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March 30, 2026

-VIA ELECTRONIC FILING-

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

Re: Docket No. 20260020-EI
**Petition for determination of need for Andytown-Oasis transmission lines project in
Broward and Miami-Dade 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 the rebuttal testimony and exhibits of FPL witness Miguel A. Yanes.

Please feel free to contact me at 561-304-5662 if you have any questions about this transmittal.

Sincerely,

/s/ William P. Cox
William P. Cox
Senior Counsel
Florida Bar No. 0093531

Enclosure

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by

Electronic Mail to the following parties of record this 30th day of March 2026:

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**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION
DOCKET NO. 20260020-EI**

FLORIDA POWER & LIGHT COMPANY

REBUTTAL TESTIMONY OF MIGUEL A. YANES

Filed: March 30, 2026

1 **I. INTRODUCTION**

2 **Q. Please state your name, business address, employer and position.**

3 A. My name is Miguel A. Yanes. My business address is 4200 W. Flagler Street, Miami,
4 Florida 33134. I am employed by Florida Power & Light Company (“FPL” or the
5 “Company”) as Senior Director, Transmission and Substation Operations.

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

7 A. Yes.

8 **Q. Are you sponsoring any rebuttal exhibits in this case?**

9 A. Yes. I am sponsoring the following rebuttal exhibits:

- 10 • Exhibit MAY-5 FPL’s Response to Staff’s First Set of Interrogatories, No. 15
- 11 • Exhibit MAY-6 FPL’s Responses to Staff’s First Set of Interrogatories, Nos. 9
12 and 11

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

14 A. The purpose of my rebuttal testimony is to respond to the direct testimony submitted
15 on behalf of the Environmental Defense Fund, Inc. (“EDF”) witnesses Ted J. Thomas
16 and David Cranston, both of whom oppose FPL’s Petition for Determination of Need
17 for the Andytown-Oasis Project (“AOP” or “Project”).

18 **Q. Did you review the direct testimonies of EDF witnesses Thomas and Cranston?**

19 A. Yes, I reviewed their direct testimonies and considered the arguments they raised
20 regarding the FPL and Florida Reliability Coordinating Council (“FRCC”) transmission planning processes, federal transmission policy, and alleged impacts to
21 FPL customers.
22

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

2 A. My rebuttal testimony explains that EDF witnesses Thomas and Cranston do not
3 contest or otherwise challenge the need for the AOP but, instead, rely on federal policy
4 advocacy coupled with speculative future planning processes that fall outside the scope
5 of this proceeding, as further explained in the rebuttal testimony of FPL witness
6 McLain.¹ My testimony also explains that EDF’s recommendation that the undisputed
7 need be addressed through a regional transmission solution developed under a future,
8 yet-to-be implemented new regional transmission planning process is fundamentally
9 flawed and would jeopardize the safe and reliable service to customers in Miami-Dade
10 County. I also rebut EDF’s claims that FPL failed to consider alternative solutions, as
11 well as their assertions that the AOP will increase costs or foreclose future economic
12 benefits for FPL customers.

13

14 **II. The Need for the AOP is Undisputed**

15 **Q. Please summarize the need that forms the basis for the proposed AOP.**

16 A. As explained in detail in my direct testimony and supporting exhibits, FPL’s 2025
17 transmission planning studies identified that FPL’s existing transmission network will
18 not be able to support the growing load demand in Miami-Dade County by 2033, and
19 that a new transmission solution is required to address identified North American
20 Electric Reliability Corporation (“NERC”) Reliability Standards TPL-001-5.1 and

¹ FPL is submitting the rebuttal testimony of FPL witness McLain out of an abundance of caution to fully rebut the issues raised by EDF witnesses Cranston and Thomas. However, such testimony should not be construed or interpreted to imply that FPL agrees, concedes, or otherwise acquiesces that the EDF witnesses’ testimony and exhibits regarding the current FERC Order 1000 regional planning process and future FERC Order 1920 regional planning process are relevant to the Commission’s need determination under Section 403.537, F.S., pursuant to the Transmission Lines Siting Act (“TLSA”), Section 403.52-403.5365, F.S., or within the Commission’s jurisdiction.

1 NUC-001-4 violations in Miami-Dade County beginning in 2033. Violations of these
2 mandatory NERC reliability standards may result in significant penalties, including
3 monetary penalties assessed on a per-day basis, and failure to resolve identified
4 reliability violations can lead to serious negative operational consequences, including
5 load shedding and broader impacts affecting both FPL’s system and the interconnected
6 electric grid.

7 **Q. Do either of the EDF witnesses dispute or challenge the need for the Project?**

8 A. No. Notably, neither EDF witness Thomas nor EDF witness Cranston dispute the need
9 for the AOP as explained and demonstrated in my direct testimony. Neither EDF
10 witness provides transmission assessments, power flow analysis, or reliability
11 modeling disputing the demonstrated need for the AOP. The EDF witnesses likewise
12 do not dispute or otherwise challenge that timely completion of the AOP will fully
13 address and resolve these reliability violations and maintain transmission reliability for
14 FPL customers in Miami-Dade County. Rather, the EDF witnesses dedicate the
15 majority of their testimony advocating for a regional transmission solution developed
16 under a future, yet-to-be implemented new regional transmission planning process
17 pursuant to the Federal Energy Regulatory Commission (“FERC”) Order 1920. As
18 explained in detail below, such a regional transmission approach for the AOP project
19 recommended by the EDF witnesses is fundamentally flawed and would jeopardize the
20 safe and reliable service to customers in Miami-Dade County.

1 **Q. Does EDF witness Cranston’s commissioned report (Exhibit DC-2) impact or alter**
2 **the NERC reliability violations identified by FPL’s transmission planning study?**

3 A. No. EDF’s commissioned and co-authored report, in partnership with the University
4 of Florida, on transmission in the state of Florida is performed utilizing a transmission
5 model that is incomplete² and inaccurate that was built utilizing, per their own
6 admission, outdated, assumed, and estimated data. As a result, the assessment does not
7 reflect a credible analysis that is sound and compliant with NERC reliability standard
8 TPL-001-5.1 nor does it include the specific voltage requirements associated with
9 Turkey Point Nuclear plant interface requirement as mandated by NERC reliability
10 standard NUC-001-4. Finally, EDF’s report provides no analysis of the specific
11 contingency events that are the drivers of the NERC reliability violations identified in
12 Miami-Dade County.

13 **Q. Is the use of a statewide production model used in EDF’s commissioned report**
14 **appropriate modeling methodology for Florida?**

15 A. No. A statewide production cost model is not appropriate for Florida when used as the
16 primary basis for transmission planning or reliability determinations. Florida’s electric
17 system is operated by vertically integrated utilities that plan generation, transmission,
18 and distribution on a coordinated, utility-specific basis under Florida Public Service
19 Commission (“FPSC” or “Commission”) oversight. Each investor-owned utility
20 independently owns and plans its generation resources and is required to maintain
21 Commission-approved planning reserve margins to ensure reliable service.

² Section 3.2.1 of the EDF-commissioned report states, “*Intra-county lines are excluded from the model because internal connections within a node do not affect power flow calculations between distinct county nodes.*”

1 A statewide production cost modeling methodology, as included in EDF's
2 commissioned report, aggregates all generation resources across the state, regardless of
3 ownership, and dispatches those resources to serve statewide load. This approach
4 inherently assumes centralized dispatch and pooled resources, which does not reflect
5 Florida's vertically integrated utility structure, where each investor-owned utility
6 independently owns and plans its generation resources and is required to maintain
7 FPSC mandated reserve margins to reliably serve its own customers.

8

9 While statewide or regional production cost models may be informative for high-level
10 policy or market analyses, they do not adequately capture localized transmission
11 constraints, contingency performance, or utility-specific system characteristics
12 necessary to assess compliance with applicable reliability standards or to determine the
13 need for specific transmission facilities within Florida. Production cost models are
14 designed primarily to evaluate economic dispatch, fuel costs, and generation utilization
15 over broad geographic areas. As such, they rely on aggregated system representations
16 and simplified transmission assumptions that are not intended to assess detailed power
17 flow behavior, voltage performance, or facility-specific thermal loading under NERC
18 contingency conditions.

19 **Q. Can you briefly explain other limitations of EDF's commissioned report on**
20 **Florida's electric transmission system?**

21 A. As stated by EDF, the purpose of this commissioned report was to allegedly understand
22 the regional transmission needs of Florida, not evaluate the need for the AOP or
23 whether that need could be addressed through an alternative transmission solution. The

1 following omissions preclude any meaningful assessment of system reliability or
2 congestion as evaluated in transmission planning practice:

- 3 • **Omission of intra-county transmission lines** - All intra-county transmission
4 lines are omitted from the production cost model based on the incorrect
5 assumption that internal system behavior is irrelevant to system performance.³
6 In reality, the need for the Project is driven by low-voltage conditions within
7 Miami-Dade County, conditions that arise from internal system limitations that
8 are explicitly excluded from EDF's commissioned report.
- 9 • **Omission of actual facility-specific transmission ratings** – Actual facility-
10 specific transmission line ratings and impedances (impedance is the parameter
11 that determines how much power will flow in any particular line, and it is a
12 specific characteristic of the specific conductor used in the transmission line)
13 are not used.⁴ Transmission line ratings are not homogeneous within a voltage
14 class and cannot be treated as a single assumed value without materially
15 distorting system capability. For example, a 230kV transmission line within
16 FPL's system can range from ~1,200 amps (478 MVA) to more than 3,800
17 amps (1,518 MVA).
- 18 • **Omission of generation specific inputs** – EDF's co-authored report admits to
19 utilizing assumptions or approximations rather than generation specific inputs⁵
20 (e.g., ramp rates, minimum run times, startup costs, startup times, and heat

³ *Id.*

⁴ Section 3.1 of the EDF commissioned report states, “We approximate transmission line capacity and line susceptance based on voltage level, line type, line length, and standard material characteristics.”

⁵ Section 3.1 of the EDF commissioned report states, “Because detailed data on marginal generation cost and transmission line parameters are not readily available, we estimate marginal generation costs using generator technology type, heat rate, fuel price, and typical variable operating and maintenance costs.”

1 rates). These parameters materially affect dispatch outcomes, congestion
2 patterns, and production cost results, and the use of generalized assumptions
3 introduces additional uncertainty into the analysis. Moreover, the model does
4 not appear to incorporate fuel transportation limitations, or firm gas pipeline
5 capacity contracts. These factors are critical to realistic dispatch outcomes and
6 to achieve a production cost that is meaningful, particularly under stressed
7 system conditions.

- 8 • **Non-existent lines** – EDF Witness Cranston on Pg. 21 of his testimony
9 references several times, a “Hendry to Palm Beach line.” However, this line
10 does not exist. It appears that the EDF commissioned report utilizes proxy lines,
11 rather than actual lines with appropriate starting and ending points at
12 substations.

13
14 Ultimately, EDF’s co-authored report does not represent actual facility ratings, voltage
15 limited conditions, or realistic dispatch behavior, and its unrealistic cost conclusions
16 rely on maintaining peak condition savings across all hours and decades.⁶

⁶ Section 4.6 of the EDF commissioned report states, “we calculate the total economic benefit of the line expansion. We take the hourly cost difference compared to the Base Case and multiply it by 8,760 hours to determine the annual cost savings. We then multiply by 20 years to account for the length of time over which the benefit will be accrued.”

1 **III. EDF’s Reliance on Regional Planning is Misplaced**

2 **Q. The EDF witnesses argue that FPL should undertake a regional transmission**
3 **planning process to evaluate the need and identify a regional transmission**
4 **solution. Do you have a response?**

5 A. Yes. The AOP is a localized solution needed to address a specific, documented, and
6 uncontested reliability need in Miami-Dade County (the southernmost load in FPL’s
7 system). Identifying and solving localized reliability constraints is a fundamental and
8 appropriate function of transmission planning, particularly in a geographically
9 constrained and highly load-dense area like Miami-Dade County. It is important to
10 remember that Miami-Dade County is itself an electrical peninsula, it is constrained by
11 Everglades National Park to the west and the Atlantic Ocean to the east. As a result, a
12 local area problem needs a local area solution such as the AOP.

13 **Q. EDF witness Thomas quotes the direct testimony of FPL witness Scott Bores in**
14 **FPL’s 2025 rate case and argues FPL’s executive management has identified that**
15 **the primary threat to the Florida grid, and specifically to the South Florida load**
16 **center, is a lack of regional connectivity and transmission import capacity. Do**
17 **you have a response?**

18 A. Yes. I disagree with EDF’s characterization of Mr. Bores’ testimony. The testimony
19 of Mr. Bores referenced by EDF witness Thomas was describing the risks related to
20 FPL’s physical infrastructure and, in particular, the risk of limited electrical
21 interconnection capacity serving Florida due to its unique peninsular geography. The
22 selective quote by EDF witness Thomas is taken out of context and does not stand for
23 the proposition that FPL’s management is somehow advocating for the advancement

1 of regional transmission solutions to address localized transmission problems or that
2 FPL should not pursue local transmission solutions when appropriate. Rather, Mr.
3 Bores' testimony supports the proposition that the AOP is necessary and appropriate to
4 address the local violations of the mandatory NERC Reliability Standards TPL-001-
5 5.1 and NUC-001-4 in Miami-Dade County, which need is not disputed by EDF.

6 **Q. EDF witness Thomas contends that the FRCC transmission planning process**
7 **reflects a siloed or localized planning approach. Do you agree?**

8 A. No, the FRCC is not "siloed." FRCC's biannual regional planning process looks at the
9 entire state of Florida and determines if there is a more cost-efficient regional project.
10 Under the FRCC's Cost Effective and Efficient Regional Transmission Solutions
11 ("CEERT") framework, a potential CEERT project must meet defined threshold
12 criteria, meet all applicable NERC and FRCC reliability criteria when modeled without
13 the displaced facilities. Many transmission needs in Florida, including those driven by
14 localized thermal overloads or voltage performance under contingency conditions, do
15 not meet these regional displacement criteria. Such needs are often specific to a
16 particular utility's service territory, load pocket, or transmission corridor and are
17 required to maintain compliance with NERC reliability standards regardless of broader
18 regional system conditions. As a result, these projects are appropriately identified and
19 addressed through utility-specific transmission planning, even though they are
20 reviewed and coordinated regionally through the FRCC planning process. Importantly,
21 however, AOP was not identified through FRCC's biannual regional planning which
22 officially concluded June 2025. The AOP is a local project designed to address a local
23 area problem that cannot be cost-efficiently addressed by a regional project.

1 **Q. Does the existence of the FERC and FRCC regional planning processes eliminate**
2 **the need for local reliability projects?**

3 A. No. The FERC Order 1000 regional planning process as governed by FERC
4 requirements and executed by the FRCC and utility local reliability planning processes
5 serve complementary purposes, addressing both regional and local area deficiencies.

6 **Q. The EDF witnesses recommend that the Commission should direct FPL to**
7 **conduct regional transmission planning studies consistent with FERC Order 1920.**
8 **Do you have a response?**

9 A. Yes. FPL's compliance filing date for FERC Order 1920 is June 12, 2026. FPL has
10 been working with the FRCC, its members, and stakeholders to draft the FERC Order
11 1920 compliance filing language. After FPL's FERC compliance filing is submitted
12 on or before June 12, 2026, the first planning cycle under FERC Order 1920 would
13 start on January 1, 2028. Importantly, the conclusion of the first planning cycle under
14 Order 1920 will be by no later than January 1, 2031. Accordingly, there currently is
15 no FERC-approved Order 1920 transmission planning process for FPL and the
16 completion of the first planning cycle under that process is still several years away.

17 **Q. Couldn't FPL delay initiation of the AOP Project until the completion of the**
18 **FERC Order 1920 study in January 2031?**

19 A. No, there would be insufficient time from the conclusion of the FERC Order 1920 study
20 in January 2031 to begin the process of building the AOP project. As explained in my
21 direct testimony, this project must be completed by December 2033 in order to maintain
22 compliance with the NERC Reliability Standards based on the most recent transmission
23 planning assessment studies. In order to meet this in-service date and avoid

1 transmission reliability needs for Miami-Dade County, FPL must stagger the
2 construction and completion dates of the AOP lines in multiple phases between 2031
3 and 2033.⁷ The process to build a complex transmission project such as AOP includes
4 several steps including, but not limited to: (i) getting TLSA approval; (ii) obtaining
5 materials which include items that require long lead times; (iii) obtaining necessary
6 right-of-way and permits; and (iv) constructing the line itself, including right-of-way
7 clearing, and civil and right-of-way improvements (*i.e.*, new roads and pads for
8 transmission structures). Furthermore, Florida’s history of extreme weather (*i.e.*,
9 hurricanes) could result in delays if the project was unwisely built as a single phase in
10 2033 (rather than multiple phases as proposed).

11

12 Waiting until the FERC Order 1920 regional study is completed in January 2031 is
13 simply not feasible and would put FPL’s customers and entire electric grid at risk.
14 Failure to complete the AOP by the 2033 in-service date would result in the existing
15 transmission system being unable to maintain reliable operations in the Miami-Dade
16 County area without involuntary load shedding of a significant number of customers as
17 detailed in Exhibit MAY-5.

⁷ In addition to the transmission needs identified by 2033, the phased approach for AOP will address a transmission line in Miami-Dade County which is projected to reach approximately 99 percent of its ampacity rating under certain NERC Reliability Standard TPL-001-5.1 contingency conditions by 2031. This information was previously provided in the Confidential attachment to Staff’s First Set of Interrogatories, No. 2

1 **Q. In your opinion as an engineer and transmission planner, is it appropriate to delay**
2 **a needed transmission project based on speculative future alternatives as**
3 **proposed by EDF?**

4 A. No. Such a delay based on speculative future alternatives would put the reliable and
5 cost-effective electric service for FPL customers at substantial risk. FPL would and
6 could not support such hypothetical future projects that may or may not materialize.

7 **Q. Could the AOP Project be replaced by a regional transmission project as implied**
8 **in EDF witness Cranston’s testimony?**

9 A. No. The suggestion that the AOP could be replaced by a regional transmission project
10 reflects a fundamental misunderstanding of Florida’s transmission topology and the
11 applicable regional planning criteria under the current FERC Order 1000 process. The
12 undisputed transmission need is in Miami-Dade County, which is located at the
13 southernmost end of FPL’s service territory and is geographically constrained by the
14 Everglades to the west and the Atlantic Ocean to the east, leaving its electrical
15 interconnection limited to northward ties into Broward County.

16
17 Under the FERC Order 1000 regional planning framework, a project is considered
18 regional only if it provides benefits to two or more transmission providers. Florida has
19 three FERC-jurisdictional transmission providers: FPL, Duke Energy Florida (“DEF”),
20 and Tampa Electric Company (“TECO”), and satisfying regional criteria for
21 Miami-Dade County would require new transmission extending from Miami to central
22 or west Florida into the service territory of DEF or TECO, a distance exceeding 250
23 miles per line. Furthermore, to transfer the magnitude of power needed, such facilities

1 would necessarily be constructed at the 500 kV voltage level, with at least two 500 kV
2 lines required, resulting in a project involving a minimum of approximately 500 miles
3 of new 500 kV transmission. TECO does not own 500 kV facilities, and DEF's 500
4 kV system is much further north.

5
6 This scale, scope, cost, and geographic reach of such regional transmission solutions
7 underscore why AOP is appropriately planned as a local reliability project rather than
8 a regional transmission solution, and it is the most cost-effective solution for FPL
9 customers.

10

11

IV. Alternative Solutions

12

**Q. Did the EDF witness identify any alternative projects to address the identified
13 reliability need?**

14

A. No. The EDF witnesses do not identify any specific alternative project, proposed
15 configuration, expected in-service date, or other evidence that an alternative would
16 address the identified reliability need within the required timeframe in 2033.

17

**Q. Do you agree with EDF witness Cranston that FPL was required to develop
18 "alternative solutions" rather than alternative routes?**

19

A. No. While I am not an attorney, it is my understanding that per Rule 25-22.076(4),
20 Florida Administrative Code, FPL is supposed to consider and describe the "*major*
21 *alternative transmission lines or transmission improvements*" or "*other transmission*
22 *line alternatives.*" The term "alternative solutions" does not appear in the
23 Commission's rule here. Pages 13-15 of my direct testimony detail the two

1 transmission alternatives to the proposed AOP project. Ultimately, the AOP is the most
2 cost-effective alternative, taking into account the demand for electricity, maintaining
3 transmission reliability and integrity, and addressing the need for abundant, low-cost
4 electrical energy to assure the economic well-being of the residents of this state.

5 **Q. Do you agree with EDF witness Cranston that FPL did not consider alternatives**
6 **such as (a) incremental generation or (b) the utilization of transmission**
7 **technologies for Miami-Dade County?**

8 A. No. FPL conceptually considered whether new generation resources located within
9 the impacted area could address the identified transmission system conditions. The
10 Company determined that incremental gas-fired generation was not a feasible
11 alternative due to existing natural gas deliverability constraints in the Miami-Dade
12 County area. FPL further expanded on why incremental generation or energy storage
13 was not feasible for Miami-Dade County in Exhibit MAY-6.

14
15 Further, FPL considers multiple transmission technologies, including but not limited to
16 Advanced Transmission Technologies (“ATT”) and Grid-Enhancing Technologies
17 (“GETs”) as part of the design and engineering of major transmission projects,
18 including the AOP Project:

- 19 • **Advanced Transmission Conductors** - FPL is utilizing advanced
20 transmission conductors on both of the 230 kV lines for AOP Project. This
21 aluminum conductor steel supported (“ACSS”) transmission conductor has
22 similar ampacity as a composite based transmission conductor (another type of
23 advanced conductor), but ACSS is more cost effective for this project.

- 1 • **Topology Optimization** - FPL’s transmission planning and operations teams
2 already employ transmission topology optimization for planning and
3 operations via switching solutions to mitigate overloads.
- 4 • **Synchronous Condensers** - FPL previously converted old steam units into
5 synchronous condensers (commonly considered a type of GET) at FPL’s
6 Turkey Point facility, which provides needed voltage support for Miami-Dade
7 County.
- 8 • **Ambient Adjusted Ratings (AAR) & Dynamic Line Ratings (DLRs)** -
9 Effective April 1, 2026, FPL is implementing AAR pursuant to FERC Order
10 881. While FPL is not utilizing DLRs for its system, AAR utilizes actual
11 weather data to accurately establish transmission line ratings, replacing
12 static/seasonal assumptions – providing more accurate near-term thermal
13 ratings to better maximize the utilization of existing transmission assets. FPL
14 lines, including the AOP, will use AAR for temperature-adjusted ratings. The
15 temperature data is retrieved every five minutes, and AAR are recalculated at
16 a minimum hourly or every five degrees change in temperature. The AAR
17 calculations are based on discrete ambient temperatures inputs of no more than
18 five degrees Fahrenheit as well as incorporating the impact of solar heating
19 effects during daytime conditions (excluded during nighttime conditions).
- 20 • **Advanced Transmission Control Devices and other transmission**
21 **technologies** – FPL’s transmission toolkit includes other transmission
22 technologies such as series compensation, static VAR compensators (“SVC”),
23 enhanced real-time grid monitoring, and grid-forming inverters which are

1 considered in the development of new or ampacity upgrades of existing
2 transmission lines. FPL categorizes technologies such as SVC and series
3 compensation as types of advanced transmission control devices since they are
4 hardware devices that can actively change how power flows across the
5 transmission network by changing impedance, or voltage to balance power
6 flow across FPL's transmission system.

7 8 **V. Customer Impact Claims**

9 **Q. EDF witness Thomas claims that the Project will harm customers economically.**
10 **Does his testimony quantify those alleged impacts?**

11 A. No. His testimony does not include production cost modeling for FPL nor analysis of
12 the specific contingency events that are the drivers of the NERC reliability violations
13 identified in Miami-Dade County. His claims that FPL ignores any potential regional
14 transmission solutions are unfounded and fail to point to a single regional transmission
15 solution that would mitigate in whole or in part the need for the AOP.

16 **Q. In further support of their claim that FPL's transmission planning will harm**
17 **customers, EDF witness Cranston claims that FPL's North Florida Resiliency**
18 **Connection ("NFRC") project is evidence of how FPL's planning methodology is**
19 **inconsistent with the economic interests of FPL's customers. Do you agree with**
20 **his claim?**

21 A. No. FPL's transmission planning process has for many years contributed to and
22 resulted in industry-leading cost-effective, reliable electric services for our customers.
23 As I explained above, FPL has considered not only alternative transmission projects,

1 but also considered and implemented transmission technologies with the goal of
2 maximizing capacity and reliability on its transmission system. The Raven-Sinai
3 Transmission Line (also known as NFRC) was discussed extensively during FPL's
4 2021 Rate Case in Docket No. 20210015-EI and was ultimately approved. Today, the
5 Raven-Sinai Transmission Line successfully connects FPL customers in Peninsular
6 Florida to those in Northwest Florida (formerly Gulf Power) allowing for economic
7 power transfer between the two areas.

8 **Q. How should reliability considerations factor into the Commission's analysis of**
9 **customer impacts?**

10 A. Maintaining system reliability is essential to protecting customers from outages, load
11 shed, and associated economic harm. Investments that prevent reliability failures at the
12 lowest cost that are reasonably feasible directly benefit customers and are consistent
13 with providing abundant, low-cost electric energy.

14

15 **VI. CONCLUSION**

16 **Q. What is your overall conclusion regarding the EDF testimonies of witnesses**
17 **Thomas and Cranston?**

18 A. The testimonies of EDF's witnesses fail to provide any technical analysis of or
19 otherwise contest the need for the AOP supported by FPL's 2025 transmission
20 assessment technical analyses based on mandatory NERC reliability standards. EDF's
21 arguments rely on generalized federal policy concerns and speculative future planning
22 concepts and processes rather than evidence relevant to and presented in this

1 proceeding. The Commission should therefore approve the Project as necessary to
2 ensure reliable electric service and low-cost energy for the benefit of FPL's customers.

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

4 A. Yes.

Florida Power & Light Company
Docket No. 20260020-EI
Staff's First Set of Interrogatories
Interrogatory No. 15
Page 1 of 1

QUESTION:

Refer to witness Yanes' testimony, page 16, lines 3 through 7. If the proposed AOP is not completed timely, provide the number of customers that would be impacted by load shedding in each of the contingencies identified.

- a. Has any load shedding occurred within the past 10 year period? If so, for each event please provide the year, number of affected customers, and amount of load shed (in MW), as well as an explanation detailing the reason(s) for the load shedding.

RESPONSE:

If the AOP is not completed by the 2033 in service date identified in FPL's 2025 transmission planning assessment, certain contingency scenarios would result in the existing transmission system being unable to maintain reliable operation in the Miami Dade County area without involuntary load shedding. Under these conditions, the loss of system elements would cause transmission overloads that cannot be fully mitigated through operational actions, requiring the shedding of approximately [REDACTED] of load to preserve system integrity and prevent broader impacts.

FPL's transmission planning assessments do not estimate the exact number of customers affected by such load shedding, as impacts depend on real time system conditions. However, for illustrative purposes, during the high load summer period from late May through late September, a load shed of approximately [REDACTED] could correspond to impacts on the order of [REDACTED] customers based on average usage assumptions and could occur on a recurring basis. The need for involuntary load shedding of this magnitude would represent a significant degradation of transmission reliability in Miami Dade County and is an outcome FPL's planning efforts are intended to avoid.

- a. See FPL's objections served contemporaneously herewith. Subject thereto, and without waiver of any objection, FPL responds as follows:

With respect to historical operations, FPL has not implemented load shedding in Miami-Dade County within the past ten (10) years.

Florida Power & Light Company
Docket No. 20260020-EI
Staff's First Set of Interrogatories
Interrogatory No. 9
Page 1 of 1

QUESTION:

Did FPL consider in whole or in part using incremental generation in the impacted areas to reduce or defer the need for the transmission lines of the AOP? If not, explain why not. If so, detail the potential generation source(s) considered and the reason(s) why each was rejected.

RESPONSE:

As part of its transmission planning and alternatives evaluation with the 2025 transmission planning assessment, FPL considered whether new generation resources located within the impacted area could address the identified transmission system conditions. FPL determined that incremental gas-fired generation was not a feasible alternative due to existing natural gas deliverability constraints in the Miami-Dade County area. The addition of new gas-fired generation would require upstream natural gas infrastructure upgrades not presently available to FPL and therefore not assumed in the 2025 transmission planning assessment.

In addition, the siting and integration of new generation resources, fossil, or nuclear would also require additional transmission facilities to interconnect and reliably deliver power, and siting, permitting, and construction lead times would exceed the 2033 need date established by the 2025 transmission planning assessment. In addition, solar generation does not address generation requirements in late afternoon due to reduced solar output during net peak demand timeframes. Based on these considerations, incremental generation was not further evaluated as an alternative to FPL's transmission planning analyses for the AOP.

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QUESTION:

Did FPL consider in whole or in part using incremental energy storage in the impacted areas to reduce or defer the need for the transmission lines of the AOP? If not, explain why not. If so, detail the potential generation source(s) considered and the reason(s) why each was rejected.

RESPONSE:

FPL's 2025 transmission planning assessment did not assume the addition of new energy storage resources beyond those energy storage facilities already reflected in the load forecast contained in FPL's 2025 Ten-Year Site Plan ("TYSP"). FPL's transmission planning assessment identified system conditions involving thermal overloads, low-voltage conditions, and contingency performance that are driven by forecasted load growth, import requirements, and transmission system topology.

In addition, energy storage resources must be charged from the transmission system prior to discharging and therefore operate as load during charging periods. Any incremental energy storage in the impacted areas would represent additional load beyond what was forecast and included in FPL's 2025 TYSP and 2025 transmission planning assessment and further stress transmission system limitations. Thus, incremental energy storage was not modeled or relied upon to address the transmission system conditions identified in FPL's planning studies.