Whidden 230kV transmission line project is \$213.5 million. Approximately 75% of the new transmission line will follow the path of the existing 69kV transmission line. While the final cost is subject to the final route and other conditions that could be imposed through the Transmission Line Siting Act process, the estimated cost in the Petition is reasonable.

FPL evaluated and rejected two transmission alternatives to the proposed Sweatt-Whidden project. Alternative I, the Ft. Drum-Whidden Project, consists of a new 230kV transmission line extending from FPL's Ft. Drum substation in Indian River County to FPL's Whidden substation in DeSoto County, requiring the construction of approximately 92 miles (subject to certification under the Florida TLSA) of a single circuit 230kV transmission line in the Indian River, Okeechobee, Highlands, and DeSoto Counties. The estimated construction cost of this alternative is \$283.9 million (\$300.3 million CPVRR). Alternative I was rejected by FPL because (1) it would not provide the needed reliability improvements for the customers served from the existing 69kV circuit between Okeechobee and Whidden substations; (2) its cost is approximately \$70 million higher than the SWP; and (3) it does not provide for future transmission network flexibility, nor does it substantially

improve reliability in the SWP project service area because it only allows for reconfiguration of existing infrastructure on the 69kV network. Alternative II, the Martin-Whidden Project, consists of a new 230kV transmission line extending from FPL's Martin substation in Martin County to FPL's Whidden substation in DeSoto County. It would require the construction of approximately 87 miles (subject to certification under the Florida TLSA) of a single circuit 230 kV transmission line in Martin, Okeechobee, Highlands, and DeSoto Counties. The estimated construction cost of this alternative is \$223.3 million (\$236.5 million CPVRR). Alternative II was rejected by FPL because (1) it does not provide the needed reliability improvements for the customers served from the existing 69kV circuit between Okeechobee and Whidden substations; (2) the cost of the alternative is approximately \$10 million higher than the SWP; and (3) this alternative does not substantially improve reliability in the SWP project service area because it only allows for reconfiguration of existing infrastructure on the 69kV network. (Prieto)

ISSUE 3: Are Florida Power & Light Company's Sweatt Substation in Okeechobee County and its Whidden Substation in DeSoto County the appropriate starting and ending points for the proposed Sweatt-Whidden 230 kV transmission line?

FPL: Yes. A new transmission line sited west from FPL's existing Sweatt Substation in Okeechobee County to FPL's exiting Whidden Substation in DeSoto County would be the most reliable, cost-effective means to serve the projected load and demand growth within Okeechobee, DeSoto, Glades, and Highlands Counties and all of the counties in FPL's West Region. The record demonstrates that the appropriate starting and ending points are the Sweatt Substation and the Whidden Substation, respectively. The Transmission Line Siting Board will make the final determination concerning the length and route of the proposed transmission line. (Prieto)

ISSUE 4: Should the Commission grant Florida Power & Light Company's petition for determination of need for the proposed Sweatt-Whidden 230 kV transmission line project?

FPL: Yes. There is a need for the Sweatt-Whidden 230 kV transmission line project starting in December 2025, taking into account the need for electric system reliability and integrity and the need for abundant, low-cost electrical energy to assure the economic well-being of the residents of this state. The appropriate starting and ending points of the line are the existing Sweatt Substation in Okeechobee County and FPL's existing Whidden Substation in DeSoto County, respectively. The Transmission Line Siting Board will make the final determination concerning the length and route of the transmission line. (Prieto)

5) STIPULATED ISSUES

FPL: None at this time.

6) PENDING MOTIONS

FPL: None at this time.

7) PENDING REQUESTS FOR CONFIDENTIALITY

Florida Power & Light Company's request for confidential classification of certain information provided in the exhibits and attachments in support of its Petition and the prefiled direct testimony of FPL witness Francisco Prieto, dated April 1, 2022. [DN 02215-2022]

8) OBJECTIONS TO A WITNESS' QUALIFICATION AS AN EXPERT

FPL: None at this time.

9) REQUEST FOR SEQUESTRATION OF WITNESSES

FPL: None at this time.

10) STATEMENT OF COMPLIANCE WITH ORDER ESTABLISHING PROCEDURE

There are no requirements of the Order Establishing Procedure with which FPL cannot comply.

Respectfully submitted this 25th day of April, 2022.

William P. Cox, Senior Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408 Telephone: (561) 304-5662 Facsimile: (561) 691-7135

By <u>s/William P. Cox</u>
William P. Cox
Florida Bar No. 0093531

will.cox@fpl.com

CERTIFICATE OF SERVICE Docket No. 20220045-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail on this 25th day of April, 2022 to the following:

Ashley Weisenfeld, Esq.
Matthew Jones, Esq.
Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850
aweisnf@psc.state.fl.us
majones@psc.state.fl.us

By: s/William P. Cox

William P. Cox Florida Bar No. 0093531