Christopher T. Wright
Senior Attorney – Regulatory
Florida Power & Light Company
700 Universe Blvd
Juno Beach, FL 33408-0420
Phone: (561) 691-7144
E-mail: Christoper.Wright@fpl.com
Florida Authorized House Counsel;
Admitted in Pennsylvania

April 10, 2020

VIA ELECTRONIC FILING

Mr. Adam Teitzman
Division of the Commission Clerk and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Re: Docket No. 20200071-EI
Review of 2020-2029 Storm Protection Plan pursuant to Rule 25-6.030, F.A.C.,
Florida Power & Light Company

Dear Mr. Teitzman:

Enclosed for electronic filing in the above-referenced docket, please find Florida Power & Light Company's Petition for Approval of the 2020-2029 Storm Protection Plan pursuant to Rule 25-6.030, F.A.C., together with the Direct Testimony of FPL witness Michael Jarro and Exhibit MJ-1. Copies of this filing will be provided as indicated on the enclosed Certificate of Service.

If you or your staff have any question regarding this filing, please contact me at (561) 691-7144.

Respectfully submitted,

s/Christopher Wright
Christopher T. Wright
Authorized House Counsel No. 1007055

Enclosure

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Review of 2020-2029 Storm Protection Plan pursuant to Rule 25-6.030, F.A.C., Florida Power & Light Company	Docket No. 20200071-EI Filed: April 10, 2020

PETITION OF FLORIDA POWER & LIGHT COMPANY FOR APPROVAL OF THE 2020-2029 STORM PROTECTION PLAN

I. INTRODUCTION

Florida Power & Light Company ("FPL" or the "Company") hereby files this petition (the "Petition") requesting that the Florida Public Service Commission ("Commission") approve the proposed Transmission and Distribution ("T&D") Storm Protection Plan for the years 2020-2029 (hereinafter, the "SPP") pursuant to Section 366.96, Florida Statutes ("F.S.") and Rule 25-6.030, Florida Administrative Code ("F.A.C."). FPL's SPP is, in large part, a continuation and expansion of its previously approved and successful storm hardening and storm preparedness programs. FPL submits that the storm hardening and storm preparedness programs included in its SPP are appropriate and necessary to achieve the legislative objectives of Section 366.96, F.S., to protect and strengthen T&D infrastructure from extreme weather conditions, reduce outage times and restoration costs, and improve overall service reliability to customers.[1] In support of this Petition, FPL states as follows:

1. The name and address of the Petitioner is:

   Florida Power & Light Company
   700 Universe Blvd
   Juno Beach, FL 33408

[1] The recovery of costs associated with the SPP, as well as the actual and projected costs to be included in FPL's Storm Protection Plan Cost Recovery Clause, will be addressed in subsequent and separate Storm Protection Plan Cost Recovery Clause dockets pursuant to Rule 25-6.031, F.A.C. The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

2. FPL is a corporation organized and existing under the laws of the State of Florida and is an electric utility as defined in Sections 366.02(2) and 366.96, F.S. FPL provides generation, transmission, and distribution service to nearly five million retail customer accounts.

3. Any pleading, motion, notice, order or other document required to be served upon the petitioner or filed by any party to this proceeding should be served upon all of the following individuals:

Kenneth A. Hoffman
Vice President, Regulatory Affairs
Florida Power & Light Company
215 South Monroe Street, Suite 810
Tallahassee, FL 32301
Phone: 850-521-3919
Fax: 850-521-3939
Email: ken.hoffman@fpl.com

John T. Burnett
Vice President and Deputy General Counsel
Christopher T. Wright
Senior Attorney
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
Phone: 561-691-7144
Fax: 561-691-7135
Email: john.t.burnett@fpl.com
Email: christopher.wright@fpl.com

4. The Commission has jurisdiction pursuant to Section 366.96, F.S., and Rule 25-6.030, F.A.C.

5. This Petition is being filed consistent with Rule 28-106.201, F.A.C. The agency affected is the Commission, located at 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399. This case does not involve reversal or modification of an agency decision or an agency's proposed action. Therefore, subparagraph (c) and portions of subparagraphs (b), (e), (f) and (g) of subsection (2) of Rule 28-106.201, F.A.C., are not applicable to this Petition. In compliance with subparagraph (d) of Rule 28-106.201, F.A.C., FPL states that it is not known which, if any, of the issues of material fact set forth in the body of this Petition may be disputed by any others who may plan to participate in this proceeding. The discussion below demonstrates how the petitioner's substantial interests will be affected by the agency determination.

II. BACKGROUND AND OVERVIEW

6. On June 27, 2019, the Governor of Florida signed CS/CS/CS/SB 796 addressing Storm Protection Plan Cost Recovery, which was codified in Section 366.96, F.S. Therein, the Florida Legislature found that it was in the State's interest to "strengthen electric utility infrastructure to withstand extreme weather conditions by promoting the overhead hardening of electrical distribution and transmission facilities, the undergrounding of certain electrical distribution lines, and vegetation management," and for each electric utility to "mitigate restoration costs and outage times to utility customers when developing transmission and distribution storm protection plans." Section 366.96(1), F.S. The Florida Legislature directed the Commission to adopt rules to specify the elements that must be included in each utility's SPP. Section 366.96(1), F.S.

7. Rule 25-6.030, F.A.C., requires each utility to file an updated SPP at least every three years that covers the utility's immediate ten-year planning period. Rule 25-6.030, F.A.C., also specifies the information to be included in each utility's SPP. Consistent with these requirements, FPL is herein submitting its SPP for the ten-year period of 2020-2029, which is provided as Exhibit MJ-1.

8. FPL's SPP is largely a continuation and expansion of its existing storm hardening and storm preparedness programs, which were most recently approved in FPL's 2019-2021 Storm Hardening Plan.[2] These existing hardening and storm preparedness programs have already demonstrated that they have and will continue to increase T&D infrastructure resiliency, reduce restoration times, and reduce restoration costs when FPL's system is impacted by extreme weather

[2] *See In re: Petition for Approval of Florida Power & Light Company's 2019-2021 Storm Hardening Plan pursuant to Rule 25-6.0342, F.A.C.*, Docket No. 20180144-EI, Order No. PSC-2019-0364-CO-EI (Fla. PSC Aug. 27, 2019) (making Order No. PSC-2019-0301-PAA-EI issued on July 29, 2019, effective and final).

events. FPL performed an analysis of Hurricanes Matthew and Irma that indicated the restoration construction man-hours ("CMH"), days to restore, and storm restoration costs for these storms would have been significantly higher without FPL's storm hardening programs.[3]

9. While FPL's nation-leading initiatives have made significant progress toward strengthening FPL's infrastructure, FPL must continue its T&D storm hardening and storm preparedness plans and initiatives. Storms remain a constant threat and Florida is the most hurricane-prone state in the nation. With the significant coast-line exposure of FPL's system, and the fact that the majority of FPL's customers live within twenty miles of the coast, a robust storm protection plan is critical to maintaining and improving grid resiliency and storm restoration as contemplated by the Legislature in Section 366.96.

10. As part of its SPP, FPL will continue the previously approved storm hardening and storm preparedness programs to achieve the legislative objectives of promoting the overhead hardening of T&D facilities, the undergrounding of distribution lines, and vegetation management to reduce restoration costs and outage times to customers and improve the overall service reliability for customers. In addition, FPL proposes to implement a new substation storm surge/flood mitigation program. FPL submits that the SPP will continue and expand the benefits of hardening, including improved day-to-day reliability, to all customers throughout FPL's system.

11. Submitted herewith and in support of FPL's SPP is the Direct Testimony of Michael Jarro and Exhibit MJ-1, which includes FPL's SPP for the period of 2020-2029 and supporting schedules.

[3] *See* FPL's Third Supplemental Response to Staff's First Data Request No. 29 ("Third Supplemental Amended") in Docket No. 20170215-EI, which is provided as Appendix A to Exhibit MJ-1.

III. STORM PROTECTION PLAN

A. Description of the SPP Programs

12. FPL's SPP is largely a continuation and expansion of the following previously approved storm hardening and storm preparedness programs:

- Pole Inspections – Distribution Program
- Structures/Other Equipment Inspections – Transmission Program
- Feeder Hardening (EWL) – Distribution Program
- Lateral Hardening (Undergrounding) – Distribution Program
- Wood Structures Hardening (Replacing) – Transmission Program
- Vegetation Management – Distribution Program
- Vegetation Management – Transmission Program

In addition, FPL proposes to implement a new Substation Storm Surge/Flood Mitigation –Program to protect T&D substations and equipment that are susceptible to storm surge or flooding during extreme weather events. These SPP programs are summarized below and a detailed description of each SPP program, consistent with Rule 25-6.030(3)(d), F.A.C., is provided in Section IV of Exhibit MJ-1.

13. The Pole Inspection – Distribution Program will continue FPL's existing Commission-approved distribution pole inspection program, which is an eight-year pole inspection cycle for all distribution poles that targets approximately 1/8 of the system annually (the actual number of poles inspected can vary somewhat from year to year). With approximately 1.2 million distribution poles as of year-end 2019, FPL expects to inspect approximately 150,000 poles annually. The estimated 2020-2029 annual average cost for the Pole Inspection – Distribution Program is approximately $61 million per year, which is consistent with historical

costs for the existing distribution pole inspection program.[4] A detailed description of the Pole Inspection – Distribution Program is provided in Section IV(A) of Exhibit MJ-1.

14. The Structures/Other Equipment Inspections – Transmission Program will continue FPL's current Commission-approved transmission inspection program which requires: (a) transmission circuits and substations and all associated hardware to be inspected on a six-year cycle; (b) wood structures to be visually inspected from the ground on an annual basis and climbing or bucket truck inspections to be conducted on a six-year cycle; and (c) steel and concrete structures to be visually inspected on an annual basis and climbing or bucket truck inspections to be conducted on a ten-year cycle. FPL expects to inspect approximately 68,000 transmission structures annually. The estimated 2020-2029 annual average cost for the Structures/Other Equipment Inspections – Transmission Program is approximately $50 million per year, which is consistent with historical costs for the existing transmission inspection program.[5] A detailed description of the Structures/Other Equipment Inspections – Transmission Program is provided in Section IV(B) of Exhibit MJ-1.

15. The Feeder Hardening (EWL) – Distribution Program will continue FPL's existing Commission-approved approach to harden existing feeders and certain critical distribution poles, as well as FPL's initiative to design and construct new pole lines and major planned work to meet the extreme wind loading ("EWL") criteria set forth in the National Electric Safety Code. FPL

[4] Note, the 2020-2029 program costs shown above are projected costs estimated as of the time of this filing. Subsequent projected and actual costs could vary by as much as 10% to 15%. The annual projected costs, actual/estimated costs, actuals costs, and true-up of actual costs to be included in FPL's Storm Protection Plan Cost Recovery Clause will all be addressed in subsequent and separate Storm Protection Plan Cost Recovery Clause filings pursuant to Rule 25-6.031, F.A.C. The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

[5] *See* footnote 4.

expects to harden approximately 280-350 feeders annually, with 100% of FPL's feeders expected to be hardened or underground by year-end 2024 and with the final costs of the program to be incurred in 2025. The estimated average annual cost for the Feeder Hardening (EWL) – Distribution Program to be incurred over the period of 2020-2025 is approximately $534 million per year, which is consistent with historical costs for the existing distribution feeder hardening program.[6] A detailed description of the Feeder Hardening (EWL) – Distribution Program is provided in Section IV(C) of Exhibit MJ-1.

16. The Lateral Hardening (Undergrounding) – Distribution Program includes completing FPL's existing three-year Storm Secure Underground Program Pilot ("SSUP Pilot") in 2020 and expanding the application of the SSUP to the implementation of the system-wide Lateral Hardening (Undergrounding) – Distribution Program for the period of 2021-2029. The SSUP Pilot is a program that targets certain overhead laterals that were impacted by recent storms and have a history of vegetation-related outages and other reliability issues for conversion from overhead to underground. As part of its SPP, FPL will incorporate, continue, and expand the SSUP during the ten-year SPP period to provide the benefits of underground lateral hardening throughout its system. After completing the SSUP Pilot in 2020, FPL estimates that it will convert approximately 300-700 laterals annually in 2021-2023 and approximately 800-900 laterals annually in 2024-2029. The estimated 2020-2029 annual average cost for the Lateral Hardening (Undergrounding) - Distribution Program is approximately $510 million per year.[7] A detailed description of the Lateral Hardening (Undergrounding) - Distribution Program is provided in Section IV(D) of Exhibit MJ-1.

[6] *See* footnote 4.

[7] *See* footnote 4.

17. The Wood Structures Hardening (Replacing) – Transmission Program is a continuation of FPL's existing transmission hardening program to replace all wood transmission structures with steel or concrete structures. As of year-end 2019, 96% of FPL's transmission structures, system-wide, were steel or concrete, with less than 2,900 (or 4%) wood structures remaining to be replaced. FPL expects to replace the 2,900 wood transmission structures remaining on its system by year-end 2022. The estimated 2020-2022 annual average cost for the Wood Structure Hardening (Replacing) – Transmission Program is approximately $39 million per year, which is a decrease from the historical costs for the existing transmission hardening program.[8] A detailed description of the Wood Structure Hardening (Replacing) – Transmission Program is provided in Section IV(E) of Exhibit MJ-1.

18. The Substation Storm Surge/Flood Mitigation Program is the only new storm hardening program that FPL proposes to implement as part of its SPP. The Substation Storm Surge/Flood Mitigation Program will implement measures to protect certain T&D substations and equipment that are susceptible to storm surge or flooding due to extreme weather events. Specifically, FPL will raise the equipment at certain substations above the flood level and construct flood protection walls around other substations that are susceptible to storm surge or flooding during extreme weather events. The Storm Surge/Flood Mitigation – Transmission and Distribution Program will reduce customer outages due to flooding and the need to de-energize substations that are impacted by storm surge or flooding, as well as reduce flood damage and restoration costs at these targeted substations. At this time, FPL has identified between 8-10 substations where it initially plans to implement storm surge/flood mitigation measures over the

[8] *See* footnote 4.

next three years (2020-2022). The estimated 2020-2022 annual average cost for the new Substation Storm Surge/Flood Mitigation Program is approximately $8 million per year.[9] A detailed description of the Substation Storm Surge/Flood Mitigation Program is provided in Section IV(F) of Exhibit MJ-1.

19. The Vegetation Management – Distribution Program is a continuation of FPL's existing, Commission-approved distribution vegetation management program. FPL's currently approved distribution vegetation program, includes the following system-wide vegetation inspection and management activities: three-year cycle for feeders; mid-year cycle targeted trimming for certain feeders; six-year cycle for laterals; and continued education of customers through its Right Tree, Right Place initiative. FPL plans to inspect and maintain, on average, approximately 15,200 miles annually, which is consistent with the historic miles inspected and trimmed annually. The estimated 2020-2029 average annual cost for the Vegetation Management – Distribution Program is approximately $60 million per year, which is consistent with historical costs for the existing distribution vegetation management program.[10] A detailed description of the Vegetation Management – Distribution Program is provided in Section IV(G)of Exhibit MJ-1.

20. The Vegetation Management – Transmission Program is a continuation of FPL's existing transmission vegetation management program, which includes visual and aerial inspections of all transmission line corridors, LiDAR inspections of North American Electric Reliability Corporation transmission line corridors, developing and executing annual work plans to address identified vegetation conditions, and identifying and addressing priority and hazard tree conditions prior to and during storm season. FPL plans to inspect and trim, on average,

[9] *See* footnote 4.

[10] *See* footnote 4.

approximately 7,000 miles of transmission lines annually, which is consistent with the historic miles inspected and trimmed annually. The estimated 2020-2029 average annual cost for the Vegetation Management – Transmission Program is approximately $10 million per year, which is consistent with historical costs for the existing transmission vegetation management program.[11] A detailed description of the Vegetation Management – Transmission Program is provided in Section IV(H) of Exhibit MJ-1.

B. Additional Details for First Three Years of the SPP

21. The following additional project level information required by Rule 25-6.030(3)(e)(1), F.A.C., for the first year of the SPP (2020) is provided in Appendix E to Exhibit MJ-1: (a) the actual or estimated construction start and completion dates; (b) a description of the affected existing facilities, including number and type(s) of customers served, historic service reliability performance during extreme weather conditions, and how this data was used to prioritize the storm protection project; and (c) a cost estimate including capital and operating expenses. A description of the criteria used to select and prioritize storm protection projects is included in the description of each SPP program provided in Section IV of Exhibit MJ-1.

22. Pursuant to Rule 25-6.030(3)(e)(2), F.A.C., FPL has also provided the estimated number and costs of projects under each specific program for the second and third years (2021-2022) of the SPP. This information is provided in Appendix C to Exhibit MJ-1.

23. The following additional information required by Rule 25-6.030(3)(f), F.A.C., for the first three years (2020-2022) of the vegetation management activities under the SPP is provided in Sections IV(G) and IV(H) of Exhibit MJ-1 and Appendix C to Exhibit MJ-1: (a) the projected frequency (trim cycle); (b) the projected miles of affected transmission and distribution overhead

[11] *See* footnote 4.

facilities; and (c) the estimated annual labor and equipment costs for both utility and contractor personnel. Descriptions of how the vegetation management activities will reduce outage times and restoration costs due to extreme weather conditions are provided in Sections IV(G) and IV(H) of Exhibit MJ-1.

C. Estimated Revenue Requirements and Rate Impacts

24. Pursuant to Rule 25-6.030(3)(g), F.A.C., the estimated annual jurisdictional revenue requirements of FPL's SPP for the ten-year period of 2020-2029 are provided in Section VI of Exhibit MJ-1. While FPL has provided estimated costs by program as of the time of this filing and associated total revenue requirements in its SPP, consistent with the requirements of Rule 25-6.030, F.A.C., subsequent projected and actual program costs submitted for cost recovery through the Storm Protection Plan Cost Recovery Clause (per Rule 25-6.031, F.A.C.,) could vary by as much as 10-15%, which variations would also impact the associated estimated revenue requirements and rate impacts.

25. FPL anticipates the programs included in the SPP will have zero bill impacts on customer bills during the first year of the SPP and only minimal bill increases for years two and three of the SPP. An estimate of hypothetical overall rate impacts for the first three years of the SPP (2020-2022) based on the total program costs reflected in this filing, without regard for the fact that FPL remains under a general base rate freeze pursuant to a Commission-approved settlement agreement through December 31, 2021, are provided in Section VII of Exhibit MJ-1. The annual jurisdictional revenue requirements and the estimated rate impacts are based on the total estimated costs, as of the time of this filing, for all programs included in the SPP regardless of whether those costs will be recovered in FPL's Storm Protection Plan Cost Recovery Clause or through base rates. In addition, under FPL's Commission-approved rate case settlement

agreement, any incremental base rate adjustment may not take place until FPL's base rates are established by the Commission in FPL's next base rate proceeding.[12]

26. FPL is not seeking Commission approval, through this petition, to recover any of the estimated costs associated with the SPP in this filing. The projected costs, actual/estimated costs, actual costs, and true-up of actual costs to be included in FPL's Storm Protection Plan Cost Recovery Clause, including whether these costs are included in current base rates, will all be addressed in subsequent and separate Storm Protection Plan Cost Recovery Clause filings pursuant to Rule 25-6.031, F.A.C. The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

D. FPL's SPP is in the Public Interest and Should Be Approved

27. Sections 366.96(4)-(5), F.S., provide that the Commission shall review each utility's SPP and, within 180 days from filing, determine whether the SPP is in the public interest.[13]

28. As explained above, the programs included in the SPP are largely a continuation and expansion of FPL's already successful and ongoing storm hardening and storm preparedness programs previously approved by the Commission, as well as a new storm hardening program to

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[12] *See In re: Petition for rate increase by Florida Power & Light Company*, Docket No. 160021-EI, Order No. PSC-16-0560-AS-EI (Fla. PSC Dec. 15, 2016).

[13] In reaching this determination, the Florida Legislature has directed the Commission to consider the following:

(a) The extent to which the plan is expected to reduce restoration costs and outage times associated with extreme weather events and enhance reliability, including whether the plan prioritizes areas of lower reliability performance.

(b) The extent to which storm protection of transmission and distribution infrastructure is feasible, reasonable, or practical in certain areas of the utility's service territory, including, but not limited to, flood zones and rural areas.

(c) The estimated costs and benefits to the utility and its customers of making the improvements proposed in the plan.

(d) The estimated annual rate impact resulting from implementation of the plan during the first 3 years addressed in the plan.

See Section 366.96(4), F.S.

protect T&D substations and equipment from storm surge and flooding due to extreme weather events. These SPP programs will continue to provide increased T&D infrastructure resiliency, reduced restoration times, and reduced restoration costs when FPL's system is impacted by extreme weather events.

29. In Docket No. 20170215-EU, the Commission reviewed the electric utilities' storm hardening and storm preparedness programs and found the following:

- Florida's aggressive storm hardening programs are working;
- The length of outages was reduced markedly from the 2004-2005 storm season;
- Hardened overhead distribution facilities performed better than non-hardened facilities;
- Underground facilities performed much better compared to overhead facilities; and
- The primary causes of power outages came from outside the utilities' rights-of-way including falling trees, displaced vegetation, and other debris.

See Review of Florida's Electric Utility Hurricane Preparedness and Restoration Actions 2018, Docket No. 20170215-EU (July 24, 2018).[14]

30. The estimate of cumulative reductions in restoration costs and outage times associated with the SPP will be directly affected by how frequently storms hit FPL's service territory. Of course, no one is in a position to know for sure how frequently FPL's service territory will be impacted by strong hurricanes. However, consistent with historical results, FPL expects that the storm hardening and storm preparedness programs included in its SPP will result in a reduction in storm as well as non-storm (day-to-day) restoration costs. *See* FPL's Third Supplemental Response to Staff's First Data Request No. 29 ("Third Supplemental Amended") in

[14] *Available at* http://www.psc.state.fl.us/library/filings/2018/04847-2018/04847-2018.pdf.

Docket No. 20170215-EI, which is provided as Appendix A to Exhibit MJ-1.

31. FPL's storm hardening and storm preparedness programs have also provided and will continue to provide increased levels of day-to-day reliability. For example, FPL has previously submitted reports to the Commission that show hardened feeders have performed approximately 40% better (*i.e.*, fewer outages) on a day-to-day basis than non-hardened feeders.

32. A detailed summary of the benefits of FPL's SPP is provided in Section II of Exhibit MJ-1, and the benefits and costs associated with each program is provided in Section IV of Exhibit MJ-1.

33. FPL's SPP meets the objectives of Section 366.96, F.S., satisfies the requirements of Rule 25-6.030, F.A.C., is in the public interest, and should be approved.

IV. CONCLUSION

34. As explained above and in further detail in Exhibit MJ-1 and the supporting Direct Testimony of FPL witness Michael Jarro, FPL's SPP provides a systematic approach to achieve the legislative objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability. FPL's SPP appropriately and effectively maintains and builds on FPL's commitment to provide safe and reliable electric service to customers, consistent with our customers' needs and expectations .

WHEREFORE, FPL respectfully requests that the Commission find FPL's proposed SPP, provided as Exhibit MJ-1, is in the public interest and approve the SPP for the years 2020-2029.

Respectfully submitted this 10th day of April, 2020,

John T. Burnett
Vice President and Deputy General Counsel
Christopher T. Wright
Senior Attorney
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
Phone: 561-691-7144
Fax: 561-691-7135
Email: john.t.burnett@fpl.com
Email: christopher.wright@fpl.com

By: *s/Christopher T. Wright*
Christopher T. Wright
Fla. Auth. House Counsel No. 1007055

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Petition for Approval of the 2020-2029 Storm Protection Plan in Docket No. 20200071-EI, along with the Direct Testimony of Michael Jarro and Exhibit MJ-1, has been furnished by Electronic Mail to the following parties of record this 10th day of April, 2020:

Charles Murphy, Esquire Rachael Dziechciarz, Esquire Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399 rdziechc@psc.state.fl.us cmurphy@psc.state.fl.us	Office of Public Counsel J.R.Kelly Patricia A. Christensen c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 kelly.jr@leg.state.fl.us christensen.patty@leg.state.fl.us

s/ Christopher T. Wright
Christopher T. Wright
Fla. Auth. House Counsel No. 1007055
Fla. Auth. House Counsel No. 1017875
Florida Power & Light Company
700 Universe Boulevard (JB/LAW)
Juno Beach, Florida 33408

Attorney for Florida Power & Light Company

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

2020-2029 STORM PROTECTION PLAN

DOCKET NO. 202000071-EI

DIRECT TESTIMONY OF

MICHAEL JARRO

APRIL 10, 2020

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Michael Jarro. My business address is Florida Power & Light Company, 15430 Endeavor Drive, Jupiter, FL, 33478.

Q. By whom are you employed and what is your position?

A. I am employed by Florida Power & Light Company ("FPL" or the "Company") as the Vice President of Distribution Operations.

Q. Please describe your duties and responsibilities in that position.

A. My current responsibilities include the operation and maintenance of FPL's approximately 68,000 miles of distribution infrastructure, including 42,000 miles of overhead and 26,000 miles of underground, that safely, reliably, and efficiently deliver electricity to more than five million customers in FPL's service territory covering approximately 28,000 square miles. I am responsible for the oversight of more than 1,600 employees in a control center and sixteen management areas. The functions and operations within my area are quite diverse and include distribution operations, major projects and construction services, power quality, meteorology, and other operations that together help provide the highest level of service to FPL's customers.

Q. Please describe your educational background and professional experience.

A. I graduated from the University of Miami with a Bachelor of Science Degree in Mechanical Engineering and Florida International University with a Master of Business Administration. I joined FPL in 1997 and have held several leadership positions in distribution operations and customer service, including serving as distribution reliability manager, manager of distribution operations for south Miami-Dade area, control center general manager, director of network operations, senior director of customer strategy and analytics, senior director of power delivery central maintenance and construction, and vice-president of transmission and substations.

Q. What is the purpose of your direct testimony?

A. The purpose of my testimony is to present and provide an overview of FPL's proposed 2020-2029 Storm Protection Plan ("SPP" or "the Plan"), which is attached to my direct testimony as Exhibit MJ-1, and demonstrate that FPL's SPP is in compliance with Section 366.96, Florida Statutes ("F.S.") and Rule 25-6.030, Florida Administrative Code ("F.A.C."). I will provide a description of each storm protection program included in FPL's SPP and how it is expected to reduce restoration costs and outage times. I will also describe the estimated start/completion dates, estimated costs, and criteria used to select and prioritize the projects in each program. Finally, I will describe the additional detail provided for the first three years of FPL's SPP pursuant to Rule 25-6.030(3)(e)-(f), (h), and (i), F.A.C.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibit MJ-1 – FPL's Storm Protection Plan 2020-2029.

II. OVERVIEW OF FPL'S SPP

Q. What is the purpose of FPL's SPP?

A. On June 27, 2019, the Governor of Florida signed into law the Storm Protection Plan Cost Recovery legislation, which was codified in Section 366.96, F.S. As part of the new law, the Florida Legislature expressly found that it is in the State's interest: (a) "to strengthen electric utility infrastructure to withstand extreme weather conditions by promoting the overhead hardening of electrical transmission and distribution facilities, the undergrounding of certain electrical distribution lines, and vegetation management;" and (b) "for each electric utility to mitigate restoration costs and outage times to utility customers when developing transmission and distribution storm protection plans." *See* Sections 366.96(1)(c)-(d), F.S. Based on these findings, the Florida Legislature directed each electric utility to file a SPP with the Florida Public Service Commission ("Commission") covering the immediate ten (10) year planning period. *See* Section 366.96(3), F.S. Consistent with this legislative requirement, FPL is submitting its SPP for the ten-year period of 2020-2029.

FPL's SPP is a systematic approach to achieve the legislative objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability. As required by Rule 25-6.030, F.A.C., FPL's SPP includes, among other things, a description of each proposed storm protection program, including: (a) how each program will enhance the existing system to reduce restoration costs and outage times; (b) applicable start and completion dates for each program; (c) a cost estimate for each program; (d) a comparison of the costs and benefits for each program; and (e) a description of how each program is prioritized. The SPP also provides an estimate of the annual jurisdictional revenue requirement for each year of the SPP and additional details on each program for the first three years of the SPP (2020-2022), including estimated rate impacts.

Q. What programs are included in FPL's SPP?

A. FPL's SPP is, in large part, a continuation and expansion of its previously approved storm hardening and storm preparedness programs, and includes the following SPP programs:

- Pole Inspections – Distribution Program
- Structures/Other Equipment Inspections – Transmission Program
- Feeder Hardening – Distribution Program
- Lateral Hardening (Undergrounding) – Distribution Program
- Wood Structures Hardening (Replacing) – Transmission Program
- Vegetation Management – Distribution Program
- Vegetation Management – Transmission Program

In addition, FPL proposes to implement a new Substation Storm Surge/Flood Mitigation Program to protect T&D substations and equipment that are susceptible to storm surge or flooding during extreme weather events.

With the exception of the new storm surge/flood mitigation program, the majority of these programs have been in place since 2007. As demonstrated by recent storm events, these programs have been successful in reducing restoration costs and outage times following major storms, as well as improving day-to-day reliability. FPL submits that continuing these previously approved storm hardening and storm preparedness programs in the SPP, together with the new storm surge/flood mitigation program, is appropriate and necessary to meet the requirements of Section 366.96, F.S., and Rule 25-6.030, F.A.C. These programs will address the expectations of FPL's customers and other stakeholders for increased storm resiliency, and will result in fewer outages, reduced restoration costs, and prompt service restoration. The SPP will continue and expand the benefits of hardening, including improved day-to-day reliability, to all customers throughout FPL's system.

Q. Please provide an overview of the benefits of FPL's SPP.

A. The major benefit of FPL's SPP is to provide increased resiliency and faster restoration to the electric infrastructure that FPL's five million customers and Florida's economy rely on for their electricity needs. Safe and reliable electric service is essential to the life, health, and safety of the public, and has become a critical component of modern life. Florida remains the most hurricane-prone state in the nation and, with the significant coast-line exposure of FPL's system and the fact that the vast majority of FPL's customers live within 20 miles of the coast, a robust storm protection plan is critical to maintaining and improving grid resiliency and storm restoration as contemplated by the Legislature in Section 366.96.

FPL's SPP programs have already demonstrated that they have provided and will continue to provide increased Transmission and Distribution ("T&D") infrastructure resiliency, reduced restoration time, and reduced restoration cost when FPL is impacted by extreme weather events. FPL performed an analysis of Hurricanes Matthew and Irma that indicated the restoration construction man-hours ("CMH"), days to restore, and storm restoration costs for

these storms would have been significantly greater without FPL's storm hardening programs. In the case of Hurricane Matthew, FPL estimated that without hardening, restoration would have taken two additional days (50% longer), and resulted in additional restoration costs of $105 million (36% higher than actual costs). In the case of Hurricane Irma, FPL estimated that without hardening, restoration would have taken four additional days (40% longer), and resulted in additional restoration costs of $496 million (40% higher than actual costs). A copy of FPL's analysis is provided in Appendix A to Exhibit MJ-1.

A detailed summary of the benefits of FPL's SPP is provided in Section II of the SPP, and the benefits of each program are provided in Section IV of the SPP.

Q. Does FPL's SPP address recovery of the costs associated with the SPP?

A. No. FPL anticipates the programs included in the SPP will have zero bill impacts on customer bills during the first year of the SPP and only minimal bill increases for years two and three of the SPP. However, the recovery of the actual costs associated with the SPP, as well as the costs to be included in FPL's Storm Protection Plan Cost Recovery Clause, will be addressed in subsequent and separate Storm Protection Plan Cost Recovery Clause dockets pursuant to Rule 25-6.031, F.A.C. The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

III. DESCRIPTION OF EACH SPP PROGRAM

Q. Has FPL provided the information required by Rule 25-6.030(3)(d) for each program included in its SPP?

A. Yes. FPL's SPP provides the information required by the Rule 25-6.030(3)(d) for each program. If applicable, each program description included in FPL's SPP includes: (1) a description of how each program is designed to enhance FPL's existing transmission and distribution facilities including an estimate of the resulting reduction in outage times and

restoration costs due to extreme weather conditions; (2) identification of the actual or estimated start and completion dates of the program; (3) a cost estimate including capital and operating expenses; (4) a comparison of the costs and the benefits; and (5) a description of the criteria used to select and prioritize proposed storm protection programs. Each of the above listed descriptions is provided in Section IV of FPL's SPP. Below, I will provide a brief overview of each program included in FPL's SPP.

Q. Please provide a summary of FPL's Pole Inspection – Distribution Program included in the SPP.

A. The Pole Inspection – Distribution Program included in the SPP is a continuation of FPL's existing Commission-approved distribution pole inspection program. FPL's existing, Commission-approved distribution pole inspection program is an eight-year pole inspection cycle for all distribution poles that targets approximately 1/8 of the system annually (the actual number of poles inspected can vary somewhat from year to year). To ensure inspection coverage throughout its service territory, FPL established nine inspection zones (based on FPL's management areas and pole population) and annually performs pole inspections of approximately 1/8 of the distribution poles in each of these zones, as well as any necessary remediation as a result of such inspections. As explained in the SPP, recent storm events demonstrate that FPL's existing distribution pole inspection program has contributed to the overall improvement in distribution pole performance during storms, resulting in reductions in storm damage to poles, days to restore, and storm restoration costs.

With approximately 1.2 million distribution poles as of year-end 2019, FPL expects to inspect approximately 150,000 poles annually (spread throughout its nine inspection zones) during the 2020-2029 SPP period. The total estimated costs for the Pole Inspection – Distribution Program for the ten-year period of 2020-2029 is $605 million with an annual average cost of approximately $61 million, which is consistent with historical costs for the existing distribution

pole inspection program.[1] A detailed description of the Pole Inspection – Distribution Program is provided in Section IV(A) of FPL's SPP.

Q. Please provide a summary of FPL's Structures/Other Equipment Inspections – Transmission Program included in the SPP.

A. The Structures/Other Equipment Inspections – Transmission Program included in the SPP is a continuation of FPL's existing Commission-approved transmission inspection program. The SPP will continue FPL's current, Commission-approved transmission inspection program which requires: (a) transmission circuits and substations and all associated hardware to be inspected on a six-year cycle; (b) wood structures to be inspected visually from the ground on an annual basis and climbing or bucket truck inspections to be conducted on a six-year cycle; and (c) steel and concrete structures to be inspected visually on an annual basis and climbing or bucket truck inspections to be conducted on a ten-year cycle. As explained in the SPP, the performance of FPL's transmission facilities during recent storm events indicates FPL's transmission inspection program has contributed to the overall storm resiliency of the transmission system and provided savings in storm restoration costs.

FPL expects to inspect approximately 68,000 structures annually during the 2020-2029 SPP period. The total estimated costs for the Structures/Other Equipment Inspections – Transmission Program for the ten-year period of 2020-2029 is $500 million with an annual average cost of approximately $50 million, which is consistent with historical costs for the

[1] Note, the 2020-2029 program costs shown above are projected costs estimated as of the time of this filing. Subsequent projected and actual costs could vary by as much as 10% to 15%. The annual projected costs, actual/estimated costs, actuals costs, and true-up of actual costs to be included in FPL's Storm Protection Plan Cost Recovery Clause will all be addressed in subsequent and separate Storm Protection Plan Cost Recovery Clause filings pursuant to Rule 25-6.031, F.A.C. The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

existing transmission inspection program.[2] A detailed description of the Structures/Other Equipment Inspections – Transmission Program is provided in Section IV(B) of FPL's SPP.

Q. Please provide a summary of FPL's Feeder Hardening (EWL) - Distribution Program included in the SPP.

A. The Feeder Hardening (EWL) – Distribution Program included in the SPP is a continuation of FPL's existing Commission-approved approach to harden existing feeders and certain critical distribution poles, as well as FPL's initiative to design and construct new pole lines and major planned work to meet the National Electrical Safety Code's ("NESC") extreme wind loading criteria ("EWL"). During the period 2006-2019, FPL hardened over 1,300 existing feeders, the vast majority being Critical Infrastructure Function ("CIF") feeders (*i.e.*, feeders that serve hospitals, 911 centers, police and fire stations, water treatment facilities, county emergency operation centers) and Community Project feeders (*i.e.*, feeders that serve other key community needs like gas stations, grocery stores and pharmacies) throughout FPL's service territory. Additional feeders were hardened as a result of FPL's Priority Feeder Initiative, a reliability program that targeted feeders experiencing the highest number of interruptions and/or customers interrupted. FPL also applied EWL to the design and construction of new pole lines and major planned work, including pole line extensions and relocations and certain pole replacements.

As provided in previous FPL Annual Reliability Report filings and three-year Storm Hardening Plan filings (per Rule 25-6.0342, F.A.C.), hardened feeders perform better than non-hardened feeders, both in day-to-day reliability performance and during severe storms. Additionally, upon review of the electric utilities' storm hardening and storm preparedness programs, the Commission found that for Hurricane Irma, hardened feeders performed significantly better than

[2] *See* footnote 1.

non-hardened feeders with respect to outage rates, pole failures, and CMH required to restore power.[3]

FPL expects to harden approximately 250-350 feeders annually, with 100% of FPL's feeders expected to be hardened or underground by year-end 2024 and with the final costs of the program to be incurred in 2025. The total estimated costs for the Feeder Hardening (EWL) – Distribution Program for the period of 2020-2025 is $3,206 million with an annual average cost of approximately $534 million, which is consistent with historical costs for the existing distribution feeder hardening program.[4] A detailed description of the Feeder Hardening (EWL) – Distribution Program is provided in Section IV(C) of FPL's SPP.

Q. Please provide a summary of FPL's Lateral Hardening (Undergrounding) - Distribution Program included in the SPP.

A. The Lateral Hardening (Undergrounding) - Distribution Program included in the SPP is a continuation and expansion of FPL's existing three-year Storm Secure Underground Program Pilot ("SSUP Pilot") implemented in 2018. The SSUP Pilot is a program that targets certain overhead laterals that were impacted by recent storms and have a history of vegetation-related outages and other reliability issues for conversion from overhead to underground. As part of its proposed SPP, FPL will complete its existing three-year SSUP Pilot in 2020 and expand the application of the SSUP during 2021-2029 to the implementation of the system-wide Lateral Hardening (Undergrounding) – Distribution Program to provide the benefits of underground lateral hardening throughout its system. As explained in the SPP, the proposal to continue and expand the application of the SSUP under the SPP is based on the performance of the

[3] *See Review of Florida's Electric Utility Hurricane Preparedness and Restoration Actions 2018*, Docket No. 20170215-EU (July 24, 2018).

[4] *See* footnote 1.

underground facilities as compared to overhead facilities and the extensive damage to the overhead facilities caused by vegetation during Hurricanes Matthew and Irma.

By the end of 2020, the third and final year of the SSUP Pilot, FPL expects to have converted a total of 220-230 laterals from overhead to underground, which is consistent with the SSUP Pilot plan most recently approved in July 2019 in FPL's most recent storm hardening plan docket, Docket No. 20180144-EI. After completing the SSUP Pilot in 2020, FPL estimates that it will convert approximately 300-700 laterals annually in 2021-2023 and approximately 800-900 laterals annually in 2024-2029. The total estimated costs for the Lateral Hardening (Undergrounding) - Distribution Program for the ten-year period of 2020-2029 is $5,101 million with an annual average cost of approximately $510 million.[5] A detailed description of the Lateral Hardening (Undergrounding) - Distribution Program is provided in Section IV(D) of FPL's SPP.

Q. Please provide a summary of FPL's Wood Structures Hardening (Replacing) – Transmission Program included in the SPP.

A. The Wood Structure Hardening (Replacing) – Transmission Program included in the SPP is a continuation of FPL's existing transmission hardening program to replace all wood transmission structures with steel or concrete structures. As explained in the SPP, the performance of FPL's transmission facilities during recent storm events indicates FPL's transmission hardening program has contributed to the overall storm resiliency of the transmission system and provided savings in storm restoration costs.

As of year-end 2019, 96% of FPL's transmission structures, system-wide, were steel or concrete, with less than 2,900 (or 4%) wood structures remaining to be replaced. FPL expects

[5] *See* footnote 1.

to replace the 2,900 wood transmission structures remaining on its system by year-end 2022. The total estimated costs for the Wood Structure Hardening (Replacing) – Transmission Program for the period of 2020-2022 is $118 million with an annual average cost of approximately $39 million, which is a decrease from the historical costs for the existing transmission hardening program.[6] A detailed description of the Wood Structure Hardening (Replacing) – Transmission Program is provided in Section IV(E) of FPL's SPP.

Q. Please provide a summary of FPL's Substation Storm Surge/Flood Mitigation Program.

A. The Substation Storm Surge/Flood Mitigation Program is the only new storm hardening program that FPL proposes to implement as part of its SPP. The Storm Surge/Flood Mitigation – Transmission and Distribution Program will implement measures to protect T&D substations and equipment that are susceptible to storm surge or flooding due to extreme weather events.

Historically, several FPL distribution and transmission substations have been impacted by storm surge and/or flooding as a result of extreme weather conditions. While proactively de-energizing those substations impacted by storm surge and/or flooding helps reduce damage to substation equipment, FPL is still required to implement both temporary flood mitigation efforts and repairs to substation facilities and equipment that become flooded as a result of extreme weather conditions. Further, flooding and the need to proactively de-energize substations located in areas susceptible to storm surge and flooding can result in significant customer outages. To prevent/mitigate future substation equipment damage and customer outages due to storm surge and flooding, FPL's new Storm Surge/Flood Mitigation Program will raise the equipment at certain substations above the flood level and construct flood protection walls around other substations to prevent/mitigate future damage due to storm surge and flooding.

[6] *See* footnote 1.

At this time, FPL has identified between 8-10 substations where it initially plans to implement storm surge/flood mitigation measures over the next three years (2020-2022). The total estimated costs for the new Substation Storm Surge/Flood Mitigation over this three-year period is approximately $23 million with an annual average cost of approximately $8 million per year.[7] A detailed description of the Storm Surge/Flood Mitigation – Transmission and Distribution Program is provided in Section IV(F) of FPL's SPP.

Q. Please provide a summary of FPL's Vegetation Management – Distribution Program included in the SPP.

A. The Vegetation Management – Distribution Program included in the SPP is a continuation of FPL's existing, Commission-approved distribution vegetation management program. FPL's currently-approved distribution vegetation program, includes the following system-wide vegetation management activities: three-year cycle for feeders; mid-year cycle targeted trimming for certain feeders; six-year cycle for laterals; and continued education of customers through its Right Tree, Right Place initiative. In approving FPL's current distribution vegetation management cycles, the Commission indicated that FPL's distribution vegetation management cycles were cost-effective and would provide savings to customers. Additionally, as explained in the SPP, recent storm events demonstrate that FPL's existing distribution vegetation management program has contributed to the overall improvement in the resiliency of distribution system during storms, resulting in reductions in storm damage to poles, days to restore, and storm restoration costs.

Under the SPP, FPL plans to trim, on average, approximately 15,200 miles annually, including approximately 11,400 miles for feeders (cycle and mid-cycle) and 3,800 miles for laterals, which is consistent with the historic miles trimmed annually. The total estimated costs for the

[7] *See* footnote 1.

Vegetation Management – Distribution Program for the ten-year period of 2020-2029 is $596 million with an annual average cost of approximately $60 million, which is consistent with historical costs for the existing distribution vegetation management program.[8] A detailed description of the Vegetation Management – Distribution Program is provided in Section IV(G) of FPL's SPP.

Q. Please provide a summary of FPL's Vegetation Management – Transmission Program included in the SPP.

A. The Vegetation Management – Transmission Program included in the SPP is a continuation of FPL's existing transmission vegetation management program. The key elements of FPL's transmission vegetation management program are to inspect the transmission right-of-ways, document vegetation inspection results and findings, prescribe a work plan, and execute the work plan. In its SPP, FPL will continue its current transmission vegetation management plan, which includes visual and aerial inspections of all transmission line corridors, Light Detection and Ranging ("LiDAR") inspections of North American Electric Reliability Corporation's ("NERC") transmission line corridors, developing and executing annual work plans to address identified vegetation conditions, and identifying and addressing priority and hazard tree conditions prior to and during storm season. As explained in the SPP, the execution of FPL's transmission vegetation management plan has been and is a significant factor in mitigating damage to transmission facilities and avoiding transmission-related outages.

Under the SPP, FPL plans to inspect and maintain, on average, approximately 7,000 miles of transmission lines annually, including approximately 4,300 miles for NERC transmission line corridors and 2,700 miles for non-NERC transmission line corridors. This is comparable to the approximately 7,000 miles inspected and maintained annually, on average for 2017-2019.

[8] *See* footnote 1.

The total estimated costs for the Vegetation Management – Transmission Program for the ten-year period of 2020-2029 is $96 million with an annual average cost of approximately $10 million, which is consistent with historical costs for the existing transmission vegetation management program.[9] A detailed description of the Vegetation Management – Transmission Program is provided in Section IV(H) of FPL's SPP.

IV. ADDITIONAL DETAILS FOR FIRST THREE YEARS OF THE SPP

Q. Has FPL provided additional project-level details and information for the first year (2020) of the SPP?

A. Yes. The following additional information required by Rule 25-6.030(3)(e)(1), F.A.C., for the first year (2020) of the SPP is provided in Appendix E to FPL's SPP: (1) the actual or estimated construction start and completion dates; (2) a description of the affected existing facilities, including number and type(s) of customers served, historic service reliability performance during extreme weather conditions, and how this data was used to prioritize the proposed storm protection project; and (3) a cost estimate including capital and operating expenses. Additionally, a description of the criteria used to select and prioritize proposed storm protection projects is included in the description of each proposed SPP program provided in Section IV of the SPP.

Q. Does FPL's SPP provide sufficient detail to develop preliminary estimates of the rate impacts for the second and third years (2021-2022) of the SPP?

A. Yes. As required by Rule 25-6.030(3)(e)(2), F.A.C., FPL has provided the estimated number and costs of projects under each specific SPP program, which information was used to develop the estimated rate impacts for 2021-2022. This information is provided in Appendix C to FPL's SPP.

[9] *See* footnote 1.

Q. Did FPL provide a description of its vegetation management activities under the SPP for the first three years (2020-2022) of the SPP?

A. Yes. The following additional information required by Rule 25-6.030(3)(f), F.A.C., for the first three years (2020-2022) of the vegetation management activities under the SPP is provided in Sections IV(G) and IV(H) of FPL's SPP and Appendix C to FPL's SPP: the projected frequency (trim cycle); the projected miles of affected transmission and distribution overhead facilities; and the estimated annual labor and equipment costs for both utility and contractor personnel. Additionally, descriptions of how the vegetation management activities will reduce outage times and restoration costs due to extreme weather conditions are provided in Sections IV(G) and IV(H) of FPL's SPP.

Q. Has FPL provided the annual jurisdictional revenue requirements for the 2020-2029 SPP?

A. Yes. Pursuant to Rule 25-6.030(3)(g), F.A.C., FPL has provided the estimated annual jurisdictional revenue requirements in Section VI of the SPP. While FPL has provided estimated costs by program as of the time of this filing and associated total revenue requirements in its SPP, consistent with the requirements of Rule 25-6.030, F.A.C., subsequent projected and actual program costs submitted for cost recovery through the Storm Protection Plan Cost Recovery Clause (per Rule 25-6.031, F.A.C.) could vary by as much as 10-15%, which variations would also impact the associated estimated revenue requirements and rate impacts. The projected costs, actual/ estimated costs, actuals costs, and true-up of actual costs to be included in FPL's Storm Protection Plan Cost Recovery Clause will all be addressed in subsequent filings in separate Storm Protection Plan Cost Recovery Clause dockets pursuant to Rule 25-6.031, F.A.C.[10]

Q. Has FPL estimated the rate impacts for each of the first three years of the SPP?

[10] The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

A. FPL anticipates the programs included in the SPP will have zero bill impacts on customer bills during the first year of the SPP and only minimal bill increases for years two and three of the SPP. An estimate of the hypothetical overall rate impacts for the first three years of the SPP (2020-2022) based on the total program costs reflected in this filing, without regard for the fact that FPL remains under a general base rate freeze pursuant to a Commission-approved settlement agreement through December 31, 2021, are provided in Section VII of the SPP. The projected costs, actual/estimated costs, actuals costs, and true-up of actual costs to be included in FPL's Storm Protection Plan Cost Recovery Clause will all be addressed in subsequent filings in separate storm protection plan cost recovery clause dockets pursuant to Rule 25-6.031, F.A.C.[11]

V. CONCLUSION

Q. Does FPL believe that its SPP will achieve the legislative objectives of Section 366.96, F.S., to reduce costs and outage times associated with extreme weather events by promoting the overhead hardening of electrical transmission and distribution facilities, the undergrounding of certain electrical distribution lines, and vegetation management?

A. Yes. While no electrical system can be made completely resistant to the impacts of hurricanes and other extreme weather conditions, FPL's SPP provides a systematic approach to achieve the legislative objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability. As explained above and in further detail in the SPP, FPL's SPP programs are largely a continuation and expansion of FPL's already successful and ongoing storm hardening and storm preparedness programs previously approved by the Commission, as well as a new storm hardening program to protect T&D substations and equipment from storm surge and flooding due to extreme weather events. These SPP programs

[11] *See* footnote 10.

will continue to provide increased T&D infrastructure resiliency, reduced restoration time, and reduced restoration costs when FPL's system is impacted by extreme weather events. FPL's SPP appropriately and effectively maintains and builds on FPL's commitment to provide safe and reliable electric service to customers, and to meet the needs and expectations of our customers, today and for many years to come.

Q. Does this conclude your direct testimony?

A. Yes.

Florida Power & Light Company

Storm Protection Plan

2020-2029

(Rule 25-6.030, F.A.C.)

Docket No. 20200071-EI

April 10, 2020

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Appendices:

Florida Power & Light Company
2020-2029 Storm Protection Plan

I. Executive Summary

Pursuant to Section 366.96, Florida Statutes ("F.S."), and Rule 25-6.030, Florida Administrative Code ("F.A.C."), Florida Power & Light Company ("FPL") submits its Storm Protection Plan for the ten (10) year period 2020-2029 (hereinafter, the "SPP"). As explained herein, the SPP is largely a continuation of FPL's successful storm hardening and storm preparedness programs previously approved by the Florida Public Service Commission ("Commission") over the last fourteen years. FPL anticipates the programs included in the SPP will have zero bill impacts on customer bills during the first year of the SPP and only minimal bill increases for years two and three of the SPP.[1]

Since 2006, FPL has been implementing Commission-approved programs to strengthen its transmission and distribution ("T&D") infrastructure. These programs include multiple storm hardening and storm preparedness programs, such as feeder hardening, replacing wood transmission structures, vegetation management, and pole inspections. As demonstrated by recent storm events, these ongoing storm hardening and storm preparedness programs have resulted in FPL's T&D electrical grid becoming more storm resilient, experiencing less infrastructure damage and reduced restoration times, as compared to non-hardened facilities. These programs have also provided significant improvements in day-to-day reliability.

The success of FPL's storm hardening and storm preparedness programs has been achieved through the development and implementation of FPL's forward-looking storm hardening, grid modernization, and reliability initiatives and investments, combined with the use of cutting-edge technology and strong employee commitment. Under the SPP, FPL remains committed to continue these successful and industry-leading programs to

[1] The recovery of the costs associated with the SPP, as well as the actual and projected costs to be included in FPL's Storm Protection Plan Cost Recovery Clause, will be addressed in a subsequent and separate Storm Protection Plan Cost Recovery Clause docket pursuant to Rule 25-6.031, F.A.C.

further strengthen its T&D infrastructure, mitigate restoration costs and outage times, continue to provide safe and reliable electric service to customers, and meet future increasing needs and expectations.

As stated previously, FPL's SPP is, in large part, a continuation and expansion of its previously approved storm hardening and storm preparedness programs, and includes the following SPP programs:

- Pole Inspections – Distribution Program
- Structures/Other Equipment Inspections – Transmission Program
- Feeder Hardening (EWL) – Distribution Program
- Lateral Hardening (Undergrounding) – Distribution Program
- Wood Structures Hardening (Replacing) – Transmission Program
- Vegetation Management – Distribution Program
- Vegetation Management – Transmission Program

In addition, FPL will implement a new Substation Storm Surge/Flood Mitigation Program to harden certain targeted substations that, based on prior experience, are susceptible to storm surge or flooding during extreme weather events.

With the exception of the new storm surge/flood mitigation program, the majority of the programs included in the SPP have been in place since 2007. As demonstrated by recent storm events, these programs have been successful in reducing restoration costs and outage times following major storms, as well as improving day-to-day reliability. FPL submits that continuing these previously approved storm hardening and storm preparedness programs in the SPP, together with the new storm surge/flood mitigation substation program, is appropriate and necessary to address the mandates set forth in Section 366.96, F.S., and Rule 25-6.030, F.A.C., as well as the expectations of FPL's customers and other stakeholders for increased storm resiliency and will result in fewer

outages, reduced restoration costs, and prompt service restoration.[2] The SPP will continue and expand the benefits of hardening, including improved day-to-day reliability, to all customers throughout FPL's system.

The following sections provide information and details on FPL's SPP as required by and in compliance with Rule 25-6.030, F.A.C. For the reasons explained below, FPL submits that implementing the SPP is necessary and appropriate to achieve the goals and requirements expressed by the Florida Legislature in Section 366.96, F.S., to reduce restoration costs and outage times associated with extreme weather events and improve overall service reliability to customers and the State of Florida by promoting the overhead hardening of electrical transmission and distribution facilities, the undergrounding of certain electrical distribution lines, and vegetation management.

II. The 2020-2029 SPP will Strengthen FPL's Infrastructure to Withstand Extreme Weather Conditions and will Reduce Restoration Costs and Outage Times

Pursuant to Rule 25-6.030(3)(a), F.A.C., this section provides an overview of how the SPP will strengthen FPL's electric utility infrastructure to withstand extreme weather conditions by promoting the overhead hardening of electrical transmission and distribution facilities, the undergrounding of certain electrical distribution lines, and vegetation management. Consistent with Rule 25-6.030(3)(b), F.A.C., this section also provides a summary of how the SPP is expected to further reduce restoration costs and outage times associated with extreme weather conditions and, therefore, improve overall service reliability.

To date, significant progress has been made toward strengthening FPL's infrastructure. For example, at year-end 2019, approximately 54% of FPL's distribution feeders have been either hardened or placed underground, and approximately 96% of FPL's transmission structures are either steel or concrete. Also, since 2006, FPL has completed multiple system-wide cycles of distribution and transmission pole inspections and

[2] As explained below, a couple of the programs included in the SPP are expected to be completed within the next several years.

vegetation management. Within the next few years several significant milestones are also expected to be reached, including replacement of all wood transmission structures with steel or concrete structures by year-end 2022 and for all feeders to be hardened or placed underground by year-end 2024.

FPL also implemented a three-year Storm Secure Underground Program Pilot in 2018 ("SSUP Pilot") that converts certain targeted overhead laterals – laterals that have been impacted by recent storms and have a history of vegetation-related outages and other reliability issues – to underground laterals. At year-end 2020, the final year of the SSUP Pilot, FPL expects 220-230 of these targeted laterals to be converted from overhead to underground. In addition, FPL's Design Guidelines incorporate and apply extreme wind loading ("EWL") criteria to the design and construction of all new overhead pole lines and major planned work, including pole line extensions, relocations, and certain pole replacements.

FPL's SPP programs have already demonstrated that they have and will continue to provide increased T&D infrastructure resiliency, reduced restoration time, and reduced restoration costs when FPL's system is impacted by severe weather events. In FPL's Third Supplemental Response to Staff's First Data Request No. 29 ("Third Supplemental Amended") in Docket No. 20170215-EI,[3] FPL prepared and submitted an analysis of Hurricanes Matthew and Irma that indicated the restoration construction man-hours ("CMH"), days to restore, and storm restoration costs for these storms would have been significantly higher without FPL's storm hardening programs. Below is a summary of the results of FPL's analysis:

Without Hardening	**Hurricane Matthew**	**Hurricane Irma**
Additional CMH (%)	93,000 (36%)	483,000 (40%)
Additional days to restore (%)	2 (50%)	4 (40%)
Additional restoration costs ($millions) (%)	$105 (36%)	$496 (40%)

[3] The Commission opened Docket No. 20170215-EI to review electric utility preparedness and restoration actions and to identify potential areas where infrastructure damage, outages, and recovery time for customers could be minimized in the future.

A copy of FPL's Third Supplemental Amended Response in Docket No. 20170215-EI, including the analysis referenced above, is provided in Appendix A. Based on a 40-year net present value analysis, the savings achieved from storm hardening would equate to $653 million (for a storm occurring once every three years) and $406 million (for a storm occurring once every five years) for a storm similar to Hurricane Matthew and $3.1 billion (for a storm occurring once every three years) and $1.9 billion (for a storm occurring once every five years) for a storm similar to Hurricane Irma.

These programs have also provided increased levels of day-to-day reliability. For example, FPL has previously submitted reports to the Commission that show hardened feeders have performed approximately 40% better (*i.e.*, fewer outages) on a day-to-day basis than non-hardened feeders.[4] Further details on the benefits of the SPP programs are provided throughout the remaining sections of this SPP.

Although FPL's storm preparedness and hardening programs to date have produced a more storm resilient and reliable T&D electrical grid, FPL must continue its efforts to storm-harden its T&D electrical grid consistent with the findings, conclusions, and objectives of the Florida Legislature in Section 366.96, F.S. Indeed, Florida remains the most hurricane-prone state in the nation and, with the significant coast-line exposure of FPL's system and the fact that the vast majority of FPL's customers live within 20 miles of the coast, a robust storm protection plan is critical to maintaining and improving grid resiliency and storm restoration.

Safe and reliable electric service is essential to the life, health, and safety of the public, and has become a critical component of modern life. Importantly, as evidenced by the significant numbers of Florida's workforce that are working remotely during the COVID-19 pandemic, today's digital society, economy, national security, and daily life are more dependent on reliable electric service than ever before. While no electrical system can be made completely resistant to the impacts of hurricanes and other extreme weather conditions, the programs included in FPL's SPP have already demonstrated that they

[4] *See* Appendix A.

mitigate and will continue to mitigate the impacts of future storms.[5] While FPL's nation-leading initiatives have made significant progress toward strengthening FPL's infrastructure, continuing these previously approved storm hardening and storm preparedness programs in the SPP, together with the new storm surge/flood mitigation substation program, is appropriate and crucial to further mitigate restoration costs and outage times, continue to provide safe and reliable electric service to customers, and meet current and future needs and expectations of customers, today and for many years to come.

III. Description of Service Area and T&D Facilities

Pursuant to Rule 25-6.030(3)(c), F.A.C., this section provides a description of FPL's service area, including areas prioritized for enhancement, if any, and any areas where FPL has determined that enhancement of its existing T&D facilities would not be feasible, reasonable, or practical at this time.

Today, FPL's service territory consists of approximately 28,000 square miles. To serve its more than 5 million customers, FPL has constructed a T&D electric grid that contains approximately 75,000 miles of electrical lines, including:

- Approximately 42,000 miles of overhead distribution lines;
- Approximately 26,000 miles of underground distribution lines;
- Approximately 7,000 miles of high-voltage transmission lines;
- Approximately 1.2 million distribution poles; and
- Approximately 68,000 transmission structures.

FPL's service territory is divided into sixteen (16) distribution management areas. A map depicting FPL's service territory and distribution management areas (with the number of customers served within each management area) is provided in Appendix B.

At this time, FPL has not identified any areas of its service territory where its SPP programs would not be feasible, reasonable, or practical. While all of FPL's SPP

[5] It is important to note that despite the implementation of these storm hardening and storm preparedness programs, outages will still occur when severe weather events impact Florida.

programs are currently system-wide initiatives, annual activities are prioritized based on certain factors such as last inspection date, last trim date, reliability performance, and efficient resource utilization.[6] At this time, there is no area specifically targeted or prioritized for enhanced performance based on its geographical location.

IV. 2020-2029 SPP Programs

Pursuant to Rule 25-6.030(3)(c)(d), F.A.C., this section provides a description of each program included in FPL's SPP. If applicable, each program description below includes: (1) a description of how each program is designed to enhance FPL's existing transmission and distribution facilities including an estimate of the resulting reduction in outage times and restoration costs due to extreme weather conditions; (2) identification of the actual or estimated start and completion dates of the program; (3) a cost estimate including capital and operating expenses; (4) a comparison of the costs and the benefits; and (5) a description of the criteria used to select and prioritize storm protection programs.

A. Pole Inspections – Distribution Program

1. Description of the Program and Benefits

The Pole Inspection – Distribution Program included in the SPP is a continuation of FPL's existing Commission-approved distribution pole inspection program. Below is an overview of FPL's existing distribution inspection program and its associated benefits.

a. Overview of the Distribution Pole Inspection Program

In response to the 2004-2005 storm seasons and, in particular, the "large number of poles throughout Florida that required replacement," the Commission required investor-owned utilities ("IOUs") to implement an eight-year pole inspection cycle for all wood distribution poles.[7] FPL's plan was approved in September 2006[8] and modified in January 2007.[9]

[6] The criteria and factors used to select and prioritize projects within each SPP program are described below.

[7] *See* Order No. PSC-06-0144-PAA-EI.

[8] *See* Order No. PSC-06-0778-PAA-EU.

[9] *See* Order No. PSC-07-0078-EU.

Subsequently, FPL expanded its distribution pole inspection plan to also include concrete poles.

FPL's eight-year pole inspection cycle for all distribution poles targets approximately 1/8 of the system annually (the actual number of poles inspected can vary somewhat from year to year). To ensure inspection coverage throughout its service territory, FPL established nine (9) inspection zones (based on FPL's management areas and pole population) and annually performs pole inspections of approximately 1/8 of the distribution poles in each of these zones, as well as any necessary remediation as a result of such inspections. FPL utilizes Osmose Utilities Services, Inc. ("Osmose"), an industry-leading pole inspection contractor, to perform the system-wide inspection of its distribution poles.

FPL's strength and loading calculations for its distribution poles and pole inspections are based on the National Electrical Safety Code's ("NESC") Grade B construction standard, as outlined by Table 261-1A section 26 of the NESC. Osmose utilizes mobile computing technology to record inspection data and to calculate strength and loading. The loading calculation, span lengths, attachment heights, and wire sizes are recorded in the mobile computer to determine whether the remaining pole strength capacity meets or exceeds NESC requirements. This data is then transferred to FPL's Geographic Information System ("GIS"). Pole locations inspected by Osmose are also randomly audited by FPL to verify that inspections are completed and meet inspection standards.

Inspections include a visual inspection of all distribution poles from the ground-line to the top of the pole to identify visual defects (*e.g.*, woodpecker holes, split tops, decayed tops, cracks, etc.). If, due to the severity of the defects, the poles are not suitable for continued service, the poles are designated for replacement.

Wood poles that pass the above-ground visual inspection are excavated to a depth of 18" (where applicable), and sounded and bored to determine the internal condition of the pole. Poles encased in concrete or asphalt are not excavated, but are sounded and bored to determine their internal condition using a standard industry-accepted inspection process called "Shell Boring." All suitable wood poles receive external and/or internal preservative treatment or, if not suitable, are replaced. Strength calculations are also

performed on wood poles to determine compliance with NESC requirements. The poles that are not suitable for continued service are designated for replacement or remediation.

In 2014, FPL obtained Commission approval to: (1) exempt the loading assessment during the second eight-year cycle for any pole that had less than 80% of full load during FPL's initial eight-year cycle; and (2) excavate Chromium Copper Arsenate ("CCA") poles every 28 years (extended from 16 years originally approved by the Commission).[10] To ensure that these exceptions to the standard eight-year inspection cycle do not compromise existing safety and storm hardening programs, FPL conducts annual testing on 1% of the exempted poles.

b. Benefits of the Distribution Pole Inspection Program

The Commission has previously found that "efforts to maintain system components can reduce the impact of hurricanes and tropical storms upon utilities' transmission and distribution systems," and noted that an "obvious key component in electric infrastructure is the transmission and distribution poles."[11] The Commission has also previously identified multiple benefits of and reasons for justifying pole inspections cycles for electric utilities, including, but no limited to: the likelihood of increased hurricane activity in the future; the high probability for equipment damage if a pole fails during a storm; the likelihood that failure of one pole often causes other poles to fail; the fact that deteriorated poles are more prone to fail when exposed to high winds; the fact that Florida electric utilities replaced nearly 32,000 poles during the 2004 storm restoration efforts; and the fact that restoration times increase significantly when a large number of poles fail, which limits the electric utilities' ability to respond quickly to widespread outages.[12]

In addition to the benefits discussed above that underlie the creation of the Commission's mandated pole inspection requirements, recent storm events indicate that FPL's distribution pole inspection program has contributed to the overall improvement in distribution pole performance during storms, resulting in reductions in storm damage to poles, days to restore, and storm restoration costs. The table below compares distribution

[10] *See* Order No. PSC-14-0594-PAA-EI.
[11] *See* Order No. PSC-06-0144-PAA-E.
[12] *See id*.

pole performance for Hurricane Wilma, which occurred in 2005 before FPL implemented its current distribution pole inspection program, and Hurricane Irma, which occurred in 2017 after FPL implemented its current distribution pole inspection program:

	Hurricane Wilma	**Hurricane Irma**
Hurricane Strength (Category)	3	4
Customer Outages (Millions)	3.2	4.4
Distribution Poles Replaced	>12,400	<2,900[13]
Total Days to Restore	18	10
Average Days to Restore	5.4	2.1

FPL's Commission-approved distribution pole inspection program has facilitated the replacement and/or strengthening of over 140,000 distribution poles since it was first implemented in 2006 and has directly improved and will continue to improve the overall health and storm resiliency of its distribution pole population.

2. Actual/Estimated Start and Completion Dates

The SPP will continue FPL's ongoing Commission-approved distribution pole inspection program described above. With approximately 1.2 million distribution poles as of year-end 2019, FPL expects to inspect approximately 150,000 poles annually (spread throughout its nine inspection zones) during the 2020-2029 SPP period.

3. Cost Estimates

Estimated/actual annual distribution pole inspection costs are a function of the number of inspections estimated to be/actually completed and the number of poles estimated to be/actually remediated/replaced as a result of the annual inspections. Although costs to inspect the poles are operating expenses, the vast majority of pole inspection program costs are capital costs resulting from remediation/replacement of poles that fail inspection.

[13] Approximately 99% of distribution poles replaced after Hurricane Irma were non-hardened poles.

The table below provides a comparison of the 2017-2019 total actual distribution pole inspection costs with the 2020-2022 (first three years of the SPP) total estimated distribution pole inspection costs and the 2020-2029 total estimated distribution pole inspection costs:

	Total Program Costs (millions)	**Annual Average Program Costs (millions)**
2017-2019	$152	$51
2020-2022	$170	$57
2020-2029	$605	$61

Further details regarding SPP estimated distribution pole inspection costs, including estimated annual capital expenditures and operating expenses, are provided in Appendix C.[14]

4. Comparison of Costs and Benefits

As provided in Section (IV)(A)(3) above, during 2020-2029, total costs for FPL's Pole Inspection – Distribution Program are expected to average approximately $61 million per year. Benefits associated with FPL's Pole Inspection – Distribution Program, discussed in Sections II and IV(A)(1)(b) above, include a more storm resilient pole population that will result in reductions in pole failures and poles needing to be replaced during storms, fewer storm-related outages and reductions in storm restoration costs.

5. Criteria used to Select and Prioritize the Program

Poles to be inspected annually are selected/prioritized within each of the nine (9) inspection zones established throughout FPL's service territory based on the last cycle's inspection dates, to ensure that poles are in compliance with FPL's established eight-year

[14] Note, the 2020-2029 program costs shown above are projected costs estimated as of the time of this filing. Subsequent projected and actual costs could vary by as much as 10% to 15%. The annual projected costs, actual/estimated costs, actuals costs, and true-up of actual costs to be included in FPL's Storm Protection Plan Cost Recovery Clause will all be addressed in subsequent and separate Storm Protection Plan Cost Recovery Clause filings pursuant to Rule 25-6.031, F.A.C. The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

cycle. As such, approximately 1/8 of the distribution poles in each inspection zone are inspected annually.

At this time, FPL has not identified any areas where the Pole Inspection – Distribution Program would not be feasible, reasonable or practical.

B. Structures/Other Equipment Inspections – Transmission Program

1. Description of the Program and Benefits

The Structures/Other Inspections – Transmission Program included in the SPP is a continuation of FPL's existing Commission-approved transmission inspection program. Below is an overview of FPL's existing transmission inspection program and the associated benefits.

a. Overview of the Transmission Inspection Program

In 2006, as part of its Storm Preparedness Initiative No. 3, the Commission required electric utilities to develop and implement plans to fully inspect all transmission structures, substations, and all hardware associated with these facilities on a six-year cycle. Consistent therewith, FPL implemented a Commission-approved transmission inspection plan in 2006 and has continued that plan to date.

Under its Commission-approved transmission inspection plan, FPL inspects its transmission circuits, substations, and other equipment on a six-year cycle. Additionally, all of FPL's transmission structures are visually inspected from the ground each year. Finally, FPL performs climbing or bucket truck inspections on all wood transmission structures on a six-year cycle and all steel and concrete structures on a ten-year cycle.

Inspections for wood structures include an overall assessment of the condition of the structures, as well as other pole/structure components including the foundation, all attachments, insulators, guys, cross-braces, cross-arms, and bolts. If a wood transmission structure does not pass visual inspection, it is designated for replacement with a concrete or steel transmission structure.

For steel and concrete structures, the visual inspection includes an overall assessment of the structure condition (*e.g.*, cracks, chips, exposed rebar, and rust) as well as other pole/structure components including the foundation, all attachments, insulators, guys, cross-braces, cross-arms, and bolts. If a concrete or steel pole/structure fails the inspection, it is designated for repair or replacement.

The SPP will continue FPL's current transmission inspection program which requires: (a) transmission circuits and substations and all associated hardware to be inspected on a six-year cycle; (b) wood structures to be inspected visually from the ground each year and climbing or bucket truck inspections to be conducted on a six-year cycle; and (c) steel and concrete structures to be inspected visually each year and climbing or bucket truck inspections to be conducted on a ten-year cycle.

b. Benefits of the Transmission Inspection Program

As noted in Section IV(A)(1)(b) above, the Commission has found numerous benefits and reasons justifying inspections of electrical utility facilities, including transmission facilities. Importantly, the transmission system is the backbone of the electric grid. While outages associated with distribution facilities (*e.g.*, a transformer, lateral or feeder) can result in an outage affecting anywhere from a few customers up to several thousands of customers, a transmission related outage can affect tens of thousands of customers. Additionally, an outage on a transmission facility could cause cascading (a loss of power at one transmission facility can trigger the loss of power on another interconnected transmission facility, which in turn can trigger the loss of power on another interconnected transmission facility, and so on) and result in the loss of service for hundreds of thousands of customers. As such, it is imperative that transmission facilities be properly inspected using appropriate cycles and standards to help ensure they are prepared for storms.

Further, the performance of FPL's transmission facilities during recent storm events indicates FPL's transmission inspection program has contributed to the overall storm resiliency of the transmission system and provided savings in storm restoration costs. The table below compares the performance of FPL's transmission system for Hurricane Wilma, which occurred in 2005 before FPL implemented its current transmission

inspection program, and Hurricane Irma, which occurred in 2017 after FPL implemented its current transmission inspection program:

Transmission Facilities	Hurricane Wilma	Hurricane Irma	Improvement
Line Section Outages	345	215	38%
Substation Outages	241	92	62%
Structures Failed	100	5	95%

As shown above, the impacts on FPL's transmission facilities associated with Hurricane Irma were significantly reduced from those experienced with Hurricane Wilma, even though Hurricane Irma's winds were stronger and its path impacted substantially more of FPL's facilities. As reflected in the Commission's reasoning for mandating transmission facility inspections, FPL submits that its systematic transmission inspection program is a key factor for this improved performance.

2. Actual/Estimated Start and Completion Dates

The SPP will continue FPL's ongoing Commission-approved transmission inspection program described above. This requires FPL to inspect: (a) transmission circuits and substations and all associated hardware on a six-year cycle; (b) wood structures to be visually inspected from the ground each year and conduct climbing or bucket truck inspections on a six-year cycle; and (c) steel and concrete structures visually each year and conduct climbing or bucket truck inspections on a ten-year cycle.

3. Cost Estimates

Estimated/actual annual transmission inspection costs are a function of the number of inspections estimated to be/actually completed and the transmission facilities estimated to be/actually remediated/replaced as a result of those annual inspections. Although the inspection costs are operating expenses, the vast majority of the transmission inspection program costs are capital costs resulting from remediation/replacement of facilities that fail inspection.

The table below provides a comparison of the 2017-2019 total actual transmission inspection costs with the 2020-2022 (first three years of the SPP) total estimated

transmission inspection costs and the 2020-2029 total estimated transmission inspection costs:

	Total Program Costs (millions)	Annual Average Program Costs (millions)
2017-2019	$128	$43
2020-2022	$97	$32
2020-2029	$500	$50

Further details regarding the SPP estimated transmission inspection costs, including estimated annual capital expenditures and operating expenses, are provided in Appendix C.[15]

4. Comparison of Costs and Benefits

As provided in Section IV(B)(3) above, during 2020-2029, total costs for FPL's Structures/Other Inspections – Transmission Program are expected to average approximately $50 million per year. Benefits associated with the Structures/Other Inspections – Transmission Program discussed in Sections II and IV(B)(1)(b) above, include avoiding outages that can affect tens of thousands of customers and, in particular, cascading outages where the loss of service can affect hundreds of thousands of customers.

5. Criteria used to Select and Prioritize the Program

As explained above, FPL visually inspects from the ground all transmission structures on an annual basis. For the inspection of transmission circuits and substations and all associated hardware, the facilities are selected/prioritized throughout FPL's service territory based on the last cycle's inspection dates, to ensure that facilities are inspected in compliance with the established six-year inspection cycle. Similarly, for bucket truck or climbing inspections, structures are selected/prioritized throughout FPL's service territory based on the last cycle's inspection dates, to ensure that structures are inspected

[15] *See* footnote 14.

in compliance with the established six-year (wood) and ten-year (steel and concrete) cycles.

At this time, FPL has not identified any areas where the Structures/Other Inspections – Transmission Program would not be feasible, reasonable or practical.

C. Feeder Hardening (EWL) – Distribution Program

1. Description of the Program and Benefits

The Feeder Hardening (EWL) – Distribution Program included in the SPP is a continuation of FPL's existing Commission-approved approach (most recently approved in Docket No. 20180144-EI) to harden existing feeders and certain critical distribution poles, as well as FPL's initiative to design and construct new pole lines and major planned work to meet the NESC's extreme wind loading criteria ("EWL"). FPL will continue the distribution feeder hardening program until 2024, when FPL expects 100% of its feeders to be hardened or underground. Below is an overview of FPL's existing distribution feeder hardening program and the associated benefits.

a. Overview of the Distribution Feeder Hardening Program

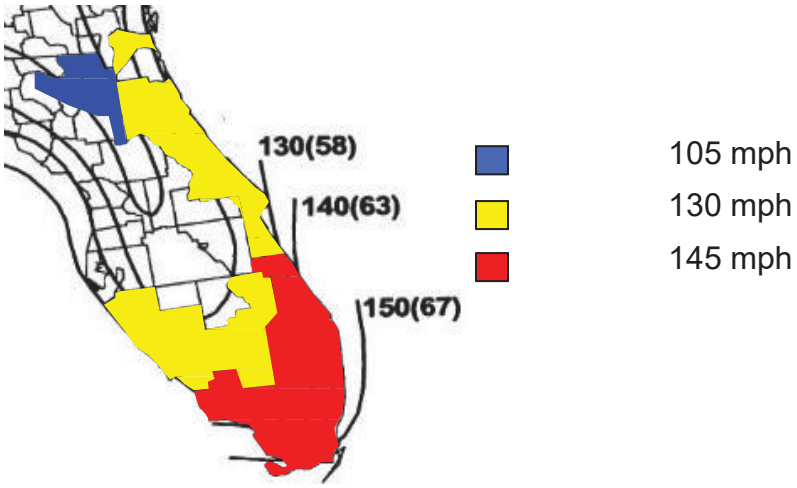
The foundation for FPL's distribution feeder hardening program was the extensive forensic and other analyses that FPL conducted after Hurricane Wilma.[16] These analyses concluded that "wind only" (as opposed to, for example, trees or other flying debris) was the predominant root cause of distribution pole breakage. This data, together with the overall performance of FPL's transmission poles that were already built to the NESC EWL standards and the performance of hardened feeders during Hurricanes Matthew and Irma, formed the basis for FPL's feeder hardening strategy.

The SPP will continue FPL's previously approved approach to apply EWL criteria to harden existing distribution feeders and certain critical poles. The NESC extreme wind map for Florida will continue to be applied to FPL's system by dividing the application of

[16] These analyses were conducted either directly by FPL or with the aid of external resources (*e.g.*, KEMA, Inc.).

EWL into three wind regions, corresponding to expected extreme winds of 105, 130 and 145 mph, as shown below.

FPL Extreme Wind Regions - mph (meter/sec)



By evaluating each of the counties served by FPL, including each county's applicable wind zones, FPL determined that utilizing three extreme wind regions of 105, 130 and 145 mph for its service territory was appropriate for the following reasons:

- A smaller number of wind regions generate advantages through efficiency of work methods, training, engineering and administrative aspects (*e.g.*, standards development and deployment); and

- Using 105, 130 and 145 mph wind zones is a well balanced approach that recognizes differences in the EWL requirements in the counties within each region.

The SPP will also continue to utilize FPL's Design Guidelines and processes that apply EWL criteria to the design and construction of new pole lines and major planned work, including pole line extensions and relocations and certain pole replacements. Depending on the scope of the work that is performed in a particular project, this could result in the EWL hardening of an entire circuit (in the case of large-scale projects) or in EWL hardening of one or more poles (in the case of small projects) so that the affected circuit will be in a position to be fully EWL hardened in the future. The Design Guidelines are

primarily associated with changes in pole class, pole type, and desired span lengths to be utilized. The Design Guidelines standardize the design and construction of new pole lines and major planned work to ensure that these projects align with FPL's hardening strategy.

FPL's current pole sizing guidelines provide for a minimum installation of: Class 2 wood poles for all new feeder and three-phase lateral work; Class 3 wood pole for two-phase and single-phase lateral work; and Class 3 wood pole for service and secondary work. For critical poles, FPL's current pole sizing guidelines provide for the installation of concrete poles at accessible locations. These guidelines significantly increase the wind ratings (up to nearly 50 percent) from the Design Guidelines in place prior to 2007. FPL's current Distribution Design Guidelines are provided in Appendix D.

To determine how an existing overhead circuit or critical pole will be hardened, a field survey of the circuit facilities is performed. By capturing detailed information at each pole location, such as pole type, class, span distance, attachments, wire size, and framing, a comprehensive wind-loading analysis can be performed to determine the current wind rating of each pole, and ultimately the circuit itself. This data is then used to identify specific pole locations on the circuit that do not meet the desired wind rating. For all poles that do not meet the applicable EWL, FPL develops recommendations to increase the allowable wind rating of the pole.

FPL plans to continue to utilize its "design toolkit" that focuses on evaluating and using cost-effective hardening options for each location, including:

- Storm Guying – Installing a guy wire in each direction perpendicular to the line, which is a very cost-effective option but is dependent on proper field conditions;
- Equipment Relocation – Moving equipment on a pole to a stronger pole near-by;
- Intermediate Pole – Installing an additional single pole within long span lengths, which reduce the span length and increases the wind rating of both adjacent poles;

- Upgrading Pole Class – Replacing the existing pole with a higher class pole to increase the pole's wind rating; and;

- Undergrounding Facilities – Evaluated on a case-by-case basis using site-specific factors and conditions.

These options are not mutually exclusive and, when used in combination with sound engineering practices, provide cost-effective methods to harden a circuit. FPL's design recommendations also take into consideration issues such as hardening, mitigation (minimizing damage), and restoration (improving the efficiency of restoration in the event of failure). Since multiple factors can contribute to losing power after a storm, utilizing this multi-faceted approach to pole design helps to reduce the amount of work required to restore power to a damaged circuit.

b. *Benefits of the Distribution Feeder Hardening Program*

Distribution feeders are the backbone of the distribution system and are critical component to providing safe and reliable electric service to FPL's customers. Thus, improving the storm resiliency of distribution feeders logically provides substantial benefits for customers. Therefore, hardening distribution feeders has been and continues to be one of FPL's highest storm hardening priorities.

During the period 2006-2019, FPL hardened over 1,300 existing feeders, the vast majority being Critical Infrastructure Function ("CIF") feeders (*i.e.*, feeders that serve hospitals, 911 centers, police and fire stations, water treatment facilities, county emergency operation centers) and Community Project feeders (*i.e.*, feeders that serve other key community needs like gas stations, grocery stores, and pharmacies) throughout FPL's service territory. Additional feeders were hardened as a result of FPL's Priority Feeder Initiative, a reliability program that targeted feeders experiencing the highest number of interruptions and/or customers interrupted. As of year-end 2019, approximately 54% of FPL's feeders were either hardened or placed underground. Additionally, FPL has hardened 125 highway crossings and over 300 "01" switches (first pole out of a substation with a feeder switch). FPL also applied EWL to the design and construction of new pole

lines and major planned work, including pole line extensions and relocations and certain pole replacements.

As provided in previous FPL Annual Reliability Report filings and three-year Storm Hardening Plan filings (per Rule 25-6.0342, F.A.C.) hardened feeders perform better than non-hardened feeders. This has been demonstrated in-day-to-day reliability performance and during severe storms. For example, when comparing day-to-day reliability performance, hardened feeders have performed 40% better than non-hardened feeders. Also, during Hurricanes Matthew and Irma, hardened feeders performed better than non-hardened feeders.

Additionally, in Docket No. 20170215-EU, the Commission reviewed the electric utilities' storm hardening and storm preparedness programs and found for Hurricane Irma that: (1) outage rates were nearly 20% less for hardened feeders than non-hardened feeders; (2) CMH to restore hardened feeders were 50% less than non-hardened feeders (primarily due to hardened feeders experiencing less damage than non-hardened hardened feeders); and (3) hardened feeders had significantly less pole failures as compared to non-hardened feeders.[17]

2. Actual/Estimated Start and Completion Dates

FPL initiated its feeder hardening initiative in 2006. As of year-end 2019, there are approximately 1,600 feeders remaining to be hardened or placed underground. FPL expects to harden approximately 250-350 feeders annually, with 100% of FPL's feeders expected to be hardened or underground by year-end 2024 and with the final costs of the program to be incurred in 2025.

[17] *See Review of Florida's Electric Utility Hurricane Prepared ness and Restoration Actions 2018*, Docket No. 20170215-EU (July 24, 2018), *available at* http://www.psc.state.fl.us/library/filings/2018/04847-2018/04847-2018.pdf.

3. Cost Estimates

Estimated distribution feeder hardening costs are determined utilizing the length of each feeder, the average historical feeder hardening cost per mile, and updated cost assumptions (*e.g.*, labor and materials).

The table below provides a comparison of the 2017-2019 total actual distribution feeder hardening costs with the 2020-2022 (first three years of the SPP) total estimated distribution feeder hardening costs and the total estimated distribution feeder hardening costs to be incurred over the period of 2020-2025[18]:

	Total Program Costs (millions)	**Annual Average Program Costs (millions)**
2017-2019	$1,492	$497
2020-2022	$1,958	$653
2020-2025	$3,206	$534

Further details regarding the SPP distribution feeder hardening costs, including estimated annual capital expenditures are provided in Appendix C.[19]

4. Comparison of Costs and Benefits

As provided in Section IV(C)(3) above, during 2020-2025, total costs for FPL's Feeder Hardening (EWL) – Distribution Program average approximately $534 million per year through 2025. Benefits associated with the Feeder Hardening (EWL) – Distribution Program discussed in Sections II and IV(C)(1)(b) above, include improved storm resiliency as well as improved day-to-day reliability.

5. Criteria used to Select and Prioritize the Program

As explained above, there are approximately 1,600 feeders remaining to be hardened or placed underground. FPL attempts to spread its annual projects throughout its service territory. In prioritizing the remaining existing feeders to be hardened each year,

[18] It is currently estimated that 100% of FPL's feeders will be hardened or underground by year-end 2024, with the final costs to be incurred in 2025.

[19] *See* footnote 14.

considerations include the feeder's historical reliability performance, restoration difficulties (*e.g.*, environmentally sensitive areas, islands with no vehicle access, river crossings, etc.), on-going or upcoming internal/external projects (*e.g.*, FPL maintenance or system expansion projects, municipal overhead/underground conversion project or municipal road project) and geographic location.

At this time, FPL has not identified any areas where the Feeder Hardening (EWL) – Distribution Program would not be feasible, reasonable or practical.

D. Lateral Hardening (Undergrounding) – Distribution Program

1. Description of the Program and Benefits

In 2018, FPL implemented a three-year Commission-approved SSUP Pilot. The SSUP Pilot is a program that targets certain overhead laterals for conversion from overhead to underground. As part of its SPP, FPL will expand undergrounding laterals in 2021-2029. Below is an overview of FPL's Lateral Hardening (Undergrounding) – Distribution Program and the associated benefits.

a. Overview of the Distribution Lateral Hardening Program

As part of the SPP, FPL will complete its existing approved three-year SSUP Pilot (in 2020) and expand the application of the SSUP during 2021-2029 to the implementation of the system-wide Lateral Hardening (Undergrounding) – Distribution Program. The SSUP Pilot targeted certain overhead laterals that were impacted by recent storms and that have a history of vegetation-related outages and other reliability issues for conversion from overhead to underground. Key objectives of the SSUP Pilot included validating conversion costs and identifying cost savings opportunities, testing different design philosophies, better understanding customer impacts and sentiments, and identifying barriers (*e.g.*, obtaining easements, placement of transformers, and attaching entities' issues).

Two design options are being utilized when FPL converts overhead laterals to underground, referred to as the North American and the European designs. The North American design currently is the predominant design, but both undergrounding designs eliminate all overhead lateral and service wire. The North American design generally

utilizes more primary conductor and a greater number of smaller-sized transformers, with less customers per transformer, and is better suited for front lot construction and service. The European design utilizes more secondary conductor, and a smaller number of larger-sized transformers, with more customers per transformer, and is better suited for rear lot construction and service. Where practical, FPL attempts to relocate existing facilities from the rear of to the front of customers' premises; however, there are instances where that option is not available (*e.g.*, FPL is unable to obtain easements in front of customers' premises). FPL's standard design is the North American design (front lot construction), but FPL is gaining important experience and knowledge from its utilization of the European design (rear lot construction), which it can then better utilize for future projects as appropriate.

As part of the conversion process, FPL is also installing meter base adaptors that allow underground service to be provided to the customer by utilizing the existing meter and meter enclosure. The meter base adaptors minimize the impact on customer-owned equipment and facilities. For example, in certain situations, overhead to underground conversions of electric service can trigger a local electrical code requirement that necessitates a customer upgrade of the home's electric service panel. This can cost the customer thousands of dollars. However, by utilizing a meter base adaptor, overall costs are reduced and customers are able to avoid the need and expense to convert their electrical service panels.

b. *Benefits of the Distribution Lateral Hardening Program*

Laterals make up the majority of FPL's distribution system. For example, system-wide, there are over 180,000 laterals (including laterals with multi-stage fusing), in contrast to approximately 3,300 feeders, and there are 1.8 times as many miles of overhead laterals as there are overhead feeders (approximately 23,000 miles vs. 13,000 miles, respectively). Additionally, while feeders are predominately located in the front of customers' premises, many laterals are "rear of" or behind customers' premises. This is especially the case in older neighborhoods located throughout FPL's service territory. Generally, facilities in the rear of customers' premises take longer to restore than facilities in front of customers' premises because rear-located facilities are more difficult to access

and are more likely to be near vegetation. This results in a greater amount of CMH being devoted to laterals during storm restoration.

The basis for FPL's SSUP Pilot and the proposal to expand upon the Pilot under the SPP is the performance of the underground facilities as compared to overhead facilities and the extensive damage to the overhead facilities caused by vegetation during Hurricanes Matthew and Irma. This performance was demonstrated by the results of FPL's analysis referenced above in Section IV(A)(1)(b) and contained in the Commission's *Review of Florida's Electric Utility Hurricane Preparedness and Restoration Actions in 2018*,[20] which is summarized in the table below:

Storm and Facility	Laterals Out	Total Laterals	% Out
Matthew OH	3,473	82,729	4%
Matthew UG	238	101,892	0.2%
Irma OH	20,341	84,574	24%
Irma UG	3,767	103,384	4%

Finally, it is important to note that underground facilities also perform better than overhead facilities on a day-to-day basis. For example, based on the reliability performance metrics for overhead and underground facilities provided to the Commission in FPL's February 28, 2020 Annual Reliability Report filing, the System Average Interruption Duration Index ("SAIDI") for underground facilities is significantly better than hybrid facilities (combination of overhead and underground) or overhead facilities as shown in the table below:

	SAIDI[21]		
Year	UG	OH	Hybrid
2015	21.4	102.4	60.0
2016	17.2	80.4	57.6
2017	17.7	89.6	55.5
2018	21.2	89.0	54.2
2019	30.3	87.4	49.4

[20] *See* footnote 17.

[21] *See* pages 93-97 of FPL's February 28, 2020 Annual Reliability Report filing for more details on day-to-day reliability performance - overhead vs. underground.

2. Actual/Estimated Start and Completion Dates

FPL's SSUP Pilot was initiated in 2018. By the end of 2020, the third and final year of the SSUP Pilot, FPL expects to have converted a total of 220-230 laterals from overhead to underground, which is consistent with the SSUP Pilot's plan most recently approved in Docket No. 20180144-EI. As part of its SPP, FPL will incorporate, continue, and expand the SSUP to provide the benefits of underground lateral hardening throughout its system. After completing the SSUP Pilot in 2020, FPL estimates it will convert 300-700 laterals annually. In 2024-2029 FPL estimates it will convert 800-900 laterals annually.

3. Cost Estimates

Estimated lateral undergrounding costs are determined utilizing the length of each lateral, the average historical lateral undergrounding cost per mile, and updated cost assumptions (*e.g.*, labor and materials). The table below provides a comparison of the 2018-2019 total actual costs for the SSUP Pilot with the 2020-2022 (first three years of the SPP) total estimated distribution lateral hardening program costs and the 2020-2029 total estimated distribution lateral hardening program costs:

	Total Program Costs (millions)	**Annual Average Program Costs (millions)**
2018-2019[22]	$76	$38
2020-2022	$676	$225
2020-2029	$5,101	$510

Further details regarding the SPP estimated distribution lateral hardening program costs, including estimated annual capital expenditures are provided in Appendix C.[23]

4. Comparison of Costs and Benefits

As provided in Section IV(D)(3) above, during 2020-2029, total costs for FPL's Lateral Hardening (Undergrounding) – Distribution Program average approximately $510 million per year. Benefits associated with the Lateral Hardening (Undergrounding) – Distribution

[22] The Storm Secure Underground Program Pilot was initiated in 2018.

[23] *See* footnote 14.

Program discussed in Sections II AND IV(D)(1)(b) above, include improved storm resiliency as well as improved day-to-day reliability.

5. Criteria used to Select and Prioritize the Program

FPL will select/prioritize future laterals for conversion to undergrounding based on an overall feeder performance methodology. Rather than selecting individual "stand-alone" laterals, FPL will underground all the laterals on a feeder such that when a hardened feeder that has experienced an outage is restored, all associated underground laterals would also be restored (unless the underground lateral was damaged).

On average, there are currently 20-30 overhead laterals on a feeder. The selection and prioritization of the laterals to be converted will be based on a methodology that considers: (a) all of the overhead laterals on each feeder; (b) outage experience during the recent Hurricanes Matthew and Irma; (c) the number of vegetation-related outages experienced over the most recent 10 years; and (d) the total number of lateral and transformer outages experienced over the most recent 10 years. These overhead lateral factors are totaled for each feeder, and the feeders are ranked based on these totals. All laterals on the feeders will then be hardened according to the ranking of each feeder.

In order to optimize resources and provide lateral hardening throughout FPL's system, lateral hardening projects will be performed annually in all sixteen (16) of FPL's management areas. At this time, FPL has not identified any areas where the Lateral Hardening (Undergrounding) – Distribution Program would not be feasible, reasonable, or practical. However, in areas that are more prone to flooding or storm surge, FPL will consider alternative construction methods (*e.g.*, elevating transformer pads).

E. Wood Structures Hardening (Replacing) – Transmission Program

1. Description of the Program and Benefits

The Wood Structure Hardening (Replacing) – Transmission Program included in the SPP is a continuation of FPL's existing transmission hardening program through the end of 2022, when FPL expects that 100% of its transmission structures will be steel or concrete.

Below is an overview of FPL's existing transmission wood structure hardening program and the associated benefits.

a. Overview of the Transmission Hardening Program

While FPL's transmission facilities were affected by the 2004 and 2005 storms, the damage experienced was significantly less than the damage sustained by distribution facilities. A primary reason for this resulted from the fact that transmission structures were, at that time, already constructed to meet EWL consistent with Florida Statute 366.04 and the National Electrical Safety Code, Rule 250 C.

Based on the forensic data collected from the 2004 and 2005 storms, FPL implemented a Commission-approved transmission storm hardening initiative to replace all wood transmission structures, which accounted for nearly 70 percent of all transmission structures replaced during the 2004-2005 storm seasons, with steel or concrete structures. As explained below, this initiative is ongoing and expected to be completed by the end of 2022. As part of its SPP, FPL will continue its initiative to replace all wood transmission structures with steel or concrete structures.

b. Benefits of the Transmission Hardening Program

While an outage associated with distribution facilities (*e.g.*, a transformer, lateral, or feeder) can impact up to several thousands of customers, a transmission-related outage can result in an outage affecting tens of thousands of customers. Additionally, an outage on a transmission facility could cause cascading (a loss of power at one transmission facility can trigger the loss of power on another interconnected transmission facility, which in turn can trigger the loss of power on another interconnected transmission facility, and so on) and result in the loss of service for hundreds of thousands of customers. As a result, the prevention of transmission-related outages is essential. As discussed earlier, while transmission facilities performed significantly better than distribution facilities during the 2004 and 2005 storms, there were several opportunities for improvement identified, including the replacement of wood transmission structures. As a result of its transmission inspection programs and its replacement of wood transmission structures, FPL's transmission facilities have demonstrated to be more storm resilient.

The table below compares the performance of FPL's transmission system for Hurricane Wilma, which occurred in 2005 before FPL implemented its current transmission hardening program, and Hurricane Irma, which occurred in 2017 after FPL implemented its current transmission hardening program:

	Hurricane Wilma	**Hurricane Irma**
% Line Section Outages	37%	17%
Transmission Structure Failures	100	5 (all non-hardened)
Transmission Substations De-energized	241	92
Days to Restore Substation Outages	5	1

As shown above, the impacts on FPL's transmission facilities associated with Hurricane Irma were significantly reduced from those experienced with Hurricane Wilma, even though Hurricane Irma's winds were stronger and its path impacted substantially more of FPL's facilities.

2. Actual/Estimated Start and Completion Dates

FPL implemented its transmission hardening program in 2007. As of year-end 2019, 96% of FPL's transmission structures, system-wide, were steel or concrete, with less than 2,900 (or 4%) wood structures remaining to be replaced. FPL expects to replace the 2,900 wood transmission structures remaining on its system by year-end 2022.

3. Cost Estimates

Estimated/actual annual transmission hardening costs are a function of the number of poles to be replaced, actual historical replacement costs, and updated cost assumptions (*e.g.*, labor and materials). The vast majority of the transmission hardening program costs are capital costs resulting from replacement of the wood transmission structures.

The table below provides a comparison of the 2017-2019 total actual transmission hardening costs with the 2020-2022 (first three years of the SPP) total estimated transmission hardening costs:[24]

	Total Program Costs (millions)	**Annual Average Program Costs (millions)**
2017-2019	$162	$54
2020-2022	$118	$39

Further details regarding the SPP estimated transmission hardening costs, including estimated annual capital expenditures and operating expenses, are provided in Appendix C.[25]

4. Comparison of Costs and Benefits

As provided in Section IV(E)(3) above, during 2020-2022, total costs for FPL's Wood Structure Hardening (Replacing) – Transmission Program average approximately $39 million per year. Benefits associated with the Wood Structure Hardening (Replacing) – Transmission Program discussed in Sections II and IV(E)(1)(b) above, include improved storm resiliency.

5. Criteria used to Select and Prioritize the Program

The annual prioritization/selection criteria for the remaining wood structures to be replaced includes proximity to high wind areas, system importance, customer counts, and coordination with other storm initiatives (*e.g.*, distribution feeder hardening). Other economic efficiencies, such as opportunities to perform work on multiple transmission line sections within the same transmission corridor, are also considered.

At this time, FPL has not identified any areas where the replacement of the remaining wood transmission structures under the Wood Structure Hardening (Replacing) – Transmission Program would not be feasible, reasonable or practical.

[24] FPL expects that 100% of the remaining wood transmission structures in its system will be replaced by year-end 2022.

[25] *See* footnote 14.

F. Substation Storm Surge/Flood Mitigation Program

1. Description of the Program and Benefits

The Substation Storm Surge/Flood Mitigation Program is the only new program included in FPL's SPP. As explained below, Substation Storm Surge/Flood Mitigation Program is a new program to mitigate damage at several targeted distribution and transmission substations that are susceptible to storm surge and flooding during extreme weather events.

Historically, several FPL distribution and transmission substations have been impacted by storm surge and/or flooding as a result of extreme weather conditions. For example, as a result of flooding caused by Hurricanes Matthew and Irma, FPL's St. Augustine substation was required to be proactively de-energized (*i.e.*, shut down before water reached levels that would cause significant damage to powered substation equipment). Another example is FPL's South Daytona substation that was proactively de-energized during Hurricane Irma as a result of flooding. While proactively de-energizing those substations impacted by storm surge and/or flooding helps reduce damage to substation equipment, FPL is still required to implement both temporary flood mitigation efforts and repairs to substation facilities and equipment that become flooded as a result of extreme weather conditions.

An outage associated with distribution substations can impact up to several thousands of customers, and an outage associated with a transmission substation can result in an outage affecting tens of thousands of customers. Flooding and the need to proactively de-energize substations located in areas susceptible to storm surge and flooding can result in significant customer outages. For example, the flooding and de-energization of St. Augustine and South Daytona during Hurricane Irma resulted in more than 8,000 customer outages. Therefore, the prevention of outages at transmission and distribution substations due to storm surge or flooding is essential.

To prevent/mitigate future substation equipment damage and customer outages due to storm surge and flooding, FPL's new Substation Storm Surge/Flood Mitigation Program will target and harden certain substations located in areas throughout FPL's service

territory that are susceptible to storm surge or flooding during extreme weather events. Specifically, FPL plans to raise the equipment at certain substations above the flood level and construct flood protection walls around other substations to prevent/mitigate future damage due to storm surge and flooding.

2. Actual/Estimated Start and Completion Dates

At this time, FPL has identified between 8-10 substations where it initially plans to implement storm surge/flood mitigation measures over the next three years (2020-2022). FPL plans to initiate construction in late summer/early fall 2020 to raise the equipment at the St. Augustine substation, which is expected to be completed in 2021. In 2021 and early 2022, FPL also plans to begin construction on flood protection walls for the other 7-9 substations identified for mitigation, which is expected to be completed by 2022.

3. Cost Estimates

The storm surge/flood mitigation costs associated with St. Augustine substation (raising substation equipment) are estimated to be approximately $10 million in total (2020 and 2021). Estimated storm surge/flood mitigation costs for the remaining 7-9 substations identified at this time (constructing surrounding flood walls) are estimated to be approximately $13 million in total (2021 and 2022). See the table below the estimated annual program costs:

	Total Program Costs (millions)	**Annual Average Program Costs (millions)**
2020-2022	$23	$8

Further details regarding the SPP estimated storm surge/flood mitigation costs, including estimated annual capital expenditures and operating expenses, are provided in Appendix C.[26]

4. Comparison of Costs and Benefits

As provided in Section IV(F)(3) above, during 2020-2022, total costs for FPL's Substation Storm Surge/Flood Mitigation Program average approximately $8 million per year.

[26] *See* footnote 14.

Benefits associated with this program discussed in Section IV(F)(1) above, include improved storm resiliency (avoiding storm surge/flood damage), reduced customer outages and storm restoration costs.

5. Criteria used to Select and Prioritize Projects

The annual prioritization/selection criteria for the targeted substations is based on FPL's historical storm surge/flood experience, in particular, Hurricanes Matthew and Irma. At this time, for the targeted substations, FPL has not identified any areas where the upgrades would not be feasible, reasonable or practical.

G. Vegetation Management – Distribution Program

1. Description of the Program and Benefits

The Vegetation Management – Distribution Program included in the SPP is a continuation of FPL's existing Commission-approved Vegetation Management – Distribution Program. Below is an overview of FPL's existing Vegetation Management – Distribution Program and the associated benefits.

a. Overview of the Vegetation Management – Distribution Program

Prior to 2006, FPL's Vegetation Management – Distribution Program consisted of inspecting and maintaining its feeders on a three-year average trim cycle and performing targeted trimming on certain feeders more frequently (*e.g.*, targeting vegetation with faster growth rates and palm trees) through its "mid-cycle" program. Lateral trimming was prioritized based on reliability performance. Another important component of this program was FPL's "Right Tree Right Place" initiative, which provided information to educate customers on FPL's vegetation management program and practices, safety issues, and the importance of placing trees in the proper location.

After the 2004-2005 storm seasons, the Commission determined that the "vegetation management practices of the investor-owned electric utilities do not provide adequate assurance that tree clearances for overhead distribution facilities are being maintained in a manner that is likely to reduce vegetation related storm damage. We believe that

utilities should develop more stringent distribution vegetation management programs."[27] As result, FPL proposed and the Commission approved the continuation of FPL's system-wide three-year average trim cycle for feeders, mid-cycle targeted trimming for certain feeders, and its Right Tree Right Place initiative, as well as the implementation of a new six-year average trim cycle for laterals.[28] These same initiatives, which have provided storm and day-to-day reliability benefits, remain in place today.

Tree limbs and branches, especially palm fronds, are among the most common causes of power outages and momentary interruptions during both day-to-day operations and storm events. The primary objective of FPL's Vegetation Management – Distribution Program is to clear vegetation in areas where FPL is permitted to trim from the vicinity of distribution facilities and equipment in order to provide safe, reliable, and cost-effective electric service to its customers. The program is comprised of multiple initiatives designed to reduce the average time customers are without electricity as a result of vegetation-related interruptions. These include preventive maintenance initiatives (planned cycle and mid-cycle maintenance), corrective maintenance (trouble work and service restoration efforts), customer trim requests, and support of system improvement and expansion projects, which focus on long-term reliability by addressing vegetation that will impact new or upgraded overhead distribution facilities.

FPL's Vegetation Management Distribution Program's practices follow the NESC, the American National Standards Institute ("ANSI") A-300, and all other applicable standards, while considering tree species, growth rates, and the location of trees in proximity to FPL's facilities. Danger or hazard trees (leaning, structurally damaged, or diseased/dead that have a high likelihood to fail and impact FPL's facilities) located outside of right-of-way ("ROW"), which cannot be trimmed without approval from the property owner, are identified as candidates for customer-approved removal.

Finally, a very important component of FPL's vegetation program is providing information to customers to educate them on the company's trimming program and practices, safety issues, and the importance of placing trees in the proper location – FPL's "Right Tree,

[27] *See* Order No. PSC-06-0351-PAA-EI.
[28] *See* Order No. PSC-07-0468-FOF-EI.

Right Place" initiative. Right Tree, Right Place is a public education program based on FPL's core belief that providing reliable electric service and sustaining the natural environment can go hand-in-hand and is a win-win partnership between the utility and its customers.

The SPP will continue FPL's currently-approved distribution vegetation program, which includes the following system-wide vegetation management activities: three-year cycle for feeders; mid-cycle targeted trimming for certain feeders; six-year cycle for laterals; and continued education of customers through its Right Tree, Right Place initiative.

b. Benefits of the Vegetation Management – Distribution Program

In Order No. PSC-07-0468-FOF-EI, the Commission confirmed that FPL should continue to implement three-year and six-year average cycles for its feeders and laterals because the cycles complied with the Commission's storm preparedness objectives to increase the level of trimming over historical levels, promote system reliability and reduce storm restoration costs.[29] Additionally, Commission's orders indicated that FPL's proposed cycles: were cost-effective; would improve day-to-day "tree SAIFI" from 0.22 to 0.16 in ten years;[30] and would provide savings when comparing savings on a customers interrupted ("CI") per storm basis. Further, day-to-day distribution tree SAIFI has significantly improved as a result of FPL implementing its approved distribution vegetation management program (from 0.20 prior to the 2004-2005 storm seasons to 0.08 at year-end 2019).

Finally, another indication that the current program is providing benefits is that, while forensic analysis indicated vegetation was the overwhelming primary cause for pole and wire failures and a significant cause of outages during Hurricanes Matthew and Irma, the vast majority of damage resulted from uprooted trees, broken trunks, and broken limbs

[29] FPL's proposed three-year and six-year cycles were initially approved in Order No. PSC-06-0781-PAA-EI.

[30] The tree-related SAIFI has averaged less than 0.09 over the last few years.

that fell into distribution facilities from outside of right-of-way, *i.e.*, beyond where FPL is currently allowed trim without approval from the property owner.

2. Actual/Estimated Start and Completion Dates

FPL's ongoing vegetation management plan was originally approved in 2007, and remains in place today. Under the SPP, FPL plans to inspect and maintain, on average, approximately 15,200 miles annually, including approximately 11,400 miles for feeders (cycle and mid-cycle) and 3,800 miles for laterals. This is comparable to the approximately 15,200 miles inspected and maintained annually, on average, for 2017-2019.

3. Cost Estimates

The vast majority of vegetation management costs are associated with cycle and mid-cycle trimming, which is performed by several FPL-approved contractors throughout FPL's system. Other vegetation management costs include costs associated with day-to-day restoration activities (*e.g.*, summer afternoon thunderstorms), removals, debris cleanup, and support (*e.g.*, arborists, supervision, back office support). Costs associated with vegetation management are generally operating expenses.

The table below provides a comparison of the 2017-2019 total actual distribution vegetation management costs with the 2020-2022 (first three years of the SPP) total estimated distribution vegetation management costs and the 2020-2029 total estimated distribution vegetation management costs:[31]

	Total Program Costs (millions)	**Annual Average Program Costs (millions)**
2017-2019	$189	$63
2020-2022	$183	$61
2020-2029	$596	$60

Further details regarding the SPP estimated distribution vegetation management costs,

[31] The vegetation management costs shown in the table below exclude storm-related vegetation management costs.

including estimated annual capital expenditures and operating expenses, are provided in Appendix C.[32]

4. Comparison of Costs and Benefits

As provided in Section IV(G)(3) above, during 2020-2029, total costs for FPL's Vegetation Management – Distribution Program average approximately $60 million per year. Benefits associated with the Vegetation Management – Distribution Program discussed in Sections II and IV(G)(1)(b) above, include increased storm resiliency.

5. Criteria Used to Select and Prioritize the Program

The primary reason for maintaining feeders on a three-year average cycle, as opposed to a six-year average cycle for laterals, is that a feeder outage can affect, on average, approximately 1,500 customers as compared to an outage on a lateral line that can affect, on average, approximately 35 customers. FPL enhances its approved feeder inspection and trimming plan through its mid-cycle trimming program, which encompasses patrolling and trimming feeders between planned maintenance cycles to address tree conditions that may cause an interruption prior to the next planned cycle trim. Mid-cycle work units typically have a trim age of 12 to 18 months and usually involve certain fast-growing trees (*e.g.*, palm trees) that need to be addressed before the next scheduled cycle trim date.

Additionally, customers often contact FPL with requests to trim trees around distribution lines in their neighborhoods and near their homes. As a result of these discussions with customers and/or a follow-up investigation, FPL either performs the necessary trimming or determines that the requested trimming can be addressed more efficiently by completing it through the normal scheduled cycle trimming.

Cycle trimming is prioritized annually to ensure compliance with cycle schedules. At this time, FPL has not identified any areas where the Vegetation Management – Distribution Program would not be feasible, reasonable or practical.

[32] *See* footnote 14.

H. Vegetation Management – Transmission Program

1. Description of the Program and Benefits

The Vegetation Management – Transmission Program included in the SPP is a continuation of FPL's existing transmission vegetation management program. Below is an overview of FPL's existing transmission vegetation management program and the associated benefits.

a. Overview of the Vegetation Management - Transmission Program

The North American Electric Reliability Corporation's (NERC) vegetation management standards/requirements serve as the basis for FPL's transmission vegetation management program. The reliability objective of these standards/requirements is to prevent vegetation-related outages that could lead to cascading by utilizing effective vegetation maintenance while recognizing that certain outages such as those due to vandalism, human errors, and acts of nature are not preventable. Transmission lines that must conform with these standards/requirements include lines operated at or above 200 kV or any line that is either an element of the Interconnection Reliability Operating Limit (IROL) or the Western Electricity Coordinating Council (WECC).

For FPL, just over 4,300 miles of its transmission system (or nearly two-thirds of all of FPL's total transmission system) are subject to NERC's vegetation management standards/requirements. NERC's vegetation management standards/requirements include annual inspection requirements, executing 100% of a utility's annual vegetation work plan, and to prevent any encroachment into established minimum vegetation clearance distances ("MVCD").

The key elements of FPL's transmission vegetation management program are to inspect the transmission right-of-ways, document vegetation inspection results and findings, prescribe a work plan, and execute the work plan.

FPL conducts ground inspections of all transmission corridors annually for work planning purposes. During these inspections, FPL identifies vegetation capable of approaching the defined Vegetation Action Threshold ("VAT"). VAT is a calculated distance from the

transmission line that factors in MVCD, conductor sag/sway potential, and a buffer. The identified vegetation is given a work prescription and then prioritized and organized into batches of work, which collectively become the annual work plan.

For transmission lines that are subject to NERC's vegetation management standards/requirements, FPL also uses a technology called "LiDAR," short for light detection and ranging. LiDAR is a remote sensing technology that uses light in the form of a pulsed laser to measure ranges (distances) to a target. For vegetation management purposes, LiDAR is used to measure distance between vegetation and transmission lines. LiDAR patrols are conducted annually for all NERC transmission corridors. Data collected by the LiDAR patrols is then used to develop annual preventative and reactive work plans.

In its SPP, FPL will continue its current transmission vegetation management plan, which includes visual and aerial inspections of all transmission line corridors, LiDAR inspections of NERC transmission line corridors, developing and executing annual work plans to address identified vegetation conditions, and identifying and addressing priority and hazard tree conditions prior to and during storm season.

b. Benefits of the Vegetation Management – Transmission Program

The benefits of a Vegetation Management – Transmission Program are self-evident and the consequences of not having a reasonable transmission vegetation management plan can be extreme. As discussed previously, the transmission system is the backbone of the electric grid. While outages associated with distribution facilities (*e.g.*, a transformer, lateral, or feeder) can result in an outage affecting anywhere from a few customers up to several thousands of customers, a transmission related outage can affect tens of thousands of customers. Additionally, an outage on a transmission facility could cause cascading and result in the loss of service for hundreds of thousands of customers. As such, it is imperative that vegetation impacting transmission facilities be properly maintained using reasonable and appropriate cycles and standards to help ensure they are prepared for storms. For these reasons, it is no surprise that NERC has developed

prescriptive vegetation management requirements for transmission facilities to help prevent such damage from occurring.

FPL also notes that while vegetation-related damage and transmission line outages occurred during Hurricanes Matthew and Irma, the vast majority of such damages/outages were caused by vegetation located outside of the right-of-way, *i.e.*, beyond where FPL is currently allowed to trim without approval from the property owner, which further demonstrates that FPL's historical efforts in this area have been beneficial.

2. Actual/Estimated Start and Completion Dates

FPL's Vegetation Management – Transmission Program is an ongoing program, initiated decades ago. Under the SPP, FPL plans to inspect and maintain, on average, approximately 7,000 miles annually, including approximately 4,300 miles for NERC transmission line corridors and 2,700 miles for non-NERC transmission line corridors. This is comparable to the approximately 7,000 miles inspected and maintained annually, on average, for 2017-2019.

3. Cost Estimates

The vast majority of vegetation management costs are associated with annual inspections and the execution of planned work to address identified conditions, which is performed by several FPL approved contractors throughout FPL's system. Other vegetation management costs include costs associated with day-to-day restoration activities (*e.g.*, summer afternoon thunderstorms), removals, debris cleanup, and support (*e.g.*, arborists, supervision, back office support). Costs associated with vegetation management are generally operating expenses.

The table below provides a comparison of the 2017-2019 total actual transmission vegetation management costs with the 2020-2022 (first three years of the SPP) total estimated transmission vegetation management costs and the 2020-2029 total estimated transmission vegetation management costs:[33]

[33] The vegetation management costs shown in the table below exclude storm-related vegetation management costs.

	Total Program Costs (millions)	Annual Average Program Costs (millions)
2017-2019	$27	$9
2020-2022	$27	$9
2020-2029	$96	$10

Further details regarding the SPP estimated transmission vegetation management costs, including estimated annual capital expenditures and operating expenses, are provided in Appendix C.[34]

4. Comparison of Costs and Benefits

As provided in Section IV(H)(3) above, during 2020-2029, total costs for FPL's Vegetation Management – Transmission Program average approximately $10 million per year. Benefits associated with the Vegetation Management – Transmission Program discussed in Sections II and IV(H)(1)(b) above, include increased storm resiliency. The execution of FPL's Vegetation Management – Transmission Program is a significant factor in mitigating damage to transmission facilities and avoiding transmission-related outages.

5. Criteria used to Select and Prioritize the Programs

Priority vegetation conditions and hazard tree conditions are completed annually prior to storm season. Additionally, prior to and during the storm season, FPL conducts aerial inspections of transmission corridors to identify hazard trees and any priority vegetation locations. Priority vegetation conditions and hazard tree conditions identified through aerial inspections are addressed as soon as possible.

At this time, FPL has not identified any areas where the Vegetation Management – Transmission Program would not be feasible, reasonable or practical.

[34] *See* footnote 14.

V. Detailed Information on the First Three Years of the SPP (2020-2022)

A. Detailed Description for the First Year of the SPP (2020)

The following additional information required by Rule 25-6.030(3)(e)(1), F.A.C., for the first year of the SPP (2020) is provided in Appendix E. (1) the actual or estimated construction start and completion dates; (2) a description of the affected existing facilities, including number and type(s) of customers served, historic service reliability performance during extreme weather conditions, and how this data was used to prioritize the storm protection projects; (3) a cost estimate including capital and operating expenses. A description of the criteria used to select and prioritize the storm protection programs is included in the description of each SPP program provided in Section IV.

B. Detailed Description of the Second and Third Years of the SPP (2021-2022)

Additional details required by Rule 25-6.030(3)(e)(2), F.A.C., for the second and third years of the SPP (2021-2022), including the estimated number and costs of projects under every program, is provided in in Appendix C.

C. Detailed Description of the Vegetation Management Activities for the First Three Years of the SPP (2020-2022)

The following additional information required by Rule 25-6.030(3)(f), F.A.C., for the first three years of the vegetation management activities under the SPP (2020-2022) is provided in n Sections IV(G) and IV(H) above and Appendix C: the projected frequency (trim cycle); the projected miles of affected transmission and distribution overhead facilities; the estimated annual labor and equipment costs for both utility and contractor personnel. A description of how the vegetation management activities will reduce outage times and restoration costs due to extreme weather conditions is provided in Sections IV(G) and IV(H) above.

VI. Estimate of Annual Jurisdictional Revenue Requirements for the 2020-2029 SPP

Pursuant to Rule 25-6.030(3)(f), F.A.C., the table below provides the estimated annual jurisdictional revenue requirements for each year of the SPP.

	Estimated Annual Revenue Requirements (millions)
2020	$257.6
2021	$369.1
2022	$494.3
2023	$625.5
2024	$760.9
2025	$878.1
2026	$963.7
2027	$1,037.1
2028	$1,110.9
2029	$1,185.2

While FPL has provided estimated costs by program as of the time of this filing and associated total revenue requirements in its SPP, consistent with the requirements of Rule 25-6.030, F.A.C., subsequent projected and actual program costs submitted for cost recovery through the Storm Protection Plan Cost Recovery Clause (per Rule 25-6.031, F.A.C.,) could vary by as much as 10-15%, which would then also impact associated estimated revenue requirements and rate impacts. The projected costs, actual/ estimated costs, actuals costs, and true-up of actual costs to be included in FPL's Storm Protection

Plan Cost Recovery Clause will all be addressed in subsequent filings in separate storm protection plan cost recovery clause dockets pursuant to Rule 25-6.031, F.A.C.[35]

VII. Estimated Rate Impacts for First Three Years of the SPP (2020-2022)

FPL anticipates the programs included in the SPP will have zero bill impacts on customer bills during the first year of the SPP and only minimal bill increases for years two and three of the SPP. An estimate of hypothetical overall rate impacts for the first three years of the SPP (2020-2022), without regard for the fact that FPL remains under a general base rate freeze pursuant to a Commission-approved settlement agreement through December 31, 2021, as stated in footnote 36 below are based on the total program costs reflected in this filing.[36] The projected costs, actual/estimated costs, actuals costs, and true-up of actual costs to be included in FPL's Storm Protection Plan Cost Recovery Clause will all be addressed in subsequent filings in Storm Protection Plan Cost Recovery Clause dockets pursuant to Rule 25-6.031, F.A.C.[37]

Pursuant to Rule 25-6.031, F.A.C., FPL has not identified any reasonable implementation alternatives that could mitigate the resulting rate impact for each of the first three years of the SPP. As explained above, FPL's SPP is largely a continuation of existing Commission-approved storm hardening programs and initiatives, which have already demonstrated that they have and will continue to provide increased T&D infrastructure resiliency, reduced restoration time, and reduced restoration costs when FPL's system is impacted by severe weather events. Further, as explained above, the estimated costs

[35] The Commission has opened Docket No. 20200092-EI to address Storm Protection Plan Cost Recovery Clause petitions to be filed the third quarter of 2020.

[36] Pursuant to Rule 25-6.030(3)(h), F.A.C., the hypothetical rate impacts for FPL's typical residential, commercial, and industrial customers for the first three years of the SPP (2020-2022) without regard for the fact that FPL remains under a general base rate freeze pursuant to a Commission-approved settlement agreement through December 31, 2021, are as follows for 2020, 2021, and 2022, respectively: Residential (RS-1) $0.00251/kWh, $0.00357/kWh, and $0.00478/kWh; Commercial (GSD-1) $0.81/kW, $1.15/kW, and $1.54/kW; and Industrial (GSLDT-3) $0.05/kW, $0.08/kW and $0.10/kW. These rate impacts are for all programs included in the SPP and are based on the total estimated costs as of the time of this filing, which could vary by as much as 10% to 15%, regardless of whether those costs will be recovered in FPL's Storm Protection Plan Cost Recovery Clause or through base rates.

[37] *See* footnote 34.

for the programs included in FPL's SPP are consistent with the historical costs incurred for the existing storm hardening and storm preparedness programs, which were most recently approved in FPL's 2019-2021 Storm Hardening Plan.

VIII. Conclusion

The Florida Legislature has determined that it is in the State's interest to "strengthen electric utility infrastructure to withstand extreme weather conditions by promoting the overhead hardening of distribution and transmission facilities, undergrounding of certain distribution lines, and vegetation management," and for each electric utility to "mitigate restoration costs and outage times to utility customers when developing transmission and distribution storm protection plans." Section 366.96(1), F.S. Based on these findings, the Florida Legislature concluded that it is in the State's interest for each electric utility to develop and file a SPP for the overhead hardening and increased resilience of electric T&D facilities, undergrounding of electric distribution facilities, and vegetation management. *See* Sections 366.96(1)-(3).

FPL's SPP is a systematic approach to achieve the legislative objectives of reducing restoration costs and outage times associated with extreme weather events and enhancing reliability. As explained above, FPL's SPP is largely a continuation and expansion of its existing and already successful storm hardening and storm preparedness programs previously approved by the Commission, as well as a new storm hardening program to harden certain targeted substations that are susceptible to storm surge or flooding during extreme weather events. Based on the recent experiences of Hurricanes Matthew and Irma, the existing storm hardening programs have a demonstrated and proven track record of mitigating and reducing restoration CMH, outage times, and storm restoration costs, as well as improving day-to-day reliability. FPL's SPP will continue and expand these important benefits to customers and the State.

APPENDIX A

Florida Power & Light Company
Docket No. 20170215-EU
Staff's First Data Request
Request No. 29 - Third Supplemental Amended

QUESTION:
Please complete the table below summarizing hardened facilities that required repair or replacement as a result of Hurricanes Matthew, Hermine, Irma, Maria, and Nate.

RESPONSE:
FPL does not maintain its accounting records at the level of detail required to provide the requested information as they do not differentiate hardened facilities from non-hardened facilities, nor do they track which assets were repaired. However, FPL does track certain assets, at the total system level, that were requested and replaced during each hurricane as reflected in the tables below. Note, FPL did not track storm repairs/replacements for Hurricanes Maria and Nate as Hurricane Maria did not impact FPL's service territory and Nate had limited impact. Also, Hurricanes Matthew and Irma capital details associated with follow-up work are not yet available by plant account as these costs have not yet been unitized from account 106 to account 101 by plant account.

Hurricane Matthew	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission		
Structures	N/A	0
Substations	N/A	0
Total	N/A	0
Distribution		
Poles	N/A	656
Substation	N/A	0
Feeder OH	N/A	0
Feeder UG	N/A	0
Feeder Combined	N/A	0
Lateral OH	N/A	N/A
Lateral UG	N/A	N/A
Lateral Combined	N/A	N/A
Total	N/A	N/A
Service		
Service OH	N/A	N/A
Service UG	N/A	N/A
Service Combined	N/A	N/A
Total	N/A	N/A

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Hurricane Hermine	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission		
Structures	N/A	0
Substations	N/A	0
Total	N/A	0
Distribution		
Poles	N/A	19
Substation	N/A	0
Feeder OH	N/A	0
Feeder UG	N/A	0
Feeder Combined	N/A	0
Lateral OH	N/A	N/A
Lateral UG	N/A	N/A
Lateral Combined	N/A	N/A
Total	N/A	N/A
Service		
Service OH	N/A	N/A
Service UG	N/A	N/A
Service Combined	N/A	N/A
Total	N/A	N/A

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Hurricane Irma	**Number of Facilities Requiring**	
	Repair	**Replacement**
Transmission		
Structures	N/A	0
Substations	N/A	0
Total	N/A	0
Distribution		
Poles	N/A	3,562
Substation	N/A	0
Feeder OH	N/A	0
Feeder UG	N/A	0
Feeder Combined	N/A	0
Lateral OH	N/A	N/A
Lateral UG	N/A	N/A
Lateral Combined	N/A	N/A
Total	N/A	N/A
Service		
Service OH	N/A	N/A
Service UG	N/A	N/A
Service Combined	N/A	N/A
Total	N/A	N/A

Notes:
For Hurricane Matthew, there is a difference of 248 poles between what is provided in this discovery response for total poles replaced (656 poles) and what is provided in FPL's post-storm forensic review report for Hurricane Matthew (provided in FPL's response to Staff's Second Data Request No. 2 in this same docket) for poles that failed and needed to be replaced to restore service (408 poles). The difference is associated with poles replaced during "follow-up" - i.e., poles that were damaged (e.g., a cracked pole) as a result of the storm and needed to be replaced to restore the pole to its pre-storm condition - but did not fail during the storm and, thus, did not need to be replaced to restore service. As mentioned above in FPL's response to this data request, FPL's accounting records do not differentiate hardened facilities from non-hardened facilities and FPL did not track or maintain forensic information on the 248 distribution poles replaced as a result of follow-up work. As a result, FPL does not have a hardened vs. non-hardened breakdown for the 248 distribution poles replaced during follow-up work.

The distribution pole and transmission structure counts provided above represent the amount of pole/structure replacements FPL has recorded on its books and records associated with Hurricane Irma as of December 31, 2017. These amounts should be considered preliminary at this time as they are subject to change (e.g., the counts do not reflect poles that will be replaced during follow-up work, which has yet to be completed).

N/A – Information is not available at this level of detail in FPL's accounting records.

For substations and feeders, FPL has stated 0 since no entire substation or feeder was replaced. However, these facilities consist of many pieces of equipment (e.g., wire, cable, breakers, transformers, cross arms and arrestors) some of which may have been replaced.

2016/2017 Hurricanes - FPL Restoration/Infrastructure Performance

FPL's infrastructure/restoration performance for Hurricanes Matthew (2016) and Irma (2017) demonstrates that the implementation and execution of its FPSC-approved (1) ten storm preparedness initiatives (which includes vegetation management): (2) pole inspection programs; (3) storm hardening plans; and (4) tariffs to incent municipal overhead to underground conversions have provided great benefits to FPL's customers and to the State of Florida.

During 2016 and 2017, FPL's service territory was threatened with massive Category 4 and 5 storms. The size and scale of these storms impacted FPL's infrastructure throughout its entire service territory (which encompasses 35 counties in the State of Florida). For both Matthew and Irma, FPL's infrastructure storm resiliency and smart grid investments resulted in improved infrastructure resiliency performance and reduced restoration times.

2016/2017 Hurricanes - Restoration Performance

FPL saw significant improvements in overall restoration results. As can be seen in the table below, restoration results for Hurricanes Matthew and Irma show significant improvement vs. Hurricane Wilma. FPL attributes these significant improvements in restoration to the investments made to make its system smarter and more storm-resilient as well as its well-tested restoration processes. This includes FPL's distribution and transmission storm hardening and storm preparedness initiatives, pole inspection programs, smart grid initiatives, vegetation management programs and continuous efforts to improve its restoration processes.

	Wilma 2005	Matthew 2016	Irma 2017
Customer Outages	3.2M	1.2M	4.4M
% Restored / days	50% / 5	99% / 2	50% /1
All restored / days	18	4	10
Avg. to restore / days	5.4	<1	2.1

2016/2017 Hurricanes – Infrastructure Performance

To assess the effectiveness of FPL's infrastructure storm hardening investments, the Company utilizes information collected through post-storm forensic data collection and various systems (e.g., FPL's outage management system) to conduct post-storm infrastructure performance analysis. These efforts and analysis allow FPL to quantify and assess its distribution and transmission infrastructure performance including the performance of: hardened and non-hardened facilities; overhead and underground facilities; and smart grid performance. For distribution, this includes reviewing the storm performance of poles, feeders and laterals. For transmission, this includes reviewing the storm performance of poles/structures, line sections and substations. The data demonstrates that hardened infrastructure performed better than non-hardened infrastructure, underground facilities performed better than overhead facilities and smart grid devices prevented a significant number of outages from occurring.

Distribution/Transmission Poles/ Structures Performance

The performance of FPL's approximately 1.2 million distribution and transmission poles/structures during Hurricanes Matthew and Irma was excellent, as hardened poles and structures performed as expected by minimizing outages and reducing restoration times. The total number of distribution/transmission poles that failed (i.e., had to be repaired/replaced in order to restore service) during Hurricanes Matthew and Irma was a mere fraction of 1% of the 1.2 million pole/structure pole population.

Additionally, hardened distribution and transmission pole performance was significantly better than non-hardened pole performance, as hardened pole failures were either non-existent (e.g., Hurricane Matthew) or significantly less than non-hardened pole failures (e.g., during Hurricane Irma, hardened feeder poles had a 0.02% failure rate, while non-hardened feeder poles had a 0.20% failure rate). Also, total poles replaced (i.e., poles that failed + poles that were replaced during follow-up work) were also a mere fraction of 1% of the total pole population and significantly less than the number of poles replaced during Hurricane Wilma.

FPL notes that for Hurricanes Matthew and Irma, while it did track hardened vs. non-hardened pole performance during restoration, it did not track poles replaced (hardened vs. non-hardened) during follow-up work, since these poles had accomplished their intended purpose of not failing during the storms. Therefore, FPL cannot provide the number of hardened poles replaced during follow up work in Hurricanes Matthew and Irma. Based on the performance of hardened poles that failed during these storms (see table below), it is highly unlikely that there would be a significant number of hardened poles, if any, that needed to be replaced during follow-up work. However, going forward, should the Commission want FPL to track replacement of hardened vs. non-hardened poles during follow-up work, FPL will begin to track this information.

FPL attributes this excellent pole performance to its FPSC-approved distribution and transmission storm hardening plan initiatives (e.g., extreme wind load construction standards for distribution poles and replacing wood transmission poles/structures) and its pole inspection programs.

Distribution Poles 12/31/17
Total Number 1,188,202
Total Hardened 124,518*

* This number is understated as it includes only poles hardened as a result of FPL's approved hardening plan projects, as FPL does not track or maintain the number of hardened poles installed as a result of new construction (e.g., new feeders or laterals) and/or daily work activities (e.g., maintenance, pole line extensions, relocation projects). There are also other existing poles throughout FPL's service territory that would currently meet the NESC's extreme wind loading criteria and therefore qualify as a hardened pole, however, FPL does not currently track or maintain that information.

Distribution Pole Failures*	Hardened	Non-Hardened	Total
Matthew - 2016	0	408	408
Irma - 2017	26	2834	2860

*Broken/Fallen poles that must be repaired/replaced to restore service

Transmission Pole/Structures 12/31/17
Total 66, 685
Concrete 60,694 (91%)
Wood 5,991 (9%)

Transmission Pole Failures*	Hardened	Non-Hardened	Total
Matthew - 2016	0	0	0
Irma - 2017	0	5	5

*Broken/Fallen poles that must be repaired/replaced to restore service

Distribution Feeders/Laterals Performance

As demonstrated below, FPL's hardened feeders performed significantly better than non-hardened feeders and underground feeders/laterals performed significantly better than overhead feeders/laterals. Performance was compared considering feeder and lateral outages that occurred during Hurricanes Matthew and Irma. It is also important to note that during Hurricane Irma, the Construction Man Hours ("CMH") to restore hardened feeders was 50% less than non-hardened feeders, primarily due to hardened feeders experiencing less damage than non-hardened feeders.

It is important to note that the majority of outages for overhead facilities resulted from trees that broke and/or fell into FPL's facilities. Many of these trees were outside of easements or public rights of way where FPL is generally allowed to trim. As a result, no additional amount of

traditional tree trimming would help mitigate this issue. Tree damage was particularly impactful on FPL laterals.

The two tables below provide feeder and lateral outage performance statistics for Hurricanes Matthew and Irma.

	Overhead non-Hardened			Overhead Hardened			Underground			Total		
Matthew	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out
Distribution Feeders	280	2,031	14%	68	721	9%	11	493	2%	359	3,245	13%
Distribution Laterals	3,473	82,729	4%	N.A.	N.A.	N.A.	238	101,892	0.2%	3,711	184,621	2%

Pop = Population; Lateral population includes laterals with multi-stage fusing

IRMA- 2017	Overhead Non-Hardened			Overhead Hardened			Underground			Total		
	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out
Distribution Feeders	1,609	1,958	82%	592	859	69%	85	470	18%	2,286	3,287	70%
Distribution Laterals	20,341	84,574	24%	N.A.	N.A.	N.A.	3,767	103,384	4%	24,108	187,958	13%

Pop = Population; Lateral population includes laterals with multi-stage fusing

FPL notes that, overall, for Hurricane Irma, many more laterals experienced outages compared to feeders, thus laterals required significantly more time to restore (871,000 CMH) compared to feeders (170,000 CMH). FPL continues to promote its Right Tree Right Place initiative and recommends there be changes to state laws and/or local ordinances to restrict the type and location of trees and provide utilities additional trimming rights to address existing tree conditions.[1]

Additionally, FPL notes that day-to-day, hardened feeders perform approximately 40% better than non-hardened feeders.

Transmission Line Sections/Substations Performance

The transmission system's performance was excellent during Hurricanes Matthew and Irma. Equipment and conductor damage was minimal as a result of our investments in transmission hardening and the installation of flood monitoring equipment in those substations located in flood prone areas. Substations that experienced outages were restored in one day. During Hurricanes Matthew and Irma, flood monitoring equipment operated as expected, providing notification which allowed FPL to proactively de-energize three substations (one in Matthew and two in Irma) and prevent potential serious damage from occurring at these substations.

[1] Where municipalities are not actively engaged in ensuring appropriate limitations on planting trees in public rights of way, restoration efforts are impeded and made more costly. In fact, one particular municipality is actively planting "wrong trees in the wrong place," in spite of FPL's direct communications and efforts to encourage its Right Tree Right Place initiative.

The tables below provide substation line section outage performance for Hurricanes Matthew and Irma.

MATTHEW - 2016	Overhead Non-Hardened			Overhead Hardened			Underground			Total		
	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out
Trans. Line Sections	16	350	5%	23*	846	3%	0	49	0%	39	1,245	3%

IRMA - 2017	Overhead Non-Hardened			Overhead Hardened			Underground			Total		
	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out	Out	Pop	% Out
Trans. Line Sections	60	306	20%	142**	884	16%	13***	51	25%	215	1241	17%

* 2 sections were out because substation was proactively de-energized due to flooding
** 4 sections were out because substations were proactively de-energized due to flooding
*** No underground section was damaged or failed causing an outage; however, the sections were out due to line termination equipment in substations.

The table below compares substation outage and restoration performance – Irma vs, Wilma.

Substations	Wilma 2005	Irma 2017
De-energized	241	92
Restored (Days)	5	1

Smart Grid Performance

During Hurricane Matthew and Irma, smart grid devices prevented a significant amount of customer outages, assisted with restoration efforts and reduced restoration time and costs. Specifically, automated feeder switches avoided approximately 664,000 outages during Hurricanes Matthew and Irma. Additionally, FPL's restoration crews are able to "ping" smart meters before leaving an area to ensure that power is, in fact, restored. This prevents restoration crews from leaving an area, thinking all power was restored, only to be called back when the customer informs FPL that they are still without service. FPL is also enhancing an application, first utilized during Hurricanes Matthew and Irma, whereby it will be able to "bulk meter ping" smart meters to confirm whether customers have service.

Automated Feeder Switches	Avoided Customer Outages
Matthew - 2016	118,000
Irma - 2017	546,000

Estimate of Storm Restoration Cost Savings Due to Hardening based on Storm Damage Model Simulation

The attached analysis provides an estimate of transmission and distribution storm restoration savings for Hurricanes Matthew and Irma that resulted from storm hardening completed by FPL prior to the storms' impacts. To calculate these savings, FPL utilized its Storm Damage Model (the same model FPL utilizes to estimate damage when a storm approaches FPL's service territory) to simulate damage that likely would have occurred without hardening and determine the associated required construction man hours (CMH) that would have been required to restore service in the absence of hardening, days to restore in the absence of hardening and associated incremental restoration costs. Additionally, FPL calculated the 40-year net present value of these savings for two scenarios – (1) a similar storm occurs every 3 years; and (2) a similar storm occurs every 5 years.

As indicated on the attached analysis, the 40-year net present values of the savings related to storm hardening are significant. In the absence of hardening the estimated percentage increase in CMHs for Hurricane Matthew and Hurricane Irma restoration would have been significantly higher (36% and 40%, respectively), days to restore would have been increased (50% and 40%, respectively) and restoration costs would have been greater (36% and 40%, respectively).

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Estimate of Storm Restoration Cost Savings Due to Hardening based on Storm Damage Model Simulation

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
	Construction Man-Hours (CMH)				Days to Restore				Storm Restoration Costs (Millions)				40 Yr NPV Savings (2017$)	
Storm	Actual	Modeled System Without Hardening	Additional CMH without Hardening	% Increase without Hardening	Actual	Modeled System Without Hardening	Additional Days to Restore without Hardening	% Increase without Hardening	Actual	Modeled System Without Hardening	Additional Storm Restoration Costs without Hardening	% Increase without Hardening	40 Yr NPV Savings Every 3 Years (2017$)	40 Yr NPV Savings Every 5 Years (2017$)
Matthew	257,000	350,000	93,000	36%	4	6	2	50%	$290	$395	$105	36%	$653	$406
Irma	1,195,000	1,678,000	483,000	40%	10	14	4	40%	$1,226	$1,722	$496	40%	$3,082	$1,915

Notes:

All costs and CMH are Transmission and Distribution only, and exclusive of follow-up work

[1] Calculated based on actual storm restoration requirements
[2] FPL storm damage model simulation results of CMH incurred without hardening
[3] Additional CMH without hardening (Col. 2 - Col. 1)
[4] Percent increase in CMH without hardening (Col. 3/Col. 1)
[5] Actual days to restore service
[6] Storm damage model simulation result of the days to restore service without hardening (assumes same restoration resources as actual)
[7] Additional days to restore without hardening (Col. 6 - Col. 5)
[8] Percent increase in days to restore without hardening (Col. 7/Col. 5)
[9] Actual cost of restoration. Irma costs are preliminary
[10] Storm damage model simulation result of restoration costs without hardening
[11] Additional restoration costs without hardening (Col. 10 - Col. 9)
[12] Percent increase in restoration costs without hardening ((Col. 11/Col. 9)
[13] 40 year net present value savings assuming a similar storm every three years (calculation details attached)
[14] 40 year net present value savings assuming a similar storm every five years (calculation details attached)

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Estimated Storm Restoration Costs Savings due to Hardening ($MM)

	Matthew Savings	
	Every 3 years	Every 5 years
40-Year NPV (2017$)	**$653**	**$406**

Discount Rate = 7.76%

	Matthew Savings			CPI	
Year	Every 3 years	Every 5 years	CPI	Multiplier	Matthew
1	$105	$105	2.1%	1.000	$105
2	$0	$0	2.4%	1.024	$107
3	$0	$0	2.4%	1.049	$110
4	$113	$0	2.6%	1.076	$113
5	$0	$0	2.7%	1.105	$115
6	$0	$118	1.7%	1.124	$118
7	$121	$0	2.5%	1.152	$121
8	$0	$0	2.4%	1.179	$124
9	$0	$0	2.3%	1.206	$127
10	$130	$0	2.2%	1.233	$130
11	$0	$133	2.2%	1.260	$133
12	$0	$0	2.2%	1.288	$136
13	$139	$0	2.2%	1.317	$139
14	$0	$0	2.2%	1.346	$143
15	$0	$0	2.2%	1.375	$146
16	$150	$150	2.1%	1.404	$150
17	$0	$0	2.1%	1.434	$153
18	$0	$0	2.1%	1.464	$157
19	$161	$0	2.1%	1.495	$161
20	$0	$0	2.1%	1.526	$165
21	$0	$169	2.1%	1.558	$169
22	$173	$0	2.1%	1.590	$173
23	$0	$0	2.1%	1.623	$177
24	$0	$0	2.1%	1.656	$181
25	$185	$0	2.1%	1.691	$185
26	$0	$190	2.1%	1.727	$190
27	$0	$0	2.1%	1.763	$194

28	$199	$0	2.1%	1.801	$199
29	$0	$0	2.2%	1.840	$204
30	$0	$0	2.2%	1.880	$209
31	$214	$214	2.1%	1.920	$214
32	$0	$0	2.2%	1.962	$219
33	$0	$0	2.1%	2.004	$224
34	$230	$0	2.1%	2.047	$230
35	$0	$0	2.1%	2.090	$235
36	$0	$241	2.1%	2.135	$241
37	$246	$0	2.1%	2.180	$246
38	$0	$0	2.1%	2.226	$252
39	$0	$0	2.1%	2.274	$258
40	$265	$0	2.1%	2.322	$265
NPV (2017$)	**$653**	**$406**			

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Estimated Storm Restoration Costs Savings due to Hardening ($MM)

	Irma Savings	
	Every 3 years	Every 5 years
40-Year NPV (2017$)	**$3,082**	**$1,915**

Discount Rate = 7.76%

	Matthew Savings			CPI	
Year	Every 3 years	Every 5 years	CPI	Multiplier	Irma
1	$496	$496	2.1%	1.000	$496
2	$0	$0	2.4%	1.024	$507
3	$0	$0	2.4%	1.049	$520
4	$532	$0	2.6%	1.076	$532
5	$0	$0	2.7%	1.105	$545
6	$0	$558	1.7%	1.124	$558
7	$571	$0	2.5%	1.152	$571
8	$0	$0	2.4%	1.179	$585
9	$0	$0	2.3%	1.206	$599
10	$613	$0	2.2%	1.233	$613
11	$0	$628	2.2%	1.260	$628
12	$0	$0	2.2%	1.288	$643
13	$659	$0	2.2%	1.317	$659
14	$0	$0	2.2%	1.346	$674
15	$0	$0	2.2%	1.375	$691
16	$707	$707	2.1%	1.404	$707
17	$0	$0	2.1%	1.434	$724
18	$0	$0	2.1%	1.464	$742
19	$759	$0	2.1%	1.495	$759
20	$0	$0	2.1%	1.526	$778
21	$0	$796	2.1%	1.558	$796
22	$815	$0	2.1%	1.590	$815
23	$0	$0	2.1%	1.623	$835
24	$0	$0	2.1%	1.656	$855
25	$876	$0	2.1%	1.691	$876
26	$0	$897	2.1%	1.727	$897
27	$0	$0	2.1%	1.763	$918

28	$940	$0	2.1%	1.801	$940
29	$0	$0	2.2%	1.840	$963
30	$0	$0	2.2%	1.880	$986
31	$1,009	$1,009	2.1%	1.920	$1,009
32	$0	$0	2.2%	1.962	$1,034
33	$0	$0	2.1%	2.004	$1,058
34	$1,084	$0	2.1%	2.047	$1,084
35	$0	$0	2.1%	2.090	$1,110
36	$0	$1,136	2.1%	2.135	$1,136
37	$1,164	$0	2.1%	2.180	$1,164
38	$0	$0	2.1%	2.226	$1,192
39	$0	$0	2.1%	2.274	$1,220
40	$1,250	$0	2.1%	2.322	$1,250
NPV (2017$)	**$3,082**	**$1,915**			

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FPL
WEIGHTED AVERAGE COST OF CAPITAL

STATE INCOME TAX	5.50%
FEDERAL INCOME T	21.00%
COMPOSITE INCOME TAX RAT	25.35%

MODEL DATE:	1-Jan-18

Debt Cost Based on Blue Chip Corporate Aaa and Bbb Bonds

SOURCE	WEIGHT[1]	COST[2]	/TD COST	AFTER TAX /TD COST	PRE TAX /TD COST
DEBT	40.40%	4.88%	1.97%	1.47%	1.97%
COMMON	59.60%	10.55%	6.29%	6.29%	8.42%
TOTAL	100.00%		8.26%	**7.76%**	10.39%

AFTER-TAX WACC	**7.76%**

Florida Power & Light Company
Docket No. 20170215-EU
Staff's First Data Request
Request No. 29 - Third Supplemental Amended
Attachment No. 1
Tab 5 of 5
Consumer Prices (1982-84=1.000) All-Urban
(Forecast adjusted to match budget assumptions)

	Index	% Change	Budget Assumptions
2009	2.1454		
2010	2.1806	1.64%	
2011	2.2494	3.16%	
2012	2.2959	2.07%	
2013	2.3296	1.46%	
2014	2.3674	1.62%	
2015	2.3702	0.12%	
2016	2.4001	1.26%	
2017	2.4512	2.13%	
2018	2.5100	2.40%	2.40%
2019	2.5703	2.40%	2.40%
2020	2.6371	2.60%	2.60%
2021	2.7083	2.70%	2.70%
2022	2.7553	1.73%	
2023	2.8231	2.46%	
2024	2.8909	2.40%	
2025	2.9569	2.28%	
2026	3.0228	2.23%	
2027	3.0895	2.21%	
2028	3.1573	2.19%	
2029	3.2270	2.21%	
2030	3.2981	2.20%	
2031	3.3693	2.16%	
2032	3.4411	2.13%	
2033	3.5142	2.12%	
2034	3.5887	2.12%	
2035	3.6642	2.10%	
2036	3.7408	2.09%	
2037	3.8187	2.08%	
2038	3.8972	2.06%	
2039	3.9779	2.07%	
2040	4.0603	2.07%	
2041	4.1449	2.08%	
2042	4.2324	2.11%	
2043	4.3226	2.13%	
2044	4.4153	2.15%	
2045	4.5104	2.15%	
2046	4.6077	2.16%	

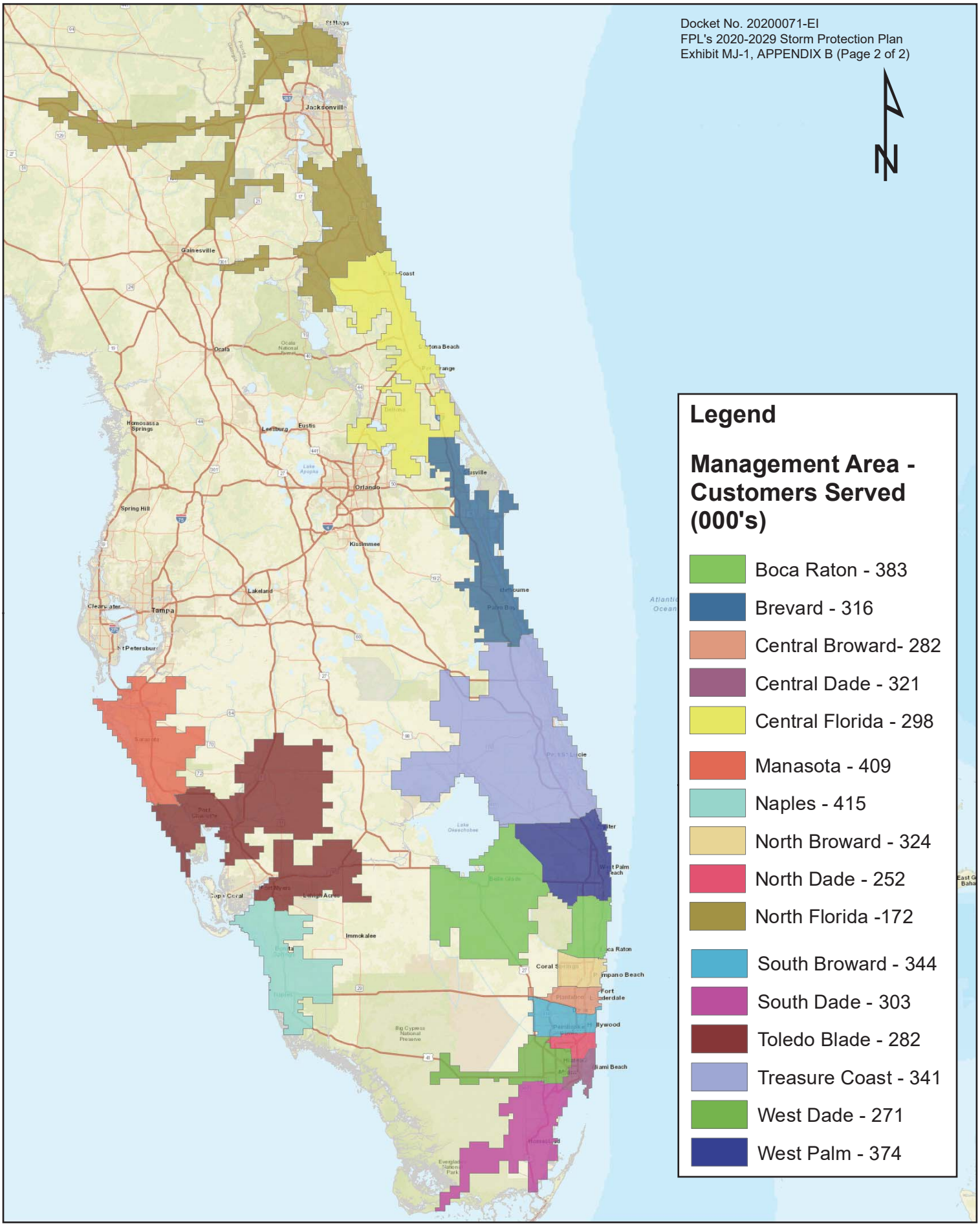
2047	4.7067	2.15%
2048	4.8099	2.19%
2049	4.9122	2.13%
2050	5.0167	2.13%
2051	5.1233	2.13%
2052	5.2323	2.13%
2053	5.3435	2.13%
2054	5.4572	2.13%
2055	5.5732	2.13%
2056	5.6917	2.13%
2057	5.8128	2.13%

Actuals thru 2017 from BLS

APPENDIX B

(FPL's Management Areas)

Docket No. 20200071-EI
FPL's 2020-2029 Storm Protection Plan
Exhibit MJ-1, APPENDIX B (Page 2 of 2)



Management Area / Customers Served

0 20 40 80 120 Miles

APPENDIX C

(FPL's 2020-2029 Estimated SPP Costs)

2020-2029 FPL SPP Program Costs/Activities

($ in millions)

FPL SPP Programs	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total SPP Costs	Annual Average Cost
Distribution - Pole Inspections												
Operating Expenses	$ 3.8	$ 3.8	$ 3.8	$ 3.8	$ 3.8	$ 3.9	$ 3.9	$ 4.0	$ 4.1	$ 4.2	**$ 39.1**	$ 3.9
Capital Expenditures	$ 50.7	$ 54.1	$ 54.1	$ 55.3	$ 55.3	$ 56.4	$ 57.8	$ 59.3	$ 60.8	$ 62.3	**$ 566.1**	$ 56.6
Total	$ 54.5	$ 57.9	$ 57.9	$ 59.0	$ 59.1	$ 60.3	$ 61.8	$ 63.3	$ 64.9	$ 66.5	**$ 605.2**	$ 60.5
# of Pole Inspections	150,000	150,000	154,000	154,000	154,000	154,000	154,000	154,000	154,000	154,000		
Transmission - Inspections												
Operating Expenses	$ 1.3	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	$ 1.0	**$ 10.5**	$ 1.0
Capital Expenditures	$ 34.5	$ 31.2	$ 27.9	$ 67.5	$ 54.6	$ 52.0	$ 53.3	$ 54.6	$ 56.0	$ 57.4	**$ 489.0**	$ 48.9
Total	$ 35.8	$ 32.2	$ 28.9	$ 68.5	$ 55.6	$ 53.0	$ 54.3	$ 55.7	$ 57.0	$ 58.4	**$ 499.5**	$ 50.0
# of Structure Inspections	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000	68,000		
Distribution - Feeder Hardening (1) (2)												
Operating Expenses												
Capital Expenditures	$ 628.1	$ 664.9	$ 664.9	$ 573.3	$ 474.5	$ 200.0	$ -	$ -	$ -	$ -	**$ 3,205.8**	$ 534.3
Total	$ 628.1	$ 664.9	$ 664.9	$ 573.3	$ 474.5	$ 200.0	$ -	$ -	$ -	$ -	**$ 3,205.8**	$ 534.3
# of Feeders (3)	300-350	300-350	300-350	300-350	250-350							
Distribution Lateral Hardening (1) (2)												
Operating Expenses												
Capital Expenditures	$ 120.4	$ 212.5	$ 342.8	$ 475.6	$ 631.4	$ 631.4	$ 647.2	$ 663.4	$ 679.9	$ 696.9	**$ 5,101.4**	$ 510.1
Total	$ 120.4	$ 212.5	$ 342.8	$ 475.6	$ 631.4	$ 631.4	$ 647.2	$ 663.4	$ 679.9	$ 696.9	**$ 5,101.4**	$ 510.1
# of Laterals (3)	220-230	300-350	400-500	600-700	800-900	800-900	800-900	800-900	800-900	800-900		
Transmission - Replacing Wood Structures												
Operating Expenses	0.2	$ 0.2	$ 0.2	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 0.6**	$ 0.2
Capital Expenditures	$ 52.7	$ 42.7	$ 21.9	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 117.3**	$ 39.1
Total	$ 52.9	$ 42.9	$ 22.1	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 117.9**	$ 39.3
# of Structures to be Replaced	1,400-1,600	900-1,100	300-600									
Distribution - Vegetation Management												
Labor - Contractor	$ 47.7	$ 47.8	$ 46.9	$ 46.9	$ 47.1	$ 47.1	$ 46.3	$ 45.5	$ 44.6	$ 43.8	**$ 463.7**	$ 46.4
Labor - FPL	$ 1.3	$ 1.4	$ 1.4	$ 1.5	$ 1.5	$ 1.6	$ 1.5	$ 1.5	$ 1.5	$ 1.5	**$ 14.7**	$ 1.5
Equipment - Contractor	$ 11.9	$ 12.0	$ 11.7	$ 11.7	$ 11.8	$ 11.8	$ 11.6	$ 11.4	$ 11.2	$ 11.0	**$ 115.9**	$ 11.6
Equipment - FPL	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	**$ 1.4**	$ 0.1
Total	$ 61.1	$ 61.3	$ 60.2	$ 60.2	$ 60.6	$ 60.6	$ 59.5	$ 58.5	$ 57.4	$ 56.4	**$ 595.7**	$ 59.6
# of Miles Maintained	15,200	15,200	15,200	15,200	15,200	15,200	15,200	15,200	15,200	15,200		
Transmission - Vegetation Management												
Labor - Contractor	$ 6.7	$ 6.7	$ 6.6	$ 6.7	$ 7.2	$ 7.2	$ 7.4	$ 7.6	$ 7.8	$ 7.9	**$ 71.7**	$ 7.2
Labor - FPL	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.5	$ 0.6	$ 0.6	$ 0.6	$ 0.6	$ 0.6	**$ 5.3**	$ 0.5
Equipment - Contractor	$ 1.7	$ 1.7	$ 1.7	$ 1.7	$ 1.8	$ 1.8	$ 1.8	$ 1.9	$ 1.9	$ 2.0	**$ 17.9**	$ 1.8
Equipment - FPL	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.1	$ 0.2	**$ 1.4**	$ 0.1
Total	$ 9.0	$ 8.9	$ 8.9	$ 9.0	$ 9.7	$ 9.7	$ 9.9	$ 10.2	$ 10.4	$ 10.7	**$ 96.4**	$ 9.6
# of Miles Maintained	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000	7,000		
Substation Storm surge/Flood Mitigation												
Operating Expenses	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ -**	
Capital Expenditures	$ 3.0	$ 10.0	$ 10.0	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 23.0**	$ 7.7
Total	$ 3.0	$ 10.0	$ 10.0	$ -	$ -	$ -	$ -	$ -	$ -	$ -	**$ 23.0**	$ 7.7
# of Substations	1	2	5 to 7									
Total SPP Costs	**$ 964.7**	**$ 1,090.7**	**$ 1,195.8**	**$ 1,245.6**	**$ 1,290.9**	**$ 1,014.9**	**$ 832.7**	**$ 851.0**	**$ 869.7**	**$ 889.0**	**$ 10,245.0**	**$ 1,271.1**

(1) Project level detail for 2020 in Appendix

(2) Costs include previous year(s) projects carried over to current year's project costs and future year's preliminary project costs (e.g., engineering)

(3) # of feeders or lateral to be initiated in the current year

APPENDIX D

(FPL's Hardening Design Guidelines)

FPL

Distribution Design Guidelines

The following **guidelines** will be used to standardize the design of FPL's overhead distribution facilities **when practical, feasible, and cost effective**.

General

1. FPL has made a change to adopt Extreme Wind loading (EWL) as the design criteria for: (1) new pole line construction, (2) pole line extensions, (3) pole line relocations, (4) feeder pole replacements on multi-circuit pole lines, and (5) feeder pole replacements on Top-CIF feeders. Reference the Pole Sizing section (pg. 7) for the guidelines to determine the necessary pole class and type for all work. Refer to the Distribution Engineering Reference Manual Addendum for calculating pole sizes for specific framing under extreme wind loading conditions.

2. For maintenance, existing non-top-CIF pole lines may be evaluated using NESC combined ice and wind loading with Grade B construction. This represents the loading prior to the adoption of extreme wind loading. If the pole must be replaced, refer to the Pole Sizing section for the minimum class pole to be installed. Refer to the Distribution Engineering Reference Manual (DERM) Section 4 for calculating pole sizes for specific framing under the NESC combined ice and wind loading conditions.

3. Every attempt should be made to place new or replacement poles in private easements or as close to the front edge of property (right of way line) as practical.

4. Overhead pole lines should be placed in front lot lines or accessible locations where feasible.

5. When replacing poles, the new pole should be set as close as possible to the existing pole to avoid the creation of a new pole location.

6. Poles are not to be placed in medians.

7. Concrete poles are not to be placed in inaccessible locations or locations that could potentially become inaccessible.

8. Please reference the minimum setting depth charts located in DCS D-3.0.0 which shows the increased setting depths for concrete poles.

9. Every effort should be made not to install poles in sidewalks. If a pole must be placed in a sidewalk, a minimum unobstructed sidewalk width of 32" must be maintained to comply with the American Disabilities Act (ADA) requirements.

10. If concrete poles are required by the governing agency as a requirement of the permit, and if the work is being done solely for FPL purposes (feeder tie, etc.), then the concrete

poles are installed with no differential charges. If the concrete poles are required as a condition of the permit, and the work is being done at the request of a customer (and fall outside the Pole Sizing Guidelines) to provide service to the customer or relocation by request of the customer, then the customer is charged a differential cost for the concrete poles.

11. When installing new OH secondary spans, multiplexed cable should be used instead of open wire secondary. When reconductoring or relocating existing pole lines containing open wire secondary, replace the open wire with multiplexed cable whenever possible. The system neutral should not be removed when replacing open wire secondary with multiplexed cable if primary wire is present. It is necessary to maintain a separate system neutral for operational continuity of the system.

12. When designing overhead facilities where secondary and service crossings exist across major roadways, the engineer should take into consideration placing these secondary street crossings underground. Operations Director Approval is required.

13. Whenever extending a feeder, reconductoring a feeder section, or attaching a device to a feeder, always reference the nearest existing disconnect switch number on the construction drawing and show the dimension to the switch. This will aid the Control Centers in updating their switching system and will aid AMG in updating AMS, as well as provide the Production Lead and Distribution Tech information needed for switching and RC Off requests.

14. When an overhead feeder crosses any obstacle to access (i.e. – water bodies such as rivers, canals, swamps; limited access R/W such as interstate highways, turnpikes, and expressways; etc.) disconnect switches should be placed on both sides of the obstacle in order to isolate the crossing in the event of a wiredown situation. See the example in the Crossing Multi-Lane Limited Access Highways section (pg. 5).

15. Projects that affect or extend feeder conductors should always be coordinated with Distribution Planning to ensure optimization of the distribution grid. Taking into account future feeder plans such as, feeder boundary changes, sectionalizing devices, integration of automation and remotely controlled protection.

As always, good engineering judgment, safety, reliability, and cost effectiveness should be considered. In addition to these guidelines, all distribution facilities shall be engineered to meet the minimum requirements set forth in all applicable standards and codes including but not limited to the National Electrical Safety Code (NESC), Utility Accommodation Guide, and FPL Distribution Construction Standards. Please contact a Distribution Construction Services (DCS) analyst with any questions.

FPL

New Construction

1. When installing a new feeder, lateral, or service pole, reference the Pole Sizing section for the guidelines to determine the necessary pole class and type to meet Extreme Wind Loading (EWL) for the wind zone region (105, 130, or 145 MPH).

2. Modified Vertical is the preferred framing for accessible locations. Post-top (single phase) or Cross Arm (multi-phase) is the preferred framing for inaccessible locations.

3. During the design of new pole lines in developed areas, field visits should be conducted to ensure the design would cause minimum impact to the existing property owners.

4. Overhead pole lines should not be built on both sides of a roadway unless agreed to by the customer nor should multi-circuit pole lines be created. When designing main feeder routes all viable options must be reviewed (including alternative routes) and consideration should be given to constructing the line underground. If undergrounding is chosen and it is not the least cost option, approval is required from the Engineering & Technical Services Director and the Operations Director. In addition, prior to proceeding with any pole lines on both sides of a street or any multi-circuit feeder design recommendations, Operations Director approval is required.

5. When there is an existing pole line in the rear easement, every effort should be made not to build a second pole line along the right of way.

6. When installing a pole line within a transmission line, accessible distribution poles should be concrete. Distribution concrete poles should not be installed in inaccessible locations.

7. If concrete distribution poles are installed in a concrete transmission line, there is no additional charge to the customer (the concrete poles are FPL's choice and not requested by the customer). Coordination between the transmission and distribution design is critical and consideration should be given to a design with all transmission poles versus distribution intermediate poles. This approach will reduce the overall number of poles.

8. When transmission is overbuilding (concrete structures), along an existing distribution corridor, if the distribution wood poles are in good condition, do not replace. If wood poles need to be changed out or relocated, replace with concrete poles to match the transmission pole type. Coordination between the transmission and distribution design is critical and consideration should be given to a design with all transmission poles versus distribution intermediate poles. This approach will reduce the overall number of poles.

FPL

Existing / Maintenance

1. When installing and/or replacing a feeder, lateral, or service pole on an existing pole line, reference the Pole Sizing section for the guidelines to determine the necessary pole class and type.

2. When installing or replacing a feeder pole on a feeder that serves a Top-CIF customer, ensure the new pole will meet extreme wind loading (versus just a minimum class 2 or IIIH pole) so that it will not have to be replaced when the feeder is hardened as a hardening project. Please reference the Storm Secure Hardening SharePoint Site: Distribution > Central Maintenance > Central Contractor Services > Hardening > Reports > Feeder Prioritization_xxxxxx Snapshot for the list of Top-CIF feeders within the Prioritization File.

3. When extending pole lines, the existing pole type should be used as a guide for the new pole type. If concrete poles are requested by the customer or are required as a condition of the permit and fall outside the Pole Sizing Guidelines, the customer will pay a differential charge for the concrete poles.

4. When replacing pole(s) and anchor(s) with larger self-supporting concrete poles, caution should be used, as the property owners in the vicinity of the pole will not necessarily perceive this concrete pole as a better choice.

5. When replacing poles on a multi-circuit feeder the replacement pole should be designed for Extreme Wind Loading using Pole Foreman to calculate the wind loading.

Relocations

1. When relocating a pole line, reference the Pole Sizing section for the guidelines to determine the necessary pole class and type to meet Extreme Wind Loading (EWL) for the wind zone region (105, 130, or 145 MPH).

2. When relocating either a concrete or wood pole line for a highway improvement project, the existing pole line 'type' should be used as a guide for the pole type replacements. There is no additional charge for concrete poles if the existing poles being relocated are concrete (like for like relocation). If the customer requests an "upgrade" to concrete poles, a differential is charged.

3. Reimbursable relocations will equal the cost to relocate the line built to Extreme Wind Loading (plus removal of old), including indirect cost.

4. Agency relocation projects should be coordinated with Distribution Planning to ensure optimization of the distribution grid and to take into account future feeder plans and potential feeder boundary changes.

FPL

Crossing Multi-Lane Limited Access Highways

The following guidelines are to be used when an overhead feeder crosses any obstacle to access (i.e. –limited access R/W such as interstate highways, turnpikes, and expressways, etc.). Similar consideration can be given to water bodies such as rivers, canals, swamps.

1. Underground installation is the preferred design for all new crossings (1, 2, 3 phase) of multi-lane limited access highways & hardening of existing crossings; reference Fig 1. Limited Access Highway Crossing Schematic (Preferred). If underground construction is not feasible, reference Fig 2. Limited Access Highway Crossing Schematic (Alternate).

2. Underground crossing for 1 & 2 phases should be designed for potential three phase feeder size cable. Ensure riser poles meet or exceed extreme wind design for the designated region. For further information, please contact the CMC Hardening Group.

3. For accessible overhead crossings, use concrete poles (III-H or greater square concrete pole) for the crossing poles and minimum Class 2 wood poles for the intermediate poles. For inaccessible overhead crossings, minimum Class 2 wood poles should be used for the crossing and intermediate poles. All poles installed should meet or exceed EWL for the designated region.

4. Every attempt should be made to install storm guys & back guys for the highway crossing poles. Storm guys are not required on the adjacent poles.

5. Frame the highway crossing pole double dead-end (See LOC 2 & 3 Fig 2 below).

6. Install disconnect switches on adjacent poles on both sides of the crossing (or as required by field conditions) to isolate the feeder section for restoration. Switches are to be installed in **accessible** locations that can be reached with readily available aerial equipment. Switches should be installed at ~42 Above Grade (AG), with a maximum pole size of 50' wood or 55' concrete. If there is no load between the nearest existing switch and the crossing, an additional switch is not required.

7. Check for uplift on all poles. Refer to DERM Section 4.2.3 Page 4 of 16 & DCS E-4.0.2 and E-4.0.3. Back guys should be installed at the adjacent pole if required for uplift.

8. Ensure to maintain proper clearance above or under all highways as dictated by the owner of the R/W & DCS B-3.0.1.

9. Any conductors crossing the highway that have splices should be replaced with a continuous conductor (NESC 261H2a). See Fig 2 below for additional notes on the use of splices on adjacent spans. One additional set of dead-end insulators at the highway crossing pole may be used if this eliminates the need for splices when installing a new pole.

10. Engineers must conduct a pre-design meeting with the Production Lead to ensure the feasibility of the proposed design.

11. As always, use good engineering judgment to produce a quality, cost-effective design.

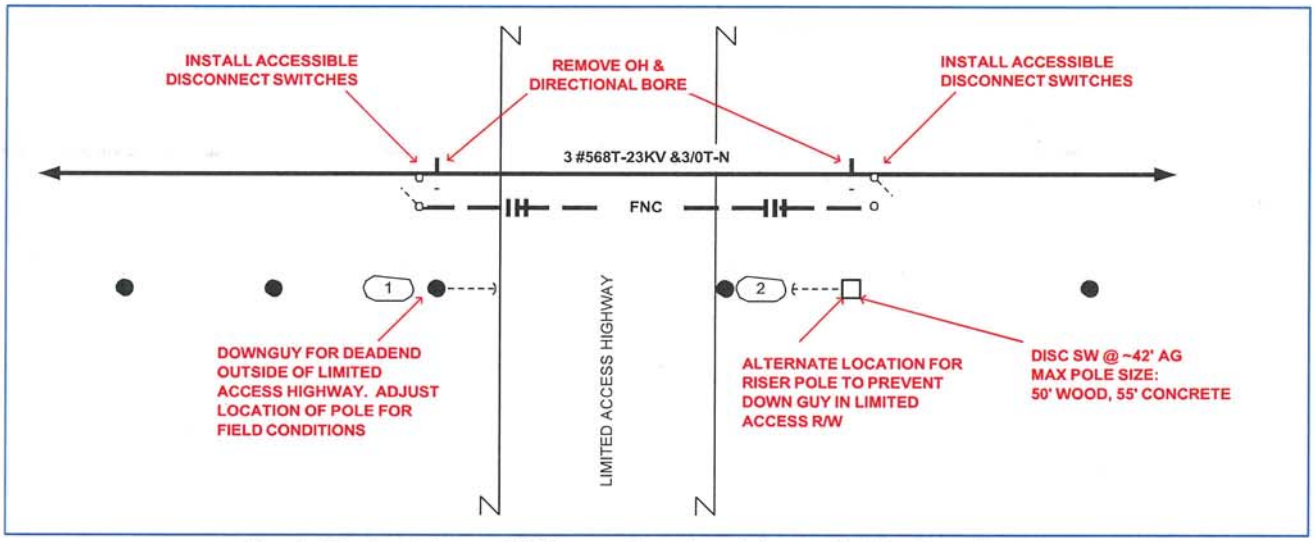


Fig 1. **Limited Access Highway Crossing Schematic (Preferred)**

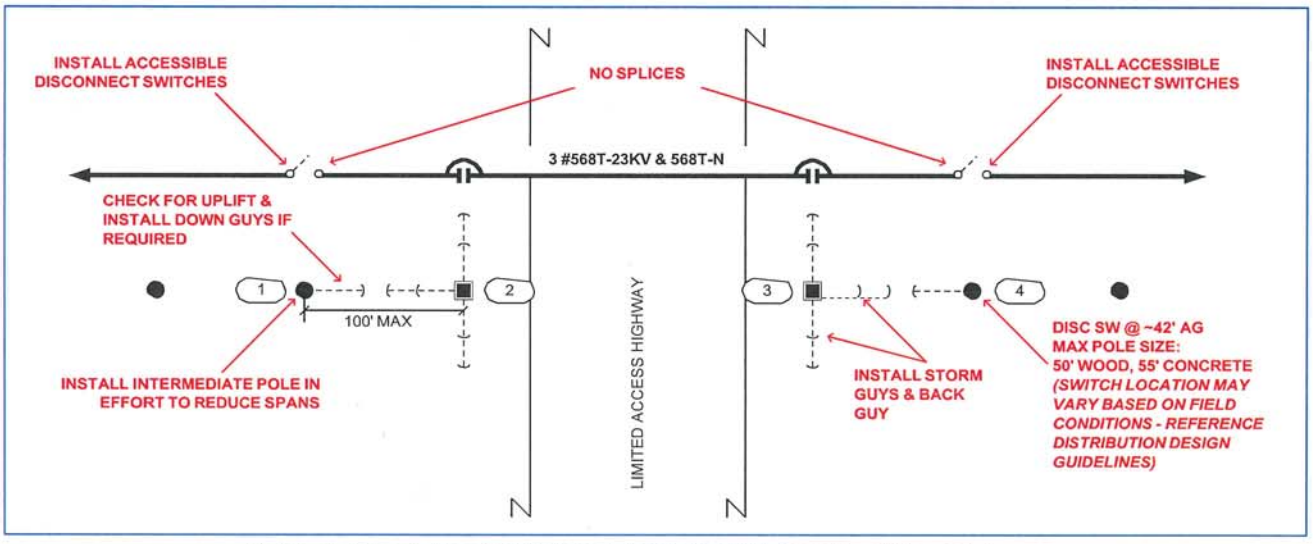


Fig 2. **Limited Access Highway Crossing Schematic (Alternate)**

FPL

Pole Sizing

1. FPL has made a change to adopt Extreme Wind loading (EWL) as the design criteria for: (1) new pole line construction, (2) pole line extensions, (3) pole line relocations, (4) feeder pole replacements on multi-circuit pole lines, and (4) feeder pole replacements on Top-CIF feeders. Reference the Pole Sizing Guidelines (at the end of this section) to determine the necessary pole class and type.

2. When installing or replacing a feeder pole on a feeder that serves a Top-CIF customer, ensure the new pole will meet the extreme wind design (versus just a minimum class 2 or IIIH pole) so that it will not have to be replaced when the feeder is hardened as a hardening project. Please reference the Storm Secure SharePoint Site: Distribution > Central Maintenance > Central Contractor Services > Hardening > Reports > Feeder Prioritization_xxxxxx Snapshot for the list of Top-CIF feeders within the Prioritization File.

3. For maintenance, existing non-top-CIF pole lines may be evaluated using NESC combined ice and wind loading with Grade B construction. This represents the loading prior to the adoption of extreme wind loading. If the pole must be replaced, refer to the Pole Sizing Guidelines for the minimum class pole to be installed.

4. When performing work on an existing pole, and the pole requires change out (e.g., clearance height, location, condition, or the ability to support the planned activity), use the Pole Selection Guidelines. If the planned work can be done without changing out the pole and the pole meets minimum NESC grade B wind loading guidelines, use the existing pole(s).

5. Foreign pole owners are required to discuss design requirements with FPL prior to construction. FPL will assist with identifying the targeted poles.

6. Efforts should be made to ensure that span distances do not exceed 250 ft. for wood poles and 350 ft. for concrete poles even if longer spans would meet the Extreme Wind Loading requirements.

7. Concrete poles are preferred in the cases where replacement costs would be extremely high (i.e. duct system riser pole, corner poles with multiple circuits, critical poles, etc.). No differential is charged for poles in this case.

FPL

Lateral Pole Policy

1. All existing poles must meet NESC grade "B" as an absolute minimum.
2. If a pole is modified in any way, it must meet NESC grade "B" at a minimum when completed.
3. If you become aware of a pole which does not meet NESC "B" or DCS standards, the pole must be immediately upgraded or modified to meet the NESC & DCS standards.
4. All replacement lateral poles must meet NESC "EWL" and be compliant with FPL Pole Policies.
5. Restoration of lateral poles should comply with the class 2/3 table.

For practical purposes this means…

1. Engineer all poles to the NESC EWL standards and to meet FPL policies.
2. Run Pole Foreman on all designed WR's and poles suspected of being substandard.
3. If you are completing substantial work on a pole, such as installing additional cables, upgrading a TX, re-conductor or new framing: The pole must meet EWL and the revised class standards.
4. If you are completing minor like for like work such as replacing a fuse switch, insulator or other small equipment: The pole must meet NESC grade "B" and DCS standards at a minimum when the work is complete.
    a. Note: Most FPL poles currently exceed NESC grade "B". This means there is some leeway for minor changes in wind loading and clearances while maintaining the NESC grade "B" minimum.
5. Temporary or time constrained poles may be installed to NESC grade "N" temporary construction. This is relatively complicated, requires sound engineering judgment and should be avoided. If grade NESC grade "N" is applied, a replacement pole engineered to NESC EWL must be designed and installed as soon as practical and not longer than 6 months after NESC grade "N" was installed.
6. Class 4 poles may only be installed for SVC, SEC, SL, OL's. Once the available stock of class 4 is used up no more will be ordered and FPL will install class 3 poles for these applications.
7. In no case should class 4 poles be installed in laterals.

Contact Engineering Standards for situations that still are in question after careful consideration

FPL

Critical Pole Definitions & Sizing:

The following list comprises what will be considered critical poles. When installing and/or when doing work that otherwise requires the replacement of an accessible critical pole, use concrete. If the pole is inaccessible, use a minimum Class 2 wood pole, or consider relocating the equipment to an accessible concrete pole.

Critical Pole Identifier **For new or when replaced use minimum III-H Square Concrete Pole[5]** (minimum Class 2 if inaccessible)			
Critical Poles	**DCS Reference**	**Critical Poles**	**DCS Reference**
1st switch out of substation or duct system riser pole	UH-15.0.0 Fig 2 UH-15.3.1	**Automated Feeder Switches (AFS)[2]**	C-9.2.0
Interstate Crossings[1,3]	E-10.0.0 Fig 2	**Aerial Auto Transformers[2]**	I-9.0.0
Poles with multiple primary risers	UH-15.2.0	**3 phase transformer banks 3 – 100 kVA and larger[2]**	I-52.0.2
Multi-circuit poles[4]	Frame as existing	**Capacitor Banks[2]**	J-2.0.2 & J-2.0.3
Three-phase reclosers[2] (or Three single-phase reclosers)	C-8.0.0	**Regulators**	I-10.1.1
Primary Meter	K-28.0.0	**Intelliruptors**	C-9.5.0
All references are to the Distribution Construction Standards (DCS).			

For all critical poles run Pole Foreman to calculate the wind loading for the specified pole and attachments combination. Additional information can be found in DERM Section 4 - Addendum for Extreme Wind Loading tables 4.2.2-8, 4.2.2-9, or 4.2.2-10.

1) *Every attempt should be made to install storm guys where feasible and practical.*
2) *Frame in-line per standard to equally distribute weight.*
3) *Refer to the Crossing Multi-Lane Limited Access Highways section for details.*
4) *Contact CMC Hardening Group before designing new multi-circuit line.*
5) *To eliminate field drilling, inventory Special Drill Pole & create Pole Boring Detail for all III-H Poles on Hardening Jobs.*

FPL

Pole Sizing Guidelines:

The following tables should be used as guidelines to help determine pole class and type, when installing and/or replacing a feeder, lateral or service pole.

Feeder or Three Phase Lateral:

Pole Line Description	New Construction, Line Extension, & Pole Line Relocation	Existing Infrastructure[1]	Installing or Replacing a Critical Pole[2]
Wood	Use minimum Class 2 Wood Pole to meet EWL	Use Class 2 Wood Poles	Use III-H (Accessible) or Class 2 Wood (Inaccessible)
Concrete	Use minimum III-H Concrete Pole to meet EWL	Use III-H Concrete Poles	Use III-H Concrete Poles

When designing for EWL run Pole Foreman to calculate the wind loading for the specified pole and attachments combination. Additional information can be found in DERM Section 4 - Addendum for Extreme Wind Loading tables 4.2.2-8, 4.2.2-9, or 4.2.2-10.

Single or Two Phase Lateral:

Pole Line Description	New Construction, Line Extension, Pole Line Relocation, Pole Replacement, & Intermediate Poles	Existing Infrastructure[1]	Installing or Replacing a Critical Pole[2]
Wood	105/135 mph: Use minimum Class 3 *MUST* meet EWL	105/135 mph: Use minimum Class 3	Use III-H (Accessible) or Class 2 Wood (Inaccessible)
	145 mph: Use minimum Class 2 *MUST* meet EWL	145 mph: Use minimum Class 2	
Concrete	Use minimum III-G[3] or III-H poles	Use III-G[3] or III-H poles to match existing line	Use III-H Concrete Poles

Notes: [1] *To be used when replacing equipment or installing new equipment on an existing pole.*
[2] *Reference Critical Pole List on pg.8.*
[3] *Use of III-G poles should be limited to existing concrete lateral pole lines whose wire size is less than or equal to 1/0A.*
[4] *Use Pole Foreman to calculate wind loading on all poles.*

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Basic Span Lengths for selected poles for Extreme Wind Loading:

Facility	Phase(s)	Wire size	Pole size	Recommended Maximum Span Length[4] (FPL with 2 attachments – FPL ONLY)		
				105 MPH	130 MPH	145 MPH
Feeder		3#568 ACAR	Class 2	180' - 230'	125' - 200'	90' - 140'
		3#3/0 AAAC	Class 2	180' - 250'	170' - 250'	120' - 220'
Lateral	3 PH	3#1/0 AAAC	Class 2	180' - 250'	180' - 250'	155' - 250'
	2 PH	2#1/0 AAAC	Class 3	180' - 250'	180' - 250'	125' - 250'
	1 PH	1#1/0 AAAC	Class 3	180' - 250'	180' - 250'	150' - 250'

[4]The lower number equates to the maximum span for FPL primary and two 1" foreign attachments. The higher number equates to the recommended maximum span for FPL primary only. Reference the DERM Addendum for EWL tables 4.2.2-8, 4.2.2-9, 4.2.2-10 when adding additional attachment(s) or equipment. As always, good engineering judgment, safety, reliability, and cost effectiveness should be considered.

Service / Secondary / St. Light / Outdoor Light Poles:

When installing or replacing a service or street light poles, a minimum of Class 3 wood pole should be used. Specific calculations may require a higher class pole for large quadruplex wire.

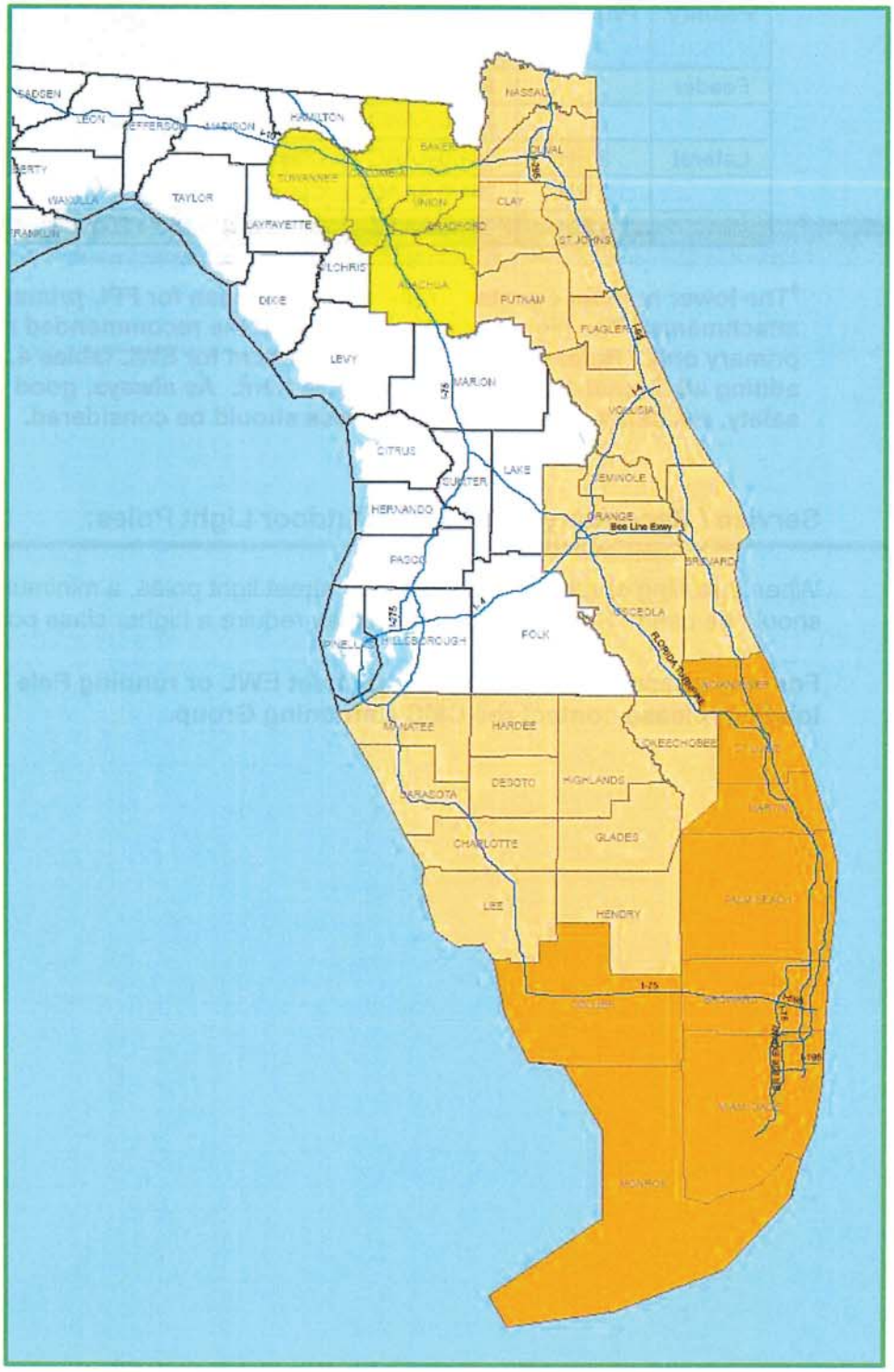
For any questions on pole sizing to meet EWL or running Pole Foreman to calculate wind loading, please contact the CMC Hardening Group.

FPL

Extreme Wind Loading (EWL) 3 Zone Map

105 MPH
130 MPH
145 MPH

Wind Zone	County
105	Alachua
105	Baker
105	Bradford
130	Brevard
145	Broward
130	Charlotte
130	Clay
145	Collier
105	Columbia
145	Miami-Dade
130	De Soto
130	Duval
130	Flagler
130	Glades
130	Hardee
130	Hendry
130	Highlands
145	Indian River
130	Lee
130	Manatee
145	Martin
145	Monroe
130	Nassau
130	Okeechobee
130	Osceola
130	Orange
145	Palm Beach
130	Putnam
130	Sarasota
130	Seminole
130	St Johns
145	St Lucie
105	Suwannee
105	Union
130	Volusia



Notification of FPL Facilities

Form 360, Notification of FPL Facilities, is to be used for all construction projects. Please include a copy of this form in negotiations with builders and developers. This form can be found on the DCS Website under “Letters and Agreements”, or in WMS on the “Reports” menu item for the work request.

APPENDIX E

(FPL's 2020 Project Level Detail)

Appendix E: FPL 2020 Project Level Detail
Feeder Hardening (EWL) - Distribution Program

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
East	ABERDEEN	7520 S Jog Road	408864	Jul-18	Feb-22	2,551	72	2	2,625	$ 1,431,326	X
East	ACME	11066 Acme Rd	405263	Dec-20	Jun-23	2,767	330	12	3,109	$ 12,876	X
East	ACME	11066 Acme Rd	405266	Dec-20	Jun-23	2,085	449	2	2,536	$ 19,098	X
East	ACME	11066 Acme Rd	405268	Jun-19	Jul-22	1,279	244	-	1,523	$ 508,180	
Dade	AIRPORT	691 Lee Dr	802631	Oct-17	Jul-22	1,439	204	1	1,644	$ 2,853,473	X
East	ALEXANDER	15955 Assembly Loop	408564	Sep-17	Jun-22	1,276	180	5	1,461	$ 3,384,362	X
East	ALLAPATTAH	9840 SW Rangeline Rd	412161	Dec-20	Aug-23	1,080	86	1	1,167	$ 8,624	X
West	ALLIGATOR	4999 Davis Blvd	503561	Dec-20	Nov-22	2,999	252	26	3,277	$ 10,356	X
West	ALLIGATOR	4999 Davis Blvd	503562	Jun-14	Jan-21	3,267	699	19	3,985	$ 13,675	X
West	ALLIGATOR	4999 Davis Blvd	503563	Aug-14	Jun-21	1,912	329	9	2,250	$ 32,945	X
West	ALLIGATOR	4999 Davis Blvd	503565	Nov-20	Aug-22	1,895	34	20	1,949	$ 39,220	X
West	ALLIGATOR	4999 Davis Blvd	503569	May-14	Dec-20	2,574	104	7	2,685	$ 19,891	X
West	ALVA	2840 Joel Blvd	504762	Nov-18	Feb-22	2,747	241	42	3,030	$ 4,196,273	X
Dade	ANHINGA	33800 SW 202nd Ave	811361	Jul-14	Jun-21	931	176	2	1,109	$ 101,811	X
North	APOLLO	451 N Apollo Blvd	210532	Mar-18	Sep-21	946	286	3	1,235	$ 1,694,888	X
West	ARCADIA	100 W Cypress St	501432	Nov-18	Jun-23	2,315	283	13	2,611	$ 1,325,471	X
West	ARCADIA	100 W Cypress St	501436	Dec-20	Aug-22	-	3	-	3	$ 27,367	X
Dade	ARCH CREEK	12681 NE 14 Ave	802835	Nov-15	Feb-21	2,582	275	1	2,858	$ 394,865	X
East	ATLANTIC	901 Glades Rd	403239	Jul-19	May-22	-	23	2	25	$ 403,011	X
West	AUBURN	2235 Venice Ave E	505762	Feb-19	Apr-22	3,166	112	-	3,278	$ 3,213,746	X
West	AUBURN	2235 Venice Ave E	505763	Jan-18	Apr-22	3,592	203	28	3,823	$ 304,008	
West	AUBURN	2235 Venice Ave E	505765	Dec-20	Aug-23	3,074	259	7	3,340	$ 12,995	X
West	AUBURN	2235 Venice Ave E	505766	Dec-20	Mar-23	1,214	73	3	1,290	$ 11,734	X
North	AURORA	1805 N Wickham Rd	202533	Nov-19	Sep-22	1,437	329	2	1,768	$ 485,361	X
North	AURORA	1805 N Wickham Rd	202534	Jun-20	Oct-21	1,645	103	1	1,749	$ 1,114,972	X
North	AURORA	1805 N Wickham Rd	202537	Mar-20	Nov-22	1,968	73	1	2,042	$ 5,198	X
Dade	AVOCADO	21600 SW 197th Ave	810061	Nov-16	Jun-21	1,030	375	4	1,409	$ 100,076	X
Dade	AVOCADO	21600 SW 197th Ave	810062	Oct-14	Dec-21	615	328	2	945	$ 517,104	X
North	BABCOCK	6290 Babcock St SE	204265	Jun-18	Sep-21	2,086	403	10	2,499	$ 2,301,662	X
Broward	BASSCREEK	1850 SW 172nd Ave	706362	Jun-19	Mar-22	1,624	228	5	1,857	$ 2,168,861	X
Broward	BASSCREEK	1850 SW 172nd Ave	706364	Dec-20	Nov-22	1,317	59	-	1,376	$ 5,867	X
Dade	BEACON	10750 NW 21st St	812161	Aug-18	Jul-22	204	483	2	689	$ 642,758	X
East	BEELINE	5101 Bee Line Hwy	405335	Nov-18	Jun-23	1,799	149	1	1,949	$ 818,669	X
Dade	BELL	666 NW 79th Ave	810833	Dec-20	Aug-22	2,062	72	-	2,134	$ 20,791	X
East	BELVEDERE	1210 Omar Rd	402538	Jun-19	Jul-22	1,265	211	3	1,479	$ 1,841,628	X
West	BENEVA	4080 Beneva Rd S	504136	Sep-18	Aug-21	1,548	136	2	1,686	$ 130,922	
Broward	BEVERLY	6201 Washington St	700831	Aug-19	Jul-22	950	42	1	993	$ 1,180,553	X
Broward	BEVERLY	6201 Washington St	700832	Aug-19	Aug-22	1,334	190	2	1,526	$ 677,282	
Broward	BEVERLY	6201 Washington St	700833	Jul-19	Aug-22	949	200	-	1,149	$ 604,009	X
Broward	BEVERLY	6201 Washington St	700837	Oct-18	Jul-22	1,594	135	1	1,730	$ 2,247,506	X
Dade	BIRD	6101 SW 40th St	806937	Aug-14	Dec-21	967	111	2	1,080	$ 941,778	X
Dade	BISCAYNE	12635 NW 5 Ave	801831	Dec-20	Nov-22	628	34	-	662	$ 2,245	X
Dade	BISCAYNE	12635 NW 5 Ave	801833	Dec-20	Nov-22	1,464	65	1	1,530	$ 12,207	X
Dade	BISCAYNE	12635 NW 5 Ave	801834	Dec-16	Dec-21	1,770	75	-	1,845	$ 1,944,469	X
Dade	BISCAYNE	12635 NW 5 Ave	801835	Jun-19	Dec-21	1,371	52	-	1,423	$ 1,448,431	
Dade	BISCAYNE	12635 NW 5 Ave	801838	Aug-14	Nov-21	1,539	87	2	1,628	$ 813,899	X
Dade	BLUE LAGOON	5590 NW 6th St	810432	Aug-18	Jul-22	1,094	241	-	1,335	$ 707,033	X
Dade	BLUE LAGOON	5590 NW 6th St	810434	Nov-15	Jul-22	2,144	239	-	2,383	$ 944,359	X
East	BOCA RATON	301 W Palmetto Park Rd	400731	Oct-15	Jun-21	1,148	142	4	1,294	$ 16,748	X
East	BOCA RATON	301 W Palmetto Park Rd	400734	Jul-19	Jul-22	971	280	-	1,251	$ 430,630	X
East	BOCA RATON	301 W Palmetto Park Rd	400735	Jul-19	Jul-22	1,454	207	7	1,668	$ 2,479,837	X
East	BOCA RATON	301 W Palmetto Park Rd	400736	Dec-20	Nov-22	1,038	23	6	1,067	$ 16,460	X
East	BOCA RATON	301 W Palmetto Park Rd	400737	Aug-14	Mar-21	2,017	106	10	2,133	$ 814,694	X
East	BOCA RATON	301 W Palmetto Park Rd	400738	Aug-19	May-21	899	81	-	980	$ 106,472	X
East	BOCA RATON	301 W Palmetto Park Rd	400739	Aug-14	May-21	1,910	175	9	2,094	$ 240,460	X
East	BOCA RATON	301 W Palmetto Park Rd	400740	Dec-17	Jul-21	698	195	14	907	$ 140,568	X
East	BOCA TEECA	675 Clint Moore Rd	404232	Sep-19	Sep-21	2,059	78	13	2,150	$ 582,093	X
East	BOCA TEECA	675 Clint Moore Rd	404239	Oct-14	Oct-21	1,423	59	2	1,484	$ 693,315	
East	BOCA TEECA	675 Clint Moore Rd	404240	Oct-14	Mar-21	1,183	236	4	1,423	$ 203,973	X
East	BOCA TEECA	675 Clint Moore Rd	404241	Jul-19	Jun-23	944	227	2	1,173	$ 970,255	X
West	BONITA SPRINGS	9491 Bonita Beach Rd	502168	Aug-18	Aug-21	2,448	252	22	2,722	$ 824,725	X
Dade	BOULEVARD	11130 NE 14th Ave	808731	Nov-15	Dec-21	2,111	121	-	2,232	$ 1,465,098	X
East	BOYNTON	951 Old Boynton Rd	400534	Feb-18	Aug-21	354	13	3	370	$ 55,031	
East	BOYNTON	951 Old Boynton Rd	400539	Nov-18	Mar-22	826	244	2	1,072	$ 861,261	
West	BRADENTON	415 Manatee Ave West	500233	Feb-19	Dec-21	713	222	4	939	$ 1,731,492	X
West	BRADENTON	415 Manatee Ave West	500235	Feb-19	Nov-21	1,015	131	2	1,148	$ 1,238,693	X
Dade	BRANDON	15100 NW 7th Ave	808631	Jun-19	Jul-22	1,244	119	1	1,364	$ 648,156	X
Dade	BRANDON	15100 NW 7th Ave	808632	Aug-16	Jul-21	1,873	195	2	2,070	$ 157,675	X
Dade	BUENA VISTA	347 NW 41st St	800331	Mar-15	Aug-20	1,034	72	-	1,106	$ 8,991	X
Dade	BUENA VISTA	347 NW 41st St	800333	Aug-14	Jun-23	1,685	172	2	1,859	$ 2,026,605	X
North	BULOW	5940 John Anderson Hwy & N Washington Ave	102033	Feb-17	Mar-21	2,293	75	6	2,374	$ 66,114	X
Broward	BUTTERFLY	6010 SR 7	708432	May-18	Jan-22	1,292	71	2	1,365	$ 1,978,450	X
Broward	BUTTERFLY	6010 SR 7	708433	Oct-19	May-22	1,327	119	-	1,446	$ 2,029,617	X
East	BUTTS	21400 Powerline Rd	405936	Nov-15	Jan-21	1,463	45	5	1,513	$ 4,785	X
East	BUTTS	21400 Powerline Rd	405939	Aug-19	Jan-22	1,707	81	3	1,791	$ 940,853	X
East	CANAL	700 1st Pl	414133	Sep-19	May-22	662	103	-	765	$ 238,586	
East	CANAL	700 1st Pl	414135	Aug-19	Apr-22	27	41	-	68	$ 158,580	
West	CAPRI	7507 Isles Of Capri Rd	504062	May-19	Feb-22	2,774	188	1	2,963	$ 4,170,618	X
West	CAPRI	7507 Isles Of Capri Rd	504064	Sep-18	May-21	4,706	441	85	5,232	$ 198,912	X
West	CASTLE	5020 E SR 64	504661	Dec-20	Mar-23	3,393	176	10	3,579	$ 2,520	X
West	CASTLE	5020 E SR 64	504663	Sep-18	Feb-22	3,952	466	15	4,433	$ 3,271,844	X
West	CASTLE	5020 E SR 64	504665	Jun-19	Feb-22	2,742	338	21	3,101	$ 1,374,123	
East	CATCHMENT	8400 Sandy Cay	409763	Jul-18	Apr-22	1,627	487	-	2,114	$ 3,302,695	X
East	CATCHMENT	8400 Sandy Cay	409764	Nov-18	May-22	4,429	279	2	4,710	$ 1,859,940	X
East	CATCHMENT	8400 Sandy Cay	409766	Oct-14	Nov-20	2,150	465	5	2,620	$ 10,482	X
North	CELERY	3881 E SR 46 (W/O SR 415)	200263	Nov-18	Jun-21	618	174	11	803	$ 159,373	X
Broward	CHAPEL	6610 SW 196th Ave	706961	Nov-20	Jun-23	1,705	253	4	1,962	$ 55,010	X
Broward	CHAPEL	6610 SW 196th Ave	706962	Dec-20	Aug-22	988	107	2	1,097	$ 5,434	
North	CHULUOTA	695 Brumley Rd	207261	Sep-19	Sep-22	1,100	92	1	1,193	$ 1,119,193	X
North	CHULUOTA	695 Brumley Rd	207263	Feb-19	Jul-21	2,053	91	1	2,145	$ 1,461	X
North	CITY POINT	3303 Beau Gast Rd - US#1 (N/O SR 528)	201534	Sep-15	Jun-21	1,350	122	4	1,476	$ 27,352	X
West	CLARK	5813 S Beneva Rd	500533	Nov-18	Dec-21	1,053	342	3	1,398	$ 968,152	X
West	CLARK	5813 S Beneva Rd	500534	Jun-18	Jun-21	1,941	269	-	2,210	$ 107,500	X
North	CLEARLAKE	33 Dora Ave	202833	Sep-18	Sep-21	1,645	215	12	1,872	$ 3,595,689	X
East	CLEWISTON	USSC Main Canal Rd	402032	Sep-16	Apr-21	1,220	152	9	1,381	$ 227,899	X
East	CLINTMOORE	6301 Old Clintmoore Rd	405465	Nov-15	May-21	1,892	78	5	1,975	$ 11,365	X

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
East	CLINTMOORE	6301 Old Clintmoore Rd	405467	Nov-16	Jun-21	1,622	101	14	1,737	$ 182,439	X
North	COCOA	616 Florida Ave	200433	Jan-18	Jun-21	1,806	115	9	1,930	$ 42,443	X
Dade	COCONUT GROVE	3701 Bird Rd	800434	Nov-16	May-21	516	162	1	679	$ 70,645	X
Dade	COCONUT GROVE	3701 Bird Rd	800445	Dec-19	Jun-23	1,185	90	6	1,281	$ 453,031	X
North	COLLEGE	1050 W Lake Mary Blvd	204633	Nov-18	Aug-21	1,247	209	3	1,459	$ 469,298	X
West	COLONIAL	4308 Yale Ct	502631	Oct-15	Jun-21	697	22	3	722	$ 8,691	X
West	COLONIAL	4308 Yale Ct	502635	Jul-18	Jun-21	1,118	360	1	1,479	$ 204,724	X
North	COLUMBIA	Marthin Luther King Dr & Davis St	301131	Sep-20	Sep-21	426	334	6	766	$ 1,335,975	X
North	COLUMBIA	Marthin Luther King Dr & Davis St	301133	Aug-18	Dec-21	909	154	-	1,063	$ 1,189,067	X
North	COLUMBIA	Marthin Luther King Dr & Davis St	301136	Aug-18	Sep-21	1,453	300	8	1,761	$ 1,613,316	X
North	COLUMBIA	Marthin Luther King Dr & Davis St	301137	Aug-18	Sep-21	530	385	2	917	$ 671,869	X
North	COLUMBIA	Marthin Luther King Dr & Davis St	301139	Aug-18	Sep-21	712	141	7	860	$ 1,601,832	X
North	COMO	234 Old Highway 17	105131	Nov-19	Sep-22	747	45	1	793	$ 167,054	X
West	COOPER	921 Edmund St	508061	Sep-18	May-21	2,113	85	10	2,208	$ 88,843	X
West	COOPER	921 Edmund St	508062	Dec-20	Nov-22	1,910	60	6	1,976	$ 14,766	X
Broward	COPANS	220 Lyons Rd	705635	Jul-19	Jan-22	812	46	3	861	$ 1,270,302	X
North	COQUINA	1151 Wall Ave	106661	Jan-20	Sep-22	1,158	268	3	1,429	$ 547,161	X
North	COQUINA	1151 Wall Ave	106662	Sep-20	Sep-22	254	460	5	719	$ 614,991	X
West	CORKSCREW	Corkscrew Rd, E/O I-75	507461	Jul-18	May-22	4,165	315	115	4,595	$ 4,517,191	X
West	CORKSCREW	Corkscrew Rd, E/O I-75	507462	Apr-15	Jan-21	2,535	465	2	3,002	$ 98,834	X
West	CORKSCREW	Corkscrew Rd, E/O I-75	507465	Sep-15	Jun-21	54	62	2	118	$ 111,266	X
West	CORTEZ	5001 Cortez Rd West	500637	Jun-18	Apr-21	2,585	222	5	2,812	$ 32,421	
West	CORTEZ	5001 Cortez Rd West	500665	Jun-18	Apr-21	3,151	286	14	3,451	$ 122,431	X
Dade	COUNTRY CLUB	7275 NW 186th St	805938	Aug-18	Dec-21	1,972	101	1	2,074	$ 891,678	X
Dade	COURT	SW 127 Ave N/O 144 St	809663	Mar-16	Aug-21	1,412	435	-	1,847	$ 535,665	X
Dade	COURT	SW 127 Ave N/O 144 St	809668	Oct-15	Feb-21	1,453	395	-	1,848	$ 64,789	X
Dade	COURT	SW 127 Ave N/O 144 St	809669	May-17	Apr-21	1,639	210	-	1,849	$ 240,066	X
North	COURTENAY	3310 N Courtenay Pkwy	201932	Jun-18	Sep-21	1,617	127	3	1,747	$ 1,622,706	X
North	COURTENAY	3310 N Courtenay Pkwy	201934	Sep-19	Sep-22	847	50	-	897	$ 730,965	X
North	COURTENAY	3310 N Courtenay Pkwy	201935	Sep-19	Sep-22	1,185	41	-	1,226	$ 554,071	X
North	COURTENAY	3310 N Courtenay Pkwy	201936	Sep-17	May-21	1,289	104	3	1,396	$ 431,505	X
East	COVE	7903 SE FEDERAL HWY	408264	Dec-17	May-21	3,457	173	11	3,641	$ 64,841	X
North	COX	880 Cox Rd	207061	Aug-14	Dec-20	1,603	95	4	1,702	$ 8,017	X
East	CRANE	4000 SW Sand Tr	407162	Nov-18	Jun-23	600	328	2	930	$ 1,566,973	X
East	CRANE	4000 SW Sand Tr	407165	Oct-15	Apr-21	1,836	148	9	1,993	$ 643,425	X
East	CRANE	4000 SW Sand Tr	407166	Oct-14	Nov-20	1,667	273	-	1,940	$ 119,707	X
Broward	CROSSBOW	6550 Dykes Rd	707661	Dec-17	May-21	689	55	2	746	$ 97,131	X
Broward	CRYSTAL	3951 N Powerline Rd	703733	Oct-19	May-22	1,941	132	2	2,075	$ 2,404,840	X
Broward	CRYSTAL	3951 N Powerline Rd	703734	Dec-20	Mar-23	825	348	-	1,173	$ 8,072	X
Broward	CRYSTAL	3951 N Powerline Rd	703735	Dec-20	Nov-22	2	331	2	335	$ 17,956	
Broward	CULLUM	4000 NW 54th Ave	707135	Jun-19	Jul-21	1,383	143	3	1,529	$ 44,771	X
Dade	CUTLER	14925 SW 67 Ave	802032	Dec-20	Mar-23	1,015	50	1	1,066	$ 10,553	X
Dade	CUTLER	14925 SW 67 Ave	802034	Aug-16	Mar-22	311	7	3	321	$ 568,048	X
Dade	CUTLER	14925 SW 67 Ave	802038	Dec-20	Nov-22	1,228	43	-	1,271	$ 12,876	X
Broward	CYPRESS CREEK	2309 W McNab Rd	702132	Dec-20	Nov-22	207	124	1	332	$ 3,347	X
Broward	CYPRESS CREEK	2309 W McNab Rd	702134	Feb-17	May-21	-	191	1	192	$ 55,289	X
Broward	CYPRESS CREEK	2309 W McNab Rd	702137	Dec-20	Nov-22	125	226	-	351	$ 2,835	X
Broward	CYPRESS CREEK	2309 W McNab Rd	702138	Oct-19	Mar-22	210	54	-	264	$ 1,185,365	X
Broward	CYPRESS CREEK	2309 W McNab Rd	702139	Dec-20	Nov-22	-	173	-	173	$ 13,428	
Dade	DADE	6301 NW 72 Ave	805432	Dec-20	Jun-23	168	366	-	534	$ 12,168	X
Dade	DADE	6301 NW 72 Ave	805433	Jun-16	Jun-21	1,566	65	2	1,633	$ 96,606	X
Dade	DADE	6301 NW 72 Ave	805438	Dec-20	Mar-23	-	760	3	763	$ 6,537	X
Dade	DADE	6301 NW 72 Ave	805439	Jul-19	Dec-21	-	164	-	164	$ 787,996	X
Dade	DADELAND	6890 SW 81st St	807535	Jun-19	Jun-21	608	89	1	698	$ 120,901	X
Dade	DADELAND	6890 SW 81st St	807536	Dec-20	Nov-22	607	130	3	740	$ 7,127	X
Dade	DADELAND	6890 SW 81st St	807542	Jun-19	Sep-21	2,155	75	-	2,230	$ 85,621	X
North	DAIRY	4452 Dairy Rd	205531	Jun-20	Nov-21	1,265	105	1	1,371	$ 763,715	X
Broward	DANIA	301 SE 5th Ave, Dania	701532	Dec-17	May-22	1,619	342	3	1,964	$ 2,261,987	X
Broward	DANIA	301 SE 5th Ave, Dania	701533	Aug-18	Jul-22	1,546	216	-	1,762	$ 3,151,291	X
Broward	DANIA	301 SE 5th Ave, Dania	701535	Oct-19	Aug-22	2,873	428	-	3,301	$ 871,357	X
Broward	DANIA	301 SE 5th Ave, Dania	701536	Sep-16	Feb-21	2,739	187	1	2,927	$ 4,995	X
East	DATURA ST	515 Datura St	400231	Jul-19	Nov-21	586	94	-	680	$ 609,817	X
East	DATURA ST	515 Datura St	400234	Sep-17	Apr-21	598	43	-	641	$ 101,150	X
East	DATURA ST	515 Datura St	400237	Oct-15	Jun-21	745	51	-	796	$ 33,018	
East	DATURA ST	515 Datura St	400240	Oct-15	Apr-21	373	166	-	539	$ 44,548	
North	DAYTONA BEACH	132 N Segrave St	100133	Oct-14	Feb-21	524	78	1	603	$ 3,503	X
North	DAYTONA BEACH	132 N Segrave St	100134	Sep-17	Feb-21	386	151	1	538	$ 49,476	X
North	DAYTONA BEACH	132 N Segrave St	100137	Nov-19	Sep-22	1,207	243	3	1,453	$ 455,591	X
North	DAYTONA BEACH	132 N Segrave St	100138	Aug-19	May-21	321	49	-	370	$ 14,886	
Broward	DEERFIELD BEACH	1001 S Deerfield Ave	703531	Nov-18	Dec-21	1,535	299	2	1,836	$ 2,493,018	X
Broward	DEERFIELD BEACH	1001 S Deerfield Ave	703534	May-15	May-21	2,336	383	7	2,726	$ 24,039	X
Broward	DEERFIELD BEACH	1001 S Deerfield Ave	703537	Jun-17	May-21	1,799	148	8	1,955	$ 38,462	X
Broward	DEERFIELD BEACH	1001 S Deerfield Ave	703541	Feb-18	Jul-21	800	285	6	1,091	$ 45,073	
Broward	DEERFIELD BEACH	1001 S Deerfield Ave	703542	Oct-17	Jun-21	2,818	342	3	3,163	$ 9,616	X
North	DELAND	2778 E. NEW YORK AVE. (W/O I-4)	102131	Oct-16	Mar-21	256	157	2	415	$ 282,406	X
East	DELMAR	22950 Powerline Rd	406931	Nov-18	Jun-23	1,459	44	3	1,506	$ 1,029,801	X
East	DELMAR	22950 Powerline Rd	406933	Mar-19	Jul-21	881	92	2	975	$ 167,485	X
East	DELMAR	22950 Powerline Rd	406935	Nov-15	Jan-21	2,297	104	6	2,407	$ 2,393	X
North	DELTONA	1960 Howland Blvd	204064	Jun-20	Nov-22	1,268	37	18	1,323	$ 25,123	X
East	DELTRAIL	7000 Via Delray	405863	Oct-14	Jun-21	2,921	127	6	3,054	$ 4,785	X
East	DELTRAIL	7000 Via Delray	405865	Nov-18	Apr-22	3,808	102	6	3,916	$ 4,033,967	X
North	DERBY	SW of Rantoul Rd and SR 46A	210131	Nov-19	Sep-22	1,818	125	-	1,943	$ 338,019	X
North	DERBY	SW of Rantoul Rd and SR 46A	210132	Jul-19	Nov-21	225	178	2	405	$ 608,135	X
North	DERBY	SW of Rantoul Rd and SR 46A	210133	Apr-17	Jun-21	1,058	51	5	1,114	$ 4,378	X
West	DORR FIELD	11 miles E/O Arcadia on SR 70	504262	Dec-20	Mar-23	36	158	3	197	$ 19,019	X
Dade	DOUGLAS	3690 SW 23rd St	806132	Oct-15	Jan-21	414	214	1	629	$ 14,771	
Broward	DRIFTWOOD	2800 N University Dr	702032	Nov-18	May-22	1,636	129	-	1,765	$ 2,535,648	X
Broward	DRIFTWOOD	2800 N University Dr	702038	Jul-18	May-21	1,902	156	1	2,059	$ 152,634	X
Dade	DUMFOUNDLING	2900 NE 185th St	809834	Aug-19	Jul-22	1,282	48	9	1,339	$ 201,061	X
Dade	DUMFOUNDLING	2900 NE 185th St	809837	Jun-19	Dec-21	1,533	129	-	1,662	$ 1,899,295	X
North	DURBIN	10475 Old Dixie Highway	108962	Dec-19	Sep-22	2,446	335	5	2,786	$ 434,582	X
North	EAU GALLIE	1860 Guava Ave	201032	Jun-20	Sep-21	1,386	161	5	1,552	$ 1,858,478	X
North	EAU GALLIE	1860 Guava Ave	201035	Sep-19	Sep-22	675	132	2	809	$ 472,203	X
East	EDEN	3733 SE Jennings Rd	411032	Nov-18	Jul-21	437	209	-	646	$ 158,887	
North	EDGEWATER	901 16 St	101933	Feb-18	Jun-21	1,587	333	6	1,926	$ 248,692	X
North	EDGEWATER	901 16 St	101938	Mar-20	Nov-22	1,955	171	6	2,132	$ 61,783	X
West	EDISON	5813 Winkler Rd	503634	Dec-20	Nov-22	1,632	189	1	1,822	$ 28,864	X
West	EDISON	5813 Winkler Rd	503635	Dec-20	Aug-22	1,922	446	-	2,368	$ 17,680	X
West	EDISON	5813 Winkler Rd	503639	Dec-20	Aug-22	2,346	176	-	2,522	$ 88,993	X
North	ELKTON	4525 St Ambrose Church Rd	105831	Aug-19	Nov-21	1,314	107	2	1,423	$ 2,124,486	X

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
North	ELKTON	4525 St Ambrose Church Rd	105832	Aug-16	Jun-21	804	373	3	1,180	$ 9,312	X
Broward	ELY	516 NW 3rd Ave	702633	Nov-18	Jun-21	1,596	275	4	1,875	$ 39,063	X
Broward	ELY	516 NW 3rd Ave	702635	Sep-14	May-21	1,287	122	3	1,412	$ 46,876	X
Broward	ELY	516 NW 3rd Ave	702638	Nov-18	Jun-21	644	372	2	1,018	$ 102,165	X
Broward	ELY	516 NW 3rd Ave	702639	Nov-18	Jun-21	871	220	2	1,093	$ 120,796	X
West	ENGLEWOOD	740 River Rd S	500761	Dec-20	Nov-22	1,460	259	4	1,723	$ 10,632	X
West	ENGLEWOOD	740 River Rd S	500767	Dec-17	Apr-21	2,489	278	19	2,786	$ 9,174	X
West	ENGLEWOOD	740 River Rd S	500768	Dec-20	Mar-23	2,008	93	6	2,107	$ 18,507	X
West	ESTERO	4750 Broadway West	503966	Oct-18	Nov-21	1,913	227	1	2,141	$ 3,048,663	X
Dade	EUREKA	17705 SW 147th Ave	811261	Jul-18	Mar-22	1,942	86	2	2,030	$ 2,601,248	X
Dade	EUREKA	17705 SW 147th Ave	811262	Oct-14	Jun-21	2,703	31	-	2,734	$ 636,897	X
Dade	EUREKA	17705 SW 147th Ave	811263	Mar-15	Feb-21	1,617	108	2	1,727	$ 453,522	X
Broward	FAIRMONT	580 NW 31 Ave	700731	Nov-18	Oct-21	874	155	2	1,031	$ 637,677	X
Dade	FLAGAMI	195 SW 92nd Ave	808062	Jun-19	Jun-23	2,794	281	1	3,076	$ 425,209	X
Dade	FLAGAMI	195 SW 92nd Ave	808064	Jul-18	Dec-21	899	249	-	1,148	$ 884,039	X
North	FLAGLER BEACH	4173 E Highway 100	101464	Aug-18	Sep-21	3,093	287	10	3,390	$ 2,128,332	X
Broward	FLAMINGO	4601 Flamingo Rd	707261	Mar-18	Jun-21	2,124	98	-	2,222	$ 41,627	X
Broward	FLAMINGO	4601 Flamingo Rd	707264	Aug-16	Mar-21	1,079	548	3	1,630	$ 117,112	X
Broward	FLAMINGO	4601 Flamingo Rd	707266	Dec-20	Nov-22	1,594	75	1	1,670	$ 21,264	X
North	FLEMING	330 Hand Ave	102432	Jul-20	Nov-22	1,041	116	-	1,157	$ 5,985	X
North	FLEMING	330 Hand Ave	102433	Oct-19	Sep-22	1,535	75	4	1,614	$ 365,151	X
North	FLEMING	330 Hand Ave	102434	Nov-15	Jun-21	1,324	175	-	1,499	$ 140,546	X
Dade	FLORIDA CITY	16100 SW 344th St	803132	Jun-13	Mar-22	1,078	133	-	1,211	$ 660,911	X
North	FOREST GROVE	65 Forest Grove Dr	106861	Sep-20	Sep-22	2,120	103	1	2,224	$ 730,302	X
North	FOREST GROVE	65 Forest Grove Dr	106863	Aug-20	Nov-22	2,180	175	14	2,369	$ 29,297	X
East	FOUNTAIN	4299 Jog Rd	405637	Nov-15	Jan-22	1,918	97	2	2,017	$ 800,007	X
East	FOUNTAIN	4299 Jog Rd	405638	Oct-18	Sep-21	2,113	77	-	2,190	$ 325,349	X
East	FOUNTAIN	4299 Jog Rd	405639	Oct-15	Nov-21	2,385	113	-	2,498	$ 433,006	X
West	FRANKLIN	16401 Franklin Ave	506464	Sep-18	Apr-21	2,802	176	15	2,993	$ 8,208	X
North	FRONTENAC	504 Clear View Drive	203035	Jul-19	Nov-21	683	129	1	813	$ 1,332,183	X
Dade	FRONTON	3795 NW 38 Ave	801134	Oct-19	Jun-23	1,606	345	1	1,952	$ 1,436,316	
Dade	FRONTON	3795 NW 38 Ave	801136	Oct-16	Jun-23	1,467	248	2	1,717	$ 1,984,453	X
West	FRUITVILLE	611 Bell Rd	501064	May-18	Aug-21	1,780	479	5	2,264	$ 222,008	X
West	FRUITVILLE	611 Bell Rd	501066	Sep-18	Nov-21	1,537	303	4	1,844	$ 2,574,533	X
West	FT MYERS	1835 Lee St	501131	Dec-20	Nov-22	720	193	3	916	$ 10,908	X
West	FT MYERS	1835 Lee St	501132	Sep-19	Oct-21	974	34	-	1,008	$ 271,923	X
West	FT MYERS	1835 Lee St	501133	Nov-18	Dec-21	1,332	150	-	1,482	$ 638,862	X
West	FT MYERS	1835 Lee St	501135	May-15	Jun-21	810	165	5	980	$ 34,282	X
West	FT MYERS	1835 Lee St	501136	Feb-19	Apr-22	1,547	217	3	1,767	$ 1,884,260	X
West	FT MYERS	1835 Lee St	501138	Oct-19	Oct-21	68	151	-	219	$ 276,834	X
Dade	GARDEN	3801 NW 179 St	804131	Dec-20	Mar-23	1,190	104	1	1,295	$ 9,844	X
Dade	GARDEN	3801 NW 179 St	804135	Dec-20	Nov-22	798	67	1	866	$ 8,505	X
Dade	GARDEN	3801 NW 179 St	804138	Dec-20	Mar-23	391	355	1	747	$ 10,041	X
West	GATEWAY	10633 Buckingham Rd	508461	Jul-18	Jun-21	1,618	197	-	1,815	$ 72,909	X
West	GATEWAY	10633 Buckingham Rd	508462	Dec-20	Mar-23	2,687	451	6	3,144	$ 26,107	X
West	GATEWAY	10633 Buckingham Rd	508464	Nov-18	Jun-21	3,441	413	32	3,886	$ 85,463	X
East	GATLIN	2210 SW Hayworth Ave	410461	Aug-14	Sep-20	2,225	28	-	2,253	$ 22,445	X
North	GATOR	165 Toms Rd	108362	Mar-18	Jun-21	759	213	6	978	$ 1,770,316	X
North	GATOR	165 Toms Rd	108363	Dec-19	Sep-22	2,299	496	8	2,803	$ 387,371	X
North	GENERAL ELECTRIC	190 West Rd	101535	Jul-19	Nov-21	230	154	1	385	$ 1,110,714	X
North	GENERAL ELECTRIC	190 West Rd	101540	Feb-19	Sep-21	1,876	204	-	2,080	$ 1,354,416	X
North	GENEVA	427 E. Osceola Rd	205361	Nov-19	Sep-22	853	114	9	976	$ 1,128,237	X
North	GENEVA	427 E. Osceola Rd	205362	Nov-19	Sep-22	505	71	2	578	$ 881,789	X
East	GERMANTOWN	1600 SW 10th St	404837	Jun-16	Mar-21	1,677	258	12	1,947	$ 25,721	X
Dade	GLADEVIEW	2409 NW 68th St	802231	Nov-15	Apr-21	1,320	135	1	1,456	$ 255,606	X
Dade	GLADEVIEW	2409 NW 68th St	802233	Mar-15	Sep-21	492	262	1	755	$ 888,011	X
West	GLADIOLUS	15830 Winkler Road	507665	Jul-19	Jun-22	2,840	133	7	2,980	$ 1,597,758	X
East	GLENDALE	1/2 mile W/O I-95 on the north side of SR 60	407561	May-14	Feb-21	191	53	1	245	$ 1,416,034	X
East	GLENDALE	1/2 mile W/O I-95 on the north side of SR 60	407562	Dec-20	Jun-23	1,243	325	-	1,568	$ 20,791	X
East	GLENDALE	1/2 mile W/O I-95 on the north side of SR 60	407563	May-19	Apr-22	409	58	3	470	$ 7,894,971	X
West	GOLDEN GATE	4001 15 Ave	504962	Feb-19	Dec-22	2,588	248	3	2,839	$ 982,151	X
West	GOLDEN GATE	4001 15 Ave	504965	Feb-19	Dec-22	2,224	227	2	2,453	$ 903,830	X
West	GOLDEN GATE	4001 15 Ave	504967	Nov-16	Jun-23	1,432	177	21	1,630	$ 117,326	X
West	GOLDEN GATE	4001 15 Ave	504968	Aug-15	Jun-22	1,795	85	22	1,902	$ 835,298	X
Dade	GOLDEN GLADES	16700 NW 19th Ave	806031	Mar-15	Aug-20	1,314	39	1	1,354	$ 130,803	X
Dade	GOLDEN GLADES	16700 NW 19th Ave	806033	Oct-14	Sep-21	1,080	79	-	1,159	$ 1,720,558	X
East	GOLF	950 SW 23rd Ave	404134	Aug-18	Jun-23	906	392	6	1,304	$ 1,884,379	X
East	GOLF	950 SW 23rd Ave	404136	Sep-14	Aug-20	4,255	325	12	4,592	$ 11,365	X
Dade	GOULDS	21200 SW 112th Ave	807332	Aug-19	Jun-21	204	88	-	292	$ 123,214	
Dade	GOULDS	21200 SW 112th Ave	807337	Nov-15	Mar-21	1,459	109	1	1,569	$ 9,834	X
East	GRACEWOOD	505 S A1A	414033	Aug-19	Jul-22	390	25	1	416	$ 381,940	
East	GRAMERCY	4301 Up The Grove Lane	410536	Aug-19	May-21	549	214	1	764	$ 35,638	
West	GRANADA	5503 S Tamiami Tr	506561	Mar-18	Jun-21	2,516	122	47	2,685	$ 11,944	X
North	GRANDVIEW	2510 Grandview Ave	201432	Jul-20	Nov-22	1,375	261	6	1,642	$ 18,035	X
North	GRANDVIEW	2510 Grandview Ave	201435	Aug-20	Nov-22	2,175	97	7	2,279	$ 6,812	X
North	GRANT	4660 Grant Rd	208762	Oct-14	Feb-21	1,006	193	10	1,209	$ 303,704	X
Dade	GRAPELAND	2731 SW 16th Ter	802933	Oct-14	Jul-22	2,505	180	2	2,687	$ 3,737,504	X
Dade	GRATIGNY	1545 W 68th St	804534	Dec-20	Nov-22	1,897	65	-	1,962	$ 23,233	X
Dade	GRATIGNY	1545 W 68th St	804537	Nov-15	Apr-21	835	17	-	852	$ 255,015	X
Dade	GRATIGNY	1545 W 68th St	804539	Dec-20	Nov-22	778	64	1	843	$ 20,082	X
East	GREENACRES	4101 S. Military Trail	401032	Dec-20	Mar-23	2,162	323	2	2,487	$ 8,269	
East	GREENACRES	4101 S. Military Trail	401035	Nov-18	Jun-23	3,055	78	-	3,133	$ 751,376	X
Dade	GREYNOLDS	2485 NE 163rd St	802531	Nov-18	Dec-21	1,119	345	-	1,464	$ 3,115,119	X
Dade	GREYNOLDS	2485 NE 163rd St	802534	Nov-18	Dec-21	1,990	161	1	2,152	$ 2,837,338	X
Broward	GRIFFIN	700 N Federal Hwy	709162	Aug-19	Nov-21	-	19	-	19	$ 763,849	X
Broward	HACIENDA	4900 SW 36th St	708932	Nov-18	Mar-22	911	318	1	1,230	$ 3,313,944	X
Broward	HACIENDA	4900 SW 36th St	708933	Nov-16	May-21	-	218	1	219	$ 60,034	X
Dade	HAINLIN	SW 147th Ave & 216th St	806435	Aug-16	Apr-21	1,573	70	-	1,643	$ 126,685	X
Broward	HALLANDALE	1390 E Hallandale Beach Blvd	700931	Jan-17	Aug-22	1,489	324	-	1,813	$ 657,478	X
Broward	HALLANDALE	1390 E Hallandale Beach Blvd	700936	Aug-19	May-22	2,239	105	1	2,345	$ 1,731,038	X
East	HAMLET	5605 Sims Road	409861	Dec-17	Sep-21	2,318	72	4	2,394	$ 1,046,877	X
North	HAMPTON	11320 SE CR 221	307562	Aug-18	Jun-21	146	79	-	225	$ 16,475	X
West	HARBOR	22505 Hancock Ave	503764	Nov-18	Jun-22	3,187	225	10	3,422	$ 3,862,286	X
North	HARRIS	4520 Lipscomb St	203631	Dec-20	Nov-22	1,146	89	2	1,237	$ 13,664	X
North	HARRIS	4520 Lipscomb St	203635	Jan-18	Jun-21	1,883	317	1	2,201	$ 83,943	
North	HARRIS	4520 Lipscomb St	203637	Dec-20	Nov-22	1,360	218	6	1,584	$ 9,490	X
North	HARRIS	4520 Lipscomb St	203638	Nov-15	Jun-21	583	234	1	818	$ 237,681	X
North	HASTINGS	Hastings State Rd 207	100331	Jul-19	Sep-22	671	261	4	936	$ 695,451	X
North	HASTINGS	Hastings State Rd 207	100332	Nov-20	Nov-22	396	125	1	522	$ 66,587	X
North	HASTINGS	Hastings State Rd 207	100333	Dec-19	Sep-22	686	136	3	825	$ 369,818	

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
Broward	HAWKINS	7010 W Mcnab Rd	702935	Nov-18	Jul-22	1,608	107	1	1,716	$ 2,635,091	X
Broward	HAWKINS	7010 W Mcnab Rd	702937	Oct-17	Jul-21	648	116	-	764	$ 34,856	X
Broward	HAWKINS	7010 W Mcnab Rd	702939	Aug-18	Apr-21	2,257	97	-	2,354	$ 9,015	X
Dade	HIALEAH	210 W 9 St	800732	Dec-20	Mar-23	1,143	76	1	1,220	$ 8,387	X
Dade	HIALEAH	210 W 9 St	800739	Dec-20	Mar-23	2,228	418	-	2,646	$ 14,963	X
Dade	HIALEAH	210 W 9 St	800740	Jun-19	Mar-22	1,744	270	1	2,015	$ 2,475,235	X
North	HIBISCUS	635 S Wickham Rd	203531	Oct-19	Sep-22	726	195	2	923	$ 486,822	X
North	HIBISCUS	635 S Wickham Rd	203532	Feb-19	Sep-21	516	289	3	808	$ 1,837,014	X
North	HIBISCUS	635 S Wickham Rd	203533	Jul-19	Nov-21	4	179	4	187	$ 1,406,731	X
North	HIBISCUS	635 S Wickham Rd	203537	Feb-19	Aug-21	242	194	2	438	$ 193,236	
North	HIBISCUS	635 S Wickham Rd	203541	Mar-18	Jun-21	1,682	206	2	1,890	$ 192,409	X
North	HIELD	SR9 & Hield Rd	208161	Nov-19	Sep-22	1,592	19	-	1,611	$ 587,696	X
North	HIELD	SR9 & Hield Rd	208163	Nov-19	Jun-22	2,223	30	-	2,253	$ 2,598,580	X
North	HIELD	SR9 & Hield Rd	208164	Sep-20	Aug-23	2,894	296	17	3,207	$ 10,908	X
North	HIELD	SR9 & Hield Rd	208167	Oct-19	Jun-22	2,274	46	1	2,321	$ 3,634,722	X
Broward	HIGHLANDS	850 SW 11th St	703834	Aug-19	Aug-22	521	19	1	541	$ 277,250	X
East	HILLCREST	4800 Dreher Tr N	400436	Oct-18	Jul-22	1,036	194	4	1,234	$ 1,478,958	X
East	HILLS	12301 SE County Line Rd	407333	Jul-18	Apr-21	1,681	44	4	1,729	$ 74,421	X
East	HILLSBORO	840 SW 19th St	404732	Oct-14	Jun-22	1,582	38	11	1,631	$ 1,991,888	X
North	HOLLAND PARK	2540 Highway A1A	202632	Oct-19	Sep-22	1,190	102	1	1,293	$ 548,224	X
North	HOLLY HILL	403 Walker St	101032	Oct-14	Apr-21	1,162	37	3	1,202	$ 67,427	X
North	HOLLY HILL	403 Walker St	101033	Sep-20	Sep-22	895	117	2	1,014	$ 405,849	X
North	HOLLY HILL	403 Walker St	101034	Feb-19	Dec-21	1,521	142	7	1,670	$ 1,744,401	X
North	HOLLY HILL	403 Walker St	101035	Nov-17	Apr-21	669	109	1	779	$ 41,157	X
North	HOLLY HILL	403 Walker St	101038	Feb-18	Jun-21	992	343	3	1,338	$ 26,708	X
Broward	HOLLYBROOK	10501 Washington St	706165	Nov-18	Mar-22	2,551	128	3	2,682	$ 1,819,452	X
Broward	HOLLYBROOK	10501 Washington St	706168	Jun-18	Apr-21	1,351	278	-	1,629	$ 87,140	X
Broward	HOLLYWOOD	709 N 21st St	700232	Dec-20	Nov-22	607	43	-	650	$ 6,970	X
Broward	HOLLYWOOD	709 N 21st St	700233	Dec-20	Aug-22	577	349	-	926	$ 5,985	X
Broward	HOLLYWOOD	709 N 21st St	700235	Dec-20	Aug-22	1,276	191	1	1,468	$ 4,922	X
Broward	HOLMBERG	6900 Holmberg Rd	706461	Jul-19	Nov-21	873	72	-	945	$ 1,085,589	X
Broward	HOLMBERG	6900 Holmberg Rd	706463	Jul-19	Mar-22	1,235	323	4	1,562	$ 2,127,700	X
Broward	HOLMBERG	6900 Holmberg Rd	706464	Nov-16	Nov-22	1,150	325	4	1,479	$ 3,005	
Broward	HOLMBERG	6900 Holmberg Rd	706465	Aug-19	Aug-22	1,139	64	3	1,206	$ 1,041,529	X
Broward	HOLY CROSS	4850 NE 19 Ave	701932	Dec-20	Nov-22	513	145	-	658	$ 10,711	X
Broward	HOLY CROSS	4850 NE 19 Ave	701935	Aug-14	Dec-20	1,461	413	2	1,876	$ 9,380	X
Broward	HOLY CROSS	4850 NE 19 Ave	701939	Dec-20	Mar-23	2,019	236	-	2,255	$ 5,237	X
Broward	HOLY CROSS	4850 NE 19 Ave	701940	Oct-19	Aug-22	887	175	12	1,074	$ 361,158	X
East	HOMELAND	W/O 441 & S/O Homeland	408661	Nov-18	May-22	2,360	200	12	2,572	$ 964,048	
Dade	HOMESTEAD	28250 SW 122 Ave	803231	Nov-18	Dec-21	-	12	-	12	$ 1,337,210	X
East	HUTCHINSON ISL	6501 S A1A	405134	Dec-15	Aug-20	3,277	116	1	3,394	$ 59,355	X
West	HYDE PARK	2826 Hyde Park St	500437	Nov-18	Feb-22	1,452	262	5	1,719	$ 1,301,522	X
East	IBM	950 NW Spanish River Blvd	404336	Jun-16	Aug-21	686	339	11	1,036	$ 620,890	X
Broward	IMAGINATION	15901 45 St	704264	Aug-16	Jun-21	1,690	121	12	1,823	$ 3,885	X
West	IMPERIAL	8812 Strike Ln	507062	Dec-20	Aug-22	3,576	375	9	3,960	$ 24,020	X
West	IMPERIAL	8812 Strike Ln	507063	Dec-20	Mar-23	2,291	378	4	2,673	$ 30,911	X
North	INDIALANTIC	200 Watson Dr	203232	Sep-18	Oct-21	1,085	39	-	1,124	$ 1,483,308	X
North	INDIALANTIC	200 Watson Dr	203233	Feb-19	Aug-21	1,266	164	4	1,434	$ 681,223	X
North	INDIAN HARBOR	2105 S Patrick Dr	202032	Nov-15	May-21	1,481	70	4	1,555	$ 107,523	X
North	INDIAN HARBOR	2105 S Patrick Dr	202033	May-18	Apr-21	2,111	140	-	2,251	$ 1,494,941	X
North	INDIAN HARBOR	2105 S Patrick Dr	202034	Apr-15	Nov-20	1,246	213	2	1,461	$ 68,381	X
North	INDIAN RIVER	950 Cheney Hwy (SR 50)	202133	Feb-18	Apr-21	2,173	104	-	2,277	$ 1,405,810	X
North	INDIAN RIVER	950 Cheney Hwy (SR 50)	202134	Oct-14	Jan-21	1,308	269	-	1,577	$ 31,125	X
North	INDIAN RIVER	950 Cheney Hwy (SR 50)	202135	Jun-18	Jun-21	2,005	104	4	2,113	$ 551,289	X
Dade	INDUSTRIAL	6050 NW 37th Ave	804632	Nov-20	Aug-23	546	270	1	817	$ 37,408	X
Dade	INDUSTRIAL	6050 NW 37th Ave	804633	Jan-17	Dec-21	-	135	1	136	$ 329,661	X
Dade	INDUSTRIAL	6050 NW 37th Ave	804634	Oct-19	Jun-23	1,145	159	1	1,305	$ 687,256	X
Dade	INDUSTRIAL	6050 NW 37th Ave	804636	Dec-20	Nov-22	779	259	-	1,038	$ 18,310	
East	INLET	1951 Avenue E	411733	Nov-15	Jul-21	1,425	110	3	1,538	$ 38,259	X
East	INLET	1951 Avenue E	411734	Dec-20	Nov-22	995	201	-	1,196	$ 30,321	X
West	IONA	17550 San Carlos Blvd	501765	Feb-18	Apr-21	3,755	282	6	4,043	$ 170,318	X
West	IXORA	6475 Enterprise Blvd	507863	Dec-20	Aug-23	1,400	235	14	1,649	$ 26,068	X
Dade	JASMINE	8805 SW Krome Ave	810565	Jun-19	May-21	3,215	170	-	3,385	$ 141,725	X
East	JENSEN	3600 US#1	403431	Nov-18	May-21	438	88	-	526	$ 80,802	
East	JENSEN	3600 US#1	403436	Nov-18	Sep-21	1,184	276	-	1,460	$ 304,521	
East	JENSEN	3600 US#1	403438	Apr-18	Jun-21	1,386	110	-	1,496	$ 167,590	X
West	JETPORT	13577 Daniels Dr	505062	Nov-15	Aug-20	1	364	1	366	$ 21,245	X
East	JUNO BEACH	11013 US #1	402632	Nov-18	Apr-22	1,235	283	1	1,519	$ 743,259	X
East	JUNO BEACH	11013 US #1	402635	Mar-15	Mar-21	986	158	5	1,149	$ 1,536,641	X
East	JUNO BEACH	11013 US #1	402638	Nov-18	Jun-22	1,634	140	3	1,777	$ 2,439,266	X
East	JUPITER	100 S. Delaware Blvd	401832	Dec-17	Aug-21	1,033	609	1	1,643	$ 550,987	X
East	JUPITER	100 S. Delaware Blvd	401837	May-18	Jun-21	610	394	1	1,005	$ 208,589	X
North	KACIE	1200 State Road 207	104732	Nov-18	Oct-21	1,220	146	23	1,389	$ 1,472,325	X
North	KACIE	1200 State Road 207	104733	Jul-18	Sep-21	1,468	549	6	2,023	$ 873,695	X
Dade	KENDALL	8175 SW 102nd St	804335	Aug-18	Jan-22	1,688	121	2	1,811	$ 827,797	X
Dade	KILLIAN	11800 SW 99th Ave	807631	Jun-19	Mar-22	985	77	-	1,062	$ 1,361,701	X
Dade	KILLIAN	11800 SW 99th Ave	807632	Dec-20	Mar-23	1,200	30	-	1,230	$ 3,898	X
Dade	KILLIAN	11800 SW 99th Ave	807633	Dec-20	Mar-23	1,158	23	-	1,181	$ 16,893	X
Dade	KILLIAN	11800 SW 99th Ave	807635	Jun-19	Mar-22	1,705	203	-	1,908	$ 1,042,583	X
East	KIMBERLY	11000 Yamato Rd	406861	May-18	Apr-21	1,870	32	3	1,905	$ 116,641	X
East	KIMBERLY	11000 Yamato Rd	406862	Dec-20	Mar-23	1,551	93	13	1,657	$ 13,861	X
East	KIMBERLY	11000 Yamato Rd	406864	May-18	Jun-23	2,070	264	-	2,334	$ 2,164,734	X
East	KIMBERLY	11000 Yamato Rd	406865	Dec-20	Nov-22	1,909	69	6	1,984	$ 17,444	X
East	KIMBERLY	11000 Yamato Rd	406867	Jun-18	Dec-21	3,234	89	2	3,325	$ 1,232,494	X
West	LABELLE	3880 SR 29 S	502463	Sep-18	Nov-22	1,155	216	5	1,376	$ 2,149,098	X
East	LAKE IDA	1600 Lake Ida Rd	409531	Mar-17	Dec-21	1,350	269	3	1,622	$ 584,766	X
East	LAKE IDA	1600 Lake Ida Rd	409534	Aug-16	Aug-21	2,673	136	4	2,813	$ 113,052	
East	LAKE PARK	1216 US#1	403935	Nov-18	Jun-23	2,027	275	1	2,303	$ 1,863,488	X
East	LAKE PARK	1216 US#1	403937	Nov-15	Feb-21	2,056	63	-	2,119	$ 45,596	X
Broward	LAKEVIEW	6181 N Powerline Rd	704938	Nov-17	Jan-21	1,470	26	3	1,499	$ 46,275	X
Broward	LAKEVIEW	6181 N Powerline Rd	704939	May-18	Mar-21	2,316	162	4	2,482	$ 97,959	X
West	LAURELWOOD	2501 Laurel Rd E	509961	Nov-20	Jun-23	1,454	352	21	1,827	$ 37,920	
Dade	LAWRENCE	1951 NW 11th St	805134	Jul-14	Jul-22	2,167	150	-	2,317	$ 3,387,113	X
Dade	LAWRENCE	1951 NW 11th St	805136	Jun-16	Jul-22	2,116	429	1	2,546	$ 2,059,638	X
Dade	LEMON CITY	7645 NE 3rd Pl	807732	Nov-16	Sep-21	1,513	202	3	1,718	$ 400,118	X
North	LEWIS	179 St Rd 16	102633	Jul-19	Oct-21	472	70	3	545	$ 388,127	X
North	LEWIS	179 St Rd 16	102636	Nov-19	Nov-21	582	285	7	874	$ 674,116	X
Dade	LINDGREN	8121 SW 137th Ave	808261	Apr-19	Mar-21	3,351	143	-	3,494	$ 9,256	
East	LINTON	200 NE 2nd Ave	401931	Sep-14	Mar-21	1,301	330	11	1,642	$ 203,973	X
East	LINTON	200 NE 2nd Ave	401934	Nov-18	Jul-22	1,206	301	3	1,510	$ 2,675,551	

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
East	LINTON	200 NE 2nd Ave	401935	Nov-18	Feb-22	1,340	160	10	1,510	$ 1,572,840	X
Dade	LITTLE RIVER	521 NW 71 St	800631	Mar-15	Nov-20	1,894	178	1	2,073	$ 7,707	X
North	LIVE OAK	Cooper & Waterman St	300632	Jul-18	Apr-21	543	175	1	719	$ 35,815	X
West	LIVINGSTON	3191 Golden Gate Pkwy	506666	Dec-20	Nov-22	287	1,236	12	1,535	$ 9,372	X
West	LIVINGSTON	3191 Golden Gate Pkwy	506667	Oct-16	Apr-21	1,666	108	10	1,784	$ 150,427	X
East	LOXAHATCHEE	200 Flying Cow Ranch Rd	407661	Aug-16	Jul-21	545	172	5	722	$ 237,938	X
East	LOXAHATCHEE	200 Flying Cow Ranch Rd	407662	Dec-17	Jul-22	2,461	57	11	2,529	$ 3,438,827	X
East	LOXAHATCHEE	200 Flying Cow Ranch Rd	407664	Dec-20	Jun-22	1,673	197	5	1,875	$ 19,492	X
East	LOXAHATCHEE	200 Flying Cow Ranch Rd	407665	Mar-17	Sep-21	2,879	259	11	3,149	$ 1,201,518	X
East	LOXAHATCHEE	200 Flying Cow Ranch Rd	407666	Aug-14	May-21	957	322	2	1,281	$ 139,409	X
North	LPGA	2494 LPGA Blvd (3/4 mile W/O I-95)	108262	Feb-19	May-21	1,392	84	65	1,541	$ 1,153,704	X
Broward	LYONS	900 SE 15th St (McNab Rd)	701133	Sep-16	Aug-20	1,542	156	4	1,702	$ 7,212	X
Broward	LYONS	900 SE 15th St (McNab Rd)	701161	Aug-19	Nov-21	1,931	101	3	2,035	$ 391,426	
North	MACCLENNY	BTWN SR 121 & SR 228 on Jonathan St	300962	Jul-18	Apr-21	318	49	2	369	$ 7,163	X
North	MADISON	610 Ranney Ave	102231	Sep-19	Sep-22	1,347	202	2	1,551	$ 367,412	X
North	MADISON	610 Ranney Ave	102232	Jun-20	Nov-21	250	17	1	268	$ 678,299	X
North	MADISON	610 Ranney Ave	102234	Sep-19	Sep-22	1,024	197	1	1,222	$ 350,454	X
North	MADISON	610 Ranney Ave	102235	Jan-18	Jun-21	1,935	155	1	2,091	$ 247,379	X
North	MADISON	610 Ranney Ave	102236	Sep-18	Jun-21	992	126	1	1,119	$ 100,703	X
Broward	MALLARD	8300 Block Of Southgate Blvd	704561	Jul-19	Mar-22	3,607	163	5	3,775	$ 1,731,144	X
Broward	MALLARD	8300 Block Of Southgate Blvd	704565	Dec-20	Nov-22	2,778	111	1	2,890	$ 8,742	X
Broward	MALLARD	8300 Block Of Southgate Blvd	704569	Feb-19	Aug-22	3,472	222	6	3,700	$ 882,343	X
Broward	MARGATE	6801 Winfield Blvd	702231	Oct-19	Aug-22	1,515	282	5	1,802	$ 973,307	X
Broward	MARGATE	6801 Winfield Blvd	702232	Oct-19	Aug-22	1,614	53	2	1,669	$ 473,009	X
Broward	MARGATE	6801 Winfield Blvd	702233	Jun-19	Jan-22	1,322	24	2	1,348	$ 2,254,985	X
Broward	MARGATE	6801 Winfield Blvd	702237	Jul-19	May-22	2,213	156	5	2,374	$ 2,591,992	X
Broward	MARGATE	6801 Winfield Blvd	702261	Oct-19	Aug-22	1,119	351	2	1,472	$ 511,668	
Dade	MARION	8045 SW 117th Ave	802732	Dec-20	Nov-22	1,329	227	-	1,556	$ 18,232	X
Dade	MARION	8045 SW 117th Ave	802733	Dec-20	Aug-22	384	123	-	507	$ 21,894	X
Dade	MARION	8045 SW 117th Ave	802739	Jun-19	Sep-21	1,514	166	-	1,680	$ 368,541	
East	MARYMOUNT	Clintmore and Military Tr	410032	Sep-18	Jul-21	-	76	4	80	$ 161,503	X
North	MATANZAS	800 State Road 206 E	102531	Jul-18	Aug-21	1,078	197	4	1,279	$ 238,596	X
North	MATANZAS	800 State Road 206 E	102533	Jun-20	Aug-21	2,638	174	20	2,832	$ 1,414,054	X
North	MATANZAS	800 State Road 206 E	102534	Sep-20	Sep-22	52	13	1	66	$ 242,107	X
Broward	MCARTHUR	2000 NW 51 Ave	702733	Oct-19	Aug-22	1,664	65	2	1,731	$ 785,227	X
Broward	MCARTHUR	2000 NW 51 Ave	702737	Nov-18	May-22	1,138	249	1	1,388	$ 2,414,748	X
Broward	MCARTHUR	2000 NW 51 Ave	702738	Dec-20	Nov-22	2,027	123	4	2,154	$ 11,026	
Broward	MCARTHUR	2000 NW 51 Ave	702739	Jun-18	Jun-21	1,483	124	2	1,609	$ 91,301	X
Broward	MCARTHUR	2000 NW 51 Ave	702740	Nov-20	Nov-22	2,239	77	1	2,317	$ 49,064	X
Broward	MCARTHUR	2000 NW 51 Ave	702741	Nov-20	Aug-22	2,186	76	1	2,263	$ 31,817	X
North	MCDONNELL	6015 Sisson Rd (W/O US#1)	203931	Jun-20	Aug-23	1,264	53	3	1,320	$ 11,341	X
North	MCDONNELL	6015 Sisson Rd (W/O US#1)	203933	Dec-20	Jun-23	541	215	3	759	$ 6,300	X
North	MCMEEKIN	951 County Rd 20A	100531	Sep-19	Sep-22	986	97	-	1,083	$ 431,555	X
North	MCMEEKIN	951 County Rd 20A	100532	Nov-19	Sep-22	172	19	3	194	$ 184,001	X
North	MELBOURNE	712 Silver Palm Ave	200531	Jul-19	Nov-21	515	126	-	641	$ 1,271,879	X
North	MELBOURNE	712 Silver Palm Ave	200533	Feb-20	Nov-22	397	189	3	589	$ 31,817	X
North	MELBOURNE	712 Silver Palm Ave	200536	May-20	Nov-22	924	532	7	1,463	$ 3,505	X
Dade	MEMORIAL	5310 Miami Gardens Dr	811831	Dec-20	Nov-22	1,522	105	-	1,627	$ 25,792	X
Dade	MEMORIAL	5310 Miami Gardens Dr	811832	Dec-20	Mar-23	1,144	167	-	1,311	$ 4,765	X
Dade	MERCHANDISE	7255 NW 7th St	807237	Aug-19	Jun-21	1,197	175	-	1,372	$ 63,604	X
North	MERRITT	155 S Courtenay Pkwy	205432	Sep-14	May-21	1,045	235	-	1,280	$ 117,898	X
West	METRO	11801 Lacy Ln	506161	Jul-19	Mar-22	1,256	300	-	1,556	$ 1,791,604	X
West	METRO	11801 Lacy Ln	506163	Nov-18	Jun-22	3,494	243	17	3,754	$ 3,865,164	X
West	METRO	11801 Lacy Ln	506164	Nov-18	Nov-21	1,865	587	-	2,452	$ 2,624,317	X
Dade	MIAMI LAKES	14501 NW 77th Ave	807932	Nov-19	Dec-21	1,577	107	-	1,684	$ 932,552	X
Dade	MIAMI LAKES	14501 NW 77th Ave	807935	Jun-19	Mar-22	1,636	265	3	1,904	$ 962,314	X
Dade	MIAMI LAKES	14501 NW 77th Ave	807961	Jul-18	Sep-21	1,360	251	1	1,612	$ 512,705	X
Dade	MIAMI SHORES	500 NW 93 St	803435	Dec-20	Nov-22	1,481	108	-	1,589	$ 12,010	X
Dade	MIAMI SHORES	500 NW 93 St	803437	Mar-15	Sep-21	1,290	136	1	1,427	$ 1,652,104	X
Dade	MIAMI SHORES	500 NW 93 St	803439	Nov-15	Aug-21	1,533	183	4	1,720	$ 23,950	X
Dade	MILAM	3400 NW 79th Ave	808161	Aug-19	Jun-21	2,194	249	3	2,446	$ 174,010	
Dade	MILAM	3400 NW 79th Ave	808162	Apr-15	Aug-20	-	503	-	503	$ 586,234	
Dade	MILAM	3400 NW 79th Ave	808165	Oct-14	Jun-21	522	387	3	912	$ 207,012	X
Dade	MILAM	3400 NW 79th Ave	808169	Apr-15	Jul-21	-	560	-	560	$ 1,053,062	
East	MILITARY TRAIL	520 S Military Tr	403035	May-18	Jun-23	1,614	187	1	1,802	$ 1,669,104	X
East	MILITARY TRAIL	520 S Military Tr	403037	Mar-15	Jun-21	615	83	2	700	$ 264,667	X
East	MILITARY TRAIL	520 S Military Tr	403038	Jan-18	Oct-21	2,096	59	-	2,155	$ 858,646	
Dade	MILLER	10750 SW 58th St	805635	May-16	May-21	1,082	170	1	1,253	$ 35,287	X
Dade	MILLER	10750 SW 58th St	805636	Dec-20	Aug-22	1,782	36	1	1,819	$ 12,168	X
North	MIMS	3528 W Main St	202232	May-19	Sep-21	1,410	110	2	1,522	$ 2,582,133	X
North	MIMS	3528 W Main St	202233	Nov-19	Sep-22	1,092	64	1	1,157	$ 871,310	X
North	MIMS	3528 W Main St	202234	Oct-19	Sep-22	1,439	166	5	1,610	$ 967,797	X
North	MINUTEMAN	105 S Brevard Ave	201831	Oct-14	Jun-21	2,009	89	5	2,103	$ 24,523	X
North	MINUTEMAN	105 S Brevard Ave	201832	Sep-18	Jul-21	820	96	8	924	$ 88,659	X
Dade	MITCHELL	13607 SW 92nd Ave	809232	Dec-20	Nov-22	23	572	1	596	$ 12,010	
Dade	MITCHELL	13607 SW 92nd Ave	809233	Aug-19	Dec-21	33	134	1	168	$ 377,162	X
Broward	MOFFETT	2149 Fletcher St	704132	Aug-19	Aug-22	2,158	236	1	2,395	$ 516,873	X
Broward	MOFFETT	2149 Fletcher St	704134	Aug-19	Aug-22	1,951	139	1	2,091	$ 744,614	X
East	MONTEREY	999 SE Ruhnke St	408333	Mar-15	May-21	925	476	1	1,402	$ 248,891	X
East	MONTEREY	999 SE Ruhnke St	408335	Dec-20	Aug-22	369	228	-	597	$ 22,878	X
Broward	MOTOROLA	7641 W Sunrise Blvd	704061	Nov-13	Sep-20	2,114	230	-	2,344	$ 228,878	X
Broward	MOTOROLA	7641 W Sunrise Blvd	704063	Oct-19	Aug-22	2,099	82	4	2,185	$ 950,661	X
Broward	MOTOROLA	7641 W Sunrise Blvd	704067	Oct-19	Aug-22	1,333	290	1	1,624	$ 768,917	X
Broward	MOTOROLA	7641 W Sunrise Blvd	704070	May-18	May-21	565	219	3	787	$ 115,690	X
North	MOULTRIE	590 Shores Blvd	104934	Sep-18	Jun-21	1,185	185	3	1,373	$ 576,615	X
West	MURDOCK	2025 Tamiami Tr	502066	Aug-18	Aug-21	2,560	53	4	2,617	$ 70,727	X
West	MURDOCK	2025 Tamiami Tr	502067	Nov-18	Mar-22	2,238	75	5	2,318	$ 3,040,713	X
West	NAPLES	366 12th St NE	501233	Mar-16	Dec-20	1,069	470	4	1,543	$ 9,324	X
West	NAPLES	366 12th St NE	501238	May-18	Jun-21	722	161	7	890	$ 287,800	X
West	NAPLES	366 12th St NE	501239	Sep-18	Aug-21	1,374	438	6	1,818	$ 356,500	X
North	NASH	S/O Nash Rd on Turner Rd (W/O I-75)	306132	Aug-18	Jun-21	1,032	208	12	1,252	$ 40,112	X
Dade	NATOMA	2475 SW 16th Ct	805232	Mar-15	Sep-21	1,641	114	3	1,758	$ 101,578	X
Dade	NATOMA	2475 SW 16th Ct	805233	Nov-15	Feb-21	1,660	124	3	1,787	$ 1,057,103	X
Dade	NATOMA	2475 SW 16th Ct	805240	Jul-16	Sep-21	1,258	39	3	1,300	$ 887,657	X
Dade	NEWTON	15951 SW 42nd St	810361	Oct-18	Mar-22	2,006	49	-	2,055	$ 1,212,273	X
Broward	NOBHILL	Broward Blvd E/O Nobhill Rd	706662	Nov-18	Jun-21	2,824	149	4	2,977	$ 265,773	X
Broward	NOBHILL	Broward Blvd E/O Nobhill Rd	706663	Nov-14	Apr-21	2,646	266	2	2,914	$ 138,202	X
Broward	NOBHILL	Broward Blvd E/O Nobhill Rd	706664	Nov-18	Jan-22	1,459	119	3	1,581	$ 1,704,112	X
Dade	NORMANDY BEACH	8716 Harding Ave	801038	Nov-18	May-21	1,461	176	3	1,640	$ 94,407	
East	OAKES	2280 S US#1	406232	Sep-14	Jun-21	2,182	246	2	2,430	$ 4,193	X

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
East	OAKES	2280 S US#1	406235	Oct-16	Dec-21	2,114	169	1	2,284	$ 1,109,926	X
Broward	OAKLAND PARK	NE 38 St & 5 Ave	700433	Jul-19	May-22	1,391	562	2	1,955	$ 2,448,882	X
Broward	OAKLAND PARK	NE 38 St & 5 Ave	700434	Jul-19	Aug-22	1,296	209	6	1,511	$ 573,193	X
Broward	OAKLAND PARK	NE 38 St & 5 Ave	700438	Jul-18	Dec-21	1,205	262	4	1,471	$ 908,283	X
Broward	OAKLAND PARK	NE 38 St & 5 Ave	700441	Jul-19	Aug-22	759	243	1	1,003	$ 473,000	X
Broward	OAKLAND PARK	NE 38 St & 5 Ave	700461	Jul-19	Jan-22	317	15	-	332	$ 1,554,486	
Dade	OJUS	19301 NE 28th Ave	804931	Apr-15	Apr-21	1,032	467	1	1,500	$ 439,695	X
Dade	OJUS	19301 NE 28th Ave	804932	Mar-15	Aug-22	809	47	4	860	$ 1,558,353	X
East	OKEECHOBEE	65 SE 6th Ave	401635	Apr-17	Mar-21	1,469	89	3	1,561	$ 802,037	X
East	OLYMPIA	13400 SE Powerline Ave	401761	Nov-19	Jul-22	797	289	8	1,094	$ 1,516,303	X
East	OLYMPIA	13400 SE Powerline Ave	401764	Aug-20	Nov-23	296	85	12	393	$ 9,608	X
Dade	OLYMPIA HEIGHTS	9750 SW 36th St	808934	Mar-16	Mar-21	1,346	236	-	1,582	$ 193,209	X
West	ONECO	508 53rd Ave West	502932	May-18	Jun-21	2,440	182	3	2,625	$ 130,109	X
West	ONECO	508 53rd Ave West	502938	May-18	Jun-22	2,727	197	3	2,927	$ 273,124	X
North	ONEIL	335 Nassauville Rd	307761	May-17	May-22	2,958	409	30	3,397	$ 622,002	X
North	ONEIL	335 Nassauville Rd	307762	Nov-19	Sep-22	1,174	61	17	1,252	$ 444,266	X
Dade	OPA LOCKA	2201 NW 135 St	801231	Nov-15	Jan-21	1,768	260	2	2,030	$ 126,504	
Dade	OPA LOCKA	2201 NW 135 St	801233	Nov-15	Dec-21	1,333	745	5	2,083	$ 477,784	X
Dade	OPA LOCKA	2201 NW 135 St	801234	Dec-20	Mar-23	1,372	113	1	1,486	$ 11,459	X
Dade	OPA LOCKA	2201 NW 135 St	801236	Dec-20	Nov-22	515	81	1	597	$ 354	
North	ORANGEDALE	3885 County Road 16-A	101862	Nov-19	Sep-22	2,148	252	4	2,404	$ 346,213	X
North	ORANGEDALE	3885 County Road 16-A	101863	Jun-18	Sep-21	3,160	108	29	3,297	$ 1,824,700	X
North	ORANGEDALE	3885 County Road 16-A	101864	Feb-18	Sep-21	2,040	73	17	2,130	$ 1,114,675	X
West	ORANGETREE	625 24th Ave NW	507362	Nov-16	Apr-21	3,274	516	3	3,793	$ 164,724	X
West	ORANGETREE	625 24th Ave NW	507365	Nov-18	Jun-22	1,840	86	63	1,989	$ 7,959,419	X
North	ORMOND	228 N Orchard St	101132	Jun-20	Nov-21	746	167	1	914	$ 814,603	X
North	ORMOND	228 N Orchard St	101134	Sep-20	Nov-22	1,940	86	-	2,026	$ 14,097	X
North	ORMOND	228 N Orchard St	101135	Jan-18	Apr-21	1,112	78	1	1,191	$ 236,870	X
North	OSTEEN	420 N SR 415	207863	Dec-20	Aug-22	705	149	3	857	$ 10,435	X
East	PAHOKEE	660 S State Market Rd	400831	Jul-19	Aug-22	262	34	-	296	$ 8,230	X
East	PAHOKEE	660 S State Market Rd	400832	Dec-20	Aug-23	280	84	19	383	$ 2,914	X
North	PALATKA	1807 Twigg St	100431	Oct-19	Sep-22	785	143	1	929	$ 301,423	X
North	PALATKA	1807 Twigg St	100433	Nov-18	Dec-21	1,680	148	4	1,832	$ 1,620,974	X
North	PALATKA	1807 Twigg St	100434	Oct-19	Sep-22	727	170	4	901	$ 317,765	X
North	PALATKA	1807 Twigg St	100435	Nov-19	Sep-22	740	318	4	1,062	$ 404,923	X
Broward	PALM AIRE	6275 NW 31st Ave	703632	Oct-19	Jun-21	2,781	80	2	2,863	$ 27,645	
Broward	PALM AIRE	6275 NW 31st Ave	703636	Oct-19	May-22	2,005	134	3	2,142	$ 2,008,975	X
Broward	PALM AIRE	6275 NW 31st Ave	703640	Nov-19	Aug-22	1,736	130	2	1,868	$ 568,520	X
North	PALM BAY	2197 Franklin Dr NE	201633	Sep-19	Sep-22	1,655	266	1	1,922	$ 711,960	X
North	PALM BAY	2197 Franklin Dr NE	201635	Sep-18	Dec-21	2,336	117	-	2,453	$ 2,612,830	X
North	PALM BAY	2197 Franklin Dr NE	201638	Sep-17	Aug-21	1,633	186	-	1,819	$ 787,468	X
West	PALMA SOLA	7100 1st Ave W	502561	Sep-14	Aug-21	2,965	200	49	3,214	$ 117,738	X
West	PALMA SOLA	7100 1st Ave W	502562	Nov-13	Aug-22	2,503	157	20	2,680	$ 145,290	X
Dade	PALMETTO	6625 W 22nd Ct	811062	Jun-19	Dec-21	1,802	651	-	2,453	$ 1,909,466	X
West	PANACEA	2295 Commerce Pkwy	508861	Nov-18	Jan-23	3,180	157	19	3,356	$ 1,439,539	X
West	PANACEA	2295 Commerce Pkwy	508864	Nov-18	Jan-23	2,348	42	22	2,412	$ 766,801	X
West	PARK	5115 University Pkwy	505361	Jun-18	Jun-21	2,991	297	1	3,289	$ 172,768	
West	PARK	5115 University Pkwy	505363	Sep-17	Jun-21	3,214	260	10	3,484	$ 133,095	X
West	PARK	5115 University Pkwy	505364	Dec-15	Nov-20	2,677	179	-	2,856	$ 36,260	
West	PARK	5115 University Pkwy	505365	Oct-18	Jan-22	3,478	128	11	3,617	$ 655,160	X
West	PARRISH	10307 US Hwy 301 N	507562	Dec-20	Mar-23	3,196	210	13	3,419	$ 512	
West	PARRISH	10307 US Hwy 301 N	507563	Jun-19	Apr-22	2,870	116	25	3,011	$ 1,918,211	X
West	PARRISH	10307 US Hwy 301 N	507564	Dec-20	Mar-23	2,688	91	3	2,782	$ 9,608	X
North	PATRICK	988 Highway A1A N	201134	Sep-18	Sep-21	1,166	61	8	1,235	$ 1,394,845	X
North	PATRICK	988 Highway A1A N	201135	Jul-19	Nov-21	1,010	161	1	1,172	$ 1,299,290	X
West	PAYNE	1123 N Tamiami Trail	502832	Dec-20	Nov-22	1,143	118	2	1,263	$ 23,784	X
West	PAYNE	1123 N Tamiami Trail	502834	Dec-20	Nov-22	1,376	143	14	1,533	$ 16,184	X
West	PAYNE	1123 N Tamiami Trail	502835	Sep-15	Jun-21	1,231	166	5	1,402	$ 29,861	X
West	PAYNE	1123 N Tamiami Trail	502837	Dec-20	Nov-22	462	77	6	545	$ 15,160	X
Broward	PEMBROKE	4001 SW 19th St	702434	Oct-19	Aug-22	2,011	558	4	2,573	$ 1,182,273	X
Broward	PEMBROKE	4001 SW 19th St	702437	Oct-19	Aug-22	1,846	125	2	1,973	$ 811,946	X
Dade	PENNSUCO	10850 NW 107th Ave	807162	Dec-15	Jun-21	92	479	-	571	$ 201,612	X
Dade	PERRINE	18400 SW 107th Ave	804237	Oct-17	Mar-22	1,159	211	-	1,370	$ 969,306	X
Broward	PERRY	8899 Pembroke Rd	702831	Dec-20	Nov-22	2,362	152	5	2,519	$ 19,728	X
Broward	PERRY	8899 Pembroke Rd	702834	Dec-20	Nov-22	2,015	95	3	2,113	$ 13,467	X
Broward	PERRY	8899 Pembroke Rd	702836	Jun-19	Mar-22	2,221	88	2	2,311	$ 1,945,700	
Broward	PERRY	8899 Pembroke Rd	702837	Dec-20	Mar-23	1,253	172	4	1,429	$ 15,633	X
West	PHILLIPPI	2050 Fiesta St	503031	Nov-20	Nov-22	1,810	239	5	2,054	$ 68,989	
West	PHILLIPPI	2050 Fiesta St	503035	Dec-20	Aug-22	1,010	66	-	1,076	$ 17,129	
West	PHILLIPPI	2050 Fiesta St	503039	Jul-18	Jan-22	2,215	379	-	2,594	$ 201,240	X
Broward	PHOENIX	8401 Southgate Blvd	705461	Feb-19	Jun-21	2,562	171	4	2,737	$ 8,414	X
West	PINE RIDGE	7100 Goodlete Frank Rd	504364	Dec-20	Nov-22	1,195	287	14	1,496	$ 5,867	X
Broward	PINEHURST	2101 SW 9 Ave	700331	Jun-18	Jul-22	1,913	44	4	1,961	$ 2,490,242	X
Broward	PINEHURST	2101 SW 9 Ave	700332	Nov-18	Jul-22	398	380	3	781	$ 2,645,948	X
Broward	PINEHURST	2101 SW 9 Ave	700334	Oct-14	Jun-21	286	287	1	574	$ 46,276	X
Broward	PINEHURST	2101 SW 9 Ave	700338	Nov-18	May-22	127	183	2	312	$ 2,647,520	X
Broward	PINEHURST	2101 SW 9 Ave	700342	Nov-16	Jun-21	192	174	-	366	$ 11,882	X
East	PINEWOOD	16701 S SR 7	409962	Nov-17	Apr-21	1,600	260	3	1,863	$ 509,632	
East	PINEWOOD	16701 S SR 7	409963	Jan-17	Nov-21	3,721	410	22	4,153	$ 1,871,015	X
Broward	PLANTATION	4900 W Broward Blvd	701633	May-18	Jul-22	1,250	61	7	1,318	$ 4,136,355	X
Broward	PLANTATION	4900 W Broward Blvd	701635	Nov-19	Aug-22	1,913	231	1	2,145	$ 1,041,533	X
Broward	PLANTATION	4900 W Broward Blvd	701637	Oct-19	Aug-22	1,083	200	5	1,288	$ 939,011	X
East	PLATT	SCL RR & SR 710, 2 miles NW of Indiantown	404631	Dec-20	Mar-23	2,027	330	8	2,365	$ 13,034	X
East	PLATT	SCL RR & SR 710, 2 miles NW of Indiantown	404632	Dec-20	Aug-22	97	66	-	163	$ 4,174	X
Broward	PLAYLAND	4750 SW 42nd Ave	701233	Mar-15	Jun-21	2,360	260	4	2,624	$ 18,760	X
Broward	PLAYLAND	4750 SW 42nd Ave	701235	Nov-15	Aug-20	1,481	128	4	1,613	$ 27,515	X
Broward	PLAYLAND	4750 SW 42nd Ave	701236	Nov-16	May-21	1	132	-	133	$ 38,146	
East	PLAZA	1165 NW St Lucie West Blvd	410162	Feb-19	Apr-22	1,570	62	-	1,632	$ 1,607,767	
East	PLAZA	1165 NW St Lucie West Blvd	410164	Nov-19	May-22	1,890	36	-	1,926	$ 1,774,134	
East	PLUMOSUS	725 Indian Creek Pkwy	408963	Dec-17	Jun-22	2,443	715	1	3,159	$ 3,428,843	X
West	POLO	2401 Lakewood Ranch Blvd	507163	Nov-18	Jun-21	2,906	231	6	3,143	$ 437,679	X
West	POLO	2401 Lakewood Ranch Blvd	507164	Oct-18	Jun-21	1,437	566	-	2,003	$ 15,357	
Broward	POMPANO	1202 Powerline Rd	700534	Aug-18	Jun-21	642	186	2	830	$ 93,151	X
North	PORT ORANGE	3000 Spruce Creek Rd	100833	Dec-20	Nov-22	1,736	195	1	1,932	$ 5,592	X
North	PORT ORANGE	3000 Spruce Creek Rd	100836	Oct-20	Aug-22	1,068	242	2	1,312	$ 14,806	X
North	PORT ORANGE	3000 Spruce Creek Rd	100839	Oct-20	Aug-22	653	205	-	858	$ 14,570	X
East	PORT SEWALL	4250 SE Federal Hwy	404932	May-19	May-22	1,015	191	2	1,208	$ 1,641,235	X
East	PORT SEWALL	4250 SE Federal Hwy	404933	Dec-20	Nov-22	1,517	247	5	1,769	$ 9,805	X
East	PORT SEWALL	4250 SE Federal Hwy	404934	Dec-20	Nov-22	146	623	2	771	$ 9,017	X
East	PORT SEWALL	4250 SE Federal Hwy	404936	Nov-20	Mar-23	1,529	210	1	1,740	$ 32,408	X

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
North	PRICE	Pounds Hammock Rd, S/O Hwy 100 E	305231	Aug-18	Sep-21	1,118	143	9	1,270	$ 1,861,195	X
East	PRIMAVISTA	6501 S. US# 1	405531	Dec-20	Nov-22	2,310	49	-	2,359	$ 12,246	X
East	PRIMAVISTA	6501 S. US# 1	405532	Nov-18	May-22	1,839	62	-	1,901	$ 2,276,555	X
East	PRIMAVISTA	6501 S. US# 1	405533	Dec-20	Nov-22	1,520	86	-	1,606	$ 1,890	
East	PRIMAVISTA	6501 S. US# 1	405535	Dec-20	Nov-22	724	268	1	993	$ 10,317	
East	PRIMAVISTA	6501 S. US# 1	405536	Jan-18	May-21	1,669	50	-	1,719	$ 21,946	X
North	PRINGLE	9699 N US#1	110361	Nov-18	Jun-21	2,421	502	5	2,928	$ 571,379	X
West	PROCTOR	6161 Proctor Rd	505161	Jun-18	Jun-21	1,527	141	5	1,673	$ 139,494	X
West	PROCTOR	6161 Proctor Rd	505163	Nov-18	Dec-21	1,598	324	9	1,931	$ 2,206,496	
Broward	PROGRESSO	1430 Progresso Dr	709261	Nov-18	Jun-21	741	111	2	854	$ 123,819	X
Broward	PROGRESSO	1430 Progresso Dr	709262	May-18	Mar-22	2,401	277	7	2,685	$ 2,627,948	X
West	PUNTA GORDA	122 E Charlotte Ave	501531	Nov-18	Jun-22	1,227	285	6	1,518	$ 2,817,459	X
West	PUNTA GORDA	122 E Charlotte Ave	501534	Nov-18	May-22	1,684	162	7	1,853	$ 1,665,471	X
West	PUNTA GORDA	122 E Charlotte Ave	501536	Jun-19	Jun-23	1,553	155	7	1,715	$ 1,541,878	X
East	PURDY LANE	2200 S Military Tr	404438	Apr-15	Jun-21	1,854	193	1	2,048	$ 194,439	
East	QUANTUM	1525 High Ridge Rd	407933	Dec-13	Aug-21	1,023	344	1	1,368	$ 108,103	X
Dade	RED ROAD	6702 W 2 Ct	806835	Dec-20	Mar-23	1,370	122	2	1,494	$ 1,772	X
Dade	RED ROAD	6702 W 2 Ct	806840	Jun-19	Dec-21	-	22	4	26	$ 569,582	X
North	REED	2455 Carmen Dr	106533	Sep-18	Jun-21	946	237	3	1,186	$ 343,265	X
North	REGIS	US#1, 1.7 miles north of Bunnell (N/O Lehigh RR)	106361	Jun-18	Sep-21	1,277	338	21	1,636	$ 5,213,972	X
North	REGIS	US#1, 1.7 miles north of Bunnell (N/O Lehigh RR)	106362	Aug-16	Apr-21	1,913	30	3	1,946	$ 10,508	X
Broward	REMSBURG	Riverside Dr & Wiles Rd	705862	Jul-19	Jul-22	2,655	289	-	2,944	$ 2,532,757	
Broward	REMSBURG	Riverside Dr & Wiles Rd	705865	Dec-20	Mar-23	1,531	112	1	1,644	$ 20,673	X
Broward	REMSBURG	Riverside Dr & Wiles Rd	705867	Dec-20	Nov-22	1,934	140	3	2,077	$ 10,199	X
Broward	REMSBURG	Riverside Dr & Wiles Rd	705868	Dec-20	Nov-22	1,833	138	2	1,973	$ 9,254	X
Broward	RESERVATION	6400 Stirling Rd	703431	Nov-18	May-22	1,680	179	4	1,863	$ 2,446,383	X
North	RINEHART	1897 Rinehart Rd	207933	Jun-20	Nov-21	364	157	1	522	$ 806,623	X
North	RINEHART	1897 Rinehart Rd	207935	Aug-19	Apr-21	655	125	-	780	$ 21,454	X
North	RINEHART	1897 Rinehart Rd	207936	Aug-19	May-21	708	155	-	863	$ 112,962	X
East	RIO	1351NE Savannah Rd	407033	Feb-19	Jul-22	1,294	214	2	1,510	$ 1,364,226	X
East	RIO	1351NE Savannah Rd	407035	Feb-19	May-22	969	476	2	1,447	$ 1,374,547	X
East	RIO	1351NE Savannah Rd	407036	May-19	Jul-22	1,420	143	1	1,564	$ 1,501,778	X
Dade	RIVERSIDE	4631 NW 4 St	800537	Jul-18	Jun-23	1,273	69	-	1,342	$ 553,822	X
Broward	ROCK ISLAND	2900 NW 31 Ave	701831	Dec-20	Mar-23	2,172	150	2	2,324	$ 9,608	X
Broward	ROCK ISLAND	2900 NW 31 Ave	701832	Oct-19	Aug-22	2,480	143	5	2,628	$ 876,099	X
Broward	ROCK ISLAND	2900 NW 31 Ave	701834	Oct-19	Mar-22	107	160	-	267	$ 1,432,981	
Broward	ROCK ISLAND	2900 NW 31 Ave	701836	Dec-20	Nov-22	1,846	170	4	2,020	$ 7,954	X
Broward	ROCK ISLAND	2900 NW 31 Ave	701838	Dec-20	Nov-22	1,507	123	3	1,633	$ 7,679	X
Broward	ROCK ISLAND	2900 NW 31 Ave	701839	Dec-20	Jun-23	1,438	517	5	1,960	$ 15,869	X
North	ROCKLEDGE	2893 Huntington Ln	203134	Mar-18	Apr-21	1,389	12	4	1,405	$ 1,464,287	X
North	ROCKLEDGE	2893 Huntington Ln	203135	Mar-20	Nov-22	451	226	3	680	$ 3,150	X
East	ROEBUCK	2385 Saratoga Rd	406331	Jul-16	Jul-21	1,136	48	-	1,184	$ 25,156	X
East	ROEBUCK	2385 Saratoga Rd	406333	Jun-18	May-21	1,949	87	-	2,036	$ 81,234	X
East	ROEBUCK	2385 Saratoga Rd	406335	Aug-16	Feb-21	823	60	-	883	$ 3,145	
Broward	ROHAN	1750 SW 31 Ave	703035	Nov-18	Mar-22	908	22	2	932	$ 2,543,192	X
Dade	RONEY	2330 Liberty Ave	809335	Nov-15	Nov-20	244	38	3	285	$ 40,460	
Dade	RONEY	2330 Liberty Ave	809341	Nov-15	Sep-21	1,151	89	-	1,240	$ 68,132	
East	ROSEDALE	5750 12th St	410761	Nov-18	Aug-21	1,298	89	12	1,399	$ 851,268	X
East	ROSEDALE	5750 12th St	410762	Nov-18	Dec-21	2,103	63	-	2,166	$ 1,457,025	X
Dade	ROSELAWN	1485 W 37th St	807031	Oct-18	Apr-21	2,063	97	-	2,160	$ 194,411	
Dade	ROSELAWN	1485 W 37th St	807038	Oct-15	Nov-20	1,273	83	-	1,356	$ 4,200	X
East	ROSS	4948 Donald Ross Rd	408163	Dec-20	Nov-22	2,532	169	-	2,701	$ 9,332	X
East	ROSS	4948 Donald Ross Rd	408168	Dec-20	Mar-23	2,369	384	1	2,754	$ 5,592	X
West	ROTONDA	149 Boundry Blvd	505665	Oct-15	Jun-21	2,259	407	26	2,692	$ 514,225	X
West	RUBONIA	1201 49 St E	505261	Dec-20	Aug-23	1,575	495	18	2,088	$ 18,468	X
West	RUBONIA	1201 49 St E	505262	Dec-20	Aug-23	3,116	310	16	3,442	$ 4,568	X
East	RYDER	8125 PGA Blvd	410661	Dec-20	Apr-22	1,809	329	-	2,138	$ 14,491	
East	SABAL	350 NW Enterprise Rd	408763	Jul-18	May-21	3,039	291	-	3,330	$ 55,364	X
Broward	SAMPLE ROAD	1501 E Sample Rd	701031	Sep-16	Aug-20	1,735	151	4	1,890	$ 24,640	X
Broward	SAMPLE ROAD	1501 E Sample Rd	701038	Oct-19	Aug-22	2,244	326	1	2,571	$ 886,892	
Broward	SAMPLE ROAD	1501 E Sample Rd	701039	Nov-15	Mar-21	901	222	1	1,124	$ 91,949	X
Broward	SAMPLE ROAD	1501 E Sample Rd	701041	Jun-19	Jan-22	916	91	2	1,009	$ 919,713	X
West	SAN CARLOS	7501 Alico Rd	507261	Jul-19	Apr-22	2,318	455	12	2,785	$ 3,621,451	X
North	SAN MATEO	380 S Hwy 17	108433	Sep-18	Oct-21	1,009	219	3	1,231	$ 1,467,507	X
East	SANDALFOOT	22859 Tradewind Rd	405034	Dec-20	Nov-22	999	99	6	1,104	$ 14,963	X
East	SANDALFOOT	22859 Tradewind Rd	405035	Dec-20	Nov-22	2,094	54	5	2,153	$ 10,120	X
East	SANDALFOOT	22859 Tradewind Rd	405036	Dec-20	Mar-23	2,205	202	3	2,410	$ 11,144	X
North	SANFORD	2600 W 1st St	200133	Dec-19	Sep-22	1,370	437	2	1,809	$ 936,052	X
West	SARASOTA	1025 Orange Ave N	500132	Jun-18	Aug-21	726	334	8	1,068	$ 100,248	X
West	SARASOTA	1025 Orange Ave N	500164	Oct-18	Dec-21	725	155	5	885	$ 796,723	X
North	SARNO	4735 Aurora Rd	205632	Nov-19	Sep-22	970	363	2	1,335	$ 673,949	X
North	SARNO	4735 Aurora Rd	205633	Nov-19	Sep-22	829	405	3	1,237	$ 641,787	X
North	SATELLITE	1403 S Patrick Dr	204133	Jan-18	Jul-21	1,596	104	2	1,702	$ 137,704	X
East	SAVANNAH	8895 S US#1	406434	Feb-19	May-22	1,562	146	-	1,708	$ 1,471,637	X
Broward	SAWGRASS	14299 NW 8th St	707463	Oct-19	Jan-22	-	67	1	68	$ 952,408	
Broward	SAWGRASS	14299 NW 8th St	707464	Nov-18	Nov-21	715	143	2	860	$ 2,073,978	X
North	SCOTTSMOOR	1631 S. US Highway 1	105061	Sep-19	Sep-22	2,032	256	2	2,290	$ 1,029,884	X
Dade	SEABOARD	8100 NW 37 Ave	803631	Oct-14	Jun-21	1,388	168	-	1,556	$ 178,810	X
East	SEBASTIAN	10999 County Rd 512	405761	Feb-19	Apr-22	2,233	226	1	2,460	$ 3,404,109	X
East	SEBASTIAN	10999 County Rd 512	405764	Feb-19	Nov-21	1,395	42	-	1,437	$ 1,346,956	
Dade	SEMINOLA	500 W 21st St	808532	Jun-18	Dec-21	2,200	352	1	2,553	$ 1,874,926	X
Dade	SEMINOLA	500 W 21st St	808534	Apr-15	Jun-21	471	233	-	704	$ 254,415	X
Dade	SEMINOLA	500 W 21st St	808537	Oct-18	Mar-22	1,385	463	3	1,851	$ 1,928,273	X
Dade	SEMINOLA	500 W 21st St	808538	Oct-18	Dec-21	4	69	-	73	$ 254,476	
Broward	SHERIDAN	8851 Sheridan St	707031	Nov-20	Nov-22	1,791	118	4	1,913	$ 66,626	X
Broward	SHERIDAN	8851 Sheridan St	707033	Dec-20	Nov-22	1,006	116	1	1,123	$ 25,201	X
Broward	SHERIDAN	8851 Sheridan St	707034	Jun-19	Jan-22	1,372	68	5	1,445	$ 1,581,809	X
East	SHERMAN	4701 SR 710	406062	Sep-13	Jun-21	3,546	371	4	3,921	$ 221,957	X
East	SHERMAN	4701 SR 710	406063	Sep-15	Jun-21	2,672	319	3	2,994	$ 2,166,198	
East	SHERMAN	4701 SR 710	406064	Dec-20	Mar-23	544	225	2	771	$ 10,750	X
Broward	SILVERLAKES	N/O Miramar Pkwy, W/O SW 196 Ave	708561	Oct-19	Aug-22	1,050	52	-	1,102	$ 706,987	X
Dade	SIMPSON	199 SW 14th St	809932	Jul-18	Mar-21	797	27	-	824	$ 105,325	
Dade	SIMPSON	199 SW 14th St	809936	Jun-16	Jul-22	1,714	141	3	1,858	$ 1,217,520	X
Broward	SISTRUNK	420 NW 6 Ave	700132	Jul-19	Aug-22	1,666	532	3	2,201	$ 1,309,489	X
Broward	SISTRUNK	420 NW 6 Ave	700134	Nov-17	Jun-21	2,338	115	3	2,456	$ 8,755	X
Broward	SISTRUNK	420 NW 6 Ave	700137	Aug-19	Aug-22	3,184	305	6	3,495	$ 934,350	X
Broward	SISTRUNK	420 NW 6 Ave	700138	Jul-19	Mar-22	823	100	1	924	$ 1,220,825	X
Broward	SISTRUNK	420 NW 6 Ave	700144	Mar-15	Jun-21	1,442	253	7	1,702	$ 20,011	X
Dade	SNAKE CREEK	3875 NW 203rd St	808434	Jul-18	Jul-22	1,414	69	-	1,483	$ 775,142	X
West	SOLANA	1405 Solana Rd	503132	Sep-17	Jun-21	2,353	266	12	2,631	$ 164,724	X

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
West	SOLANA	1405 Solana Rd	503134	Dec-15	Jan-21	1,501	280	5	1,786	$ 229,370	X
West	SOLANA	1405 Solana Rd	503135	Dec-20	Aug-22	1,443	73	7	1,523	$ 13,034	X
West	SOLANA	1405 Solana Rd	503136	Nov-16	Nov-21	1,032	177	4	1,213	$ 575,722	X
West	SORRENTO	1001 Bay St	504831	Apr-15	Jun-21	2,116	265	4	2,385	$ 25,595	X
West	SORRENTO	1001 Bay St	504833	Dec-20	Nov-22	1,312	63	2	1,377	$ 13,743	X
West	SORRENTO	1001 Bay St	504834	Dec-20	Aug-23	2,146	99	2	2,247	$ 10,711	X
West	SORRENTO	1001 Bay St	504835	Nov-18	Jun-21	2,210	107	3	2,320	$ 98,115	
East	SOUTH BAY	1249 S US Hwy 27	403632	Dec-17	Feb-22	775	147	3	925	$ 5,061,540	X
North	SOUTH DAYTONA	1601 S Palmetto Ave	100933	Jul-19	Nov-21	1,283	128	2	1,413	$ 918,302	X
North	SOUTH DAYTONA	1601 S Palmetto Ave	100935	Jul-19	Nov-21	1,175	129	7	1,311	$ 1,186,710	X
North	SOUTH DAYTONA	1601 S Palmetto Ave	100937	Feb-19	Jun-21	1,502	95	4	1,601	$ 110,335	X
Dade	SOUTH MIAMI	5797 SW 68th St	802437	Nov-18	Jul-22	1,062	202	8	1,272	$ 398,387	X
West	SOUTH VENICE	150 Grove Rd	503433	Dec-20	Nov-22	1,575	64	1	1,640	$ 14,412	X
West	SOUTH VENICE	150 Grove Rd	503434	Dec-20	Jun-23	1,724	302	2	2,028	$ 14,609	X
West	SOUTH VENICE	150 Grove Rd	503435	Jul-18	Jun-21	2,467	37	4	2,508	$ 17,490	X
East	SOUTHFORK	9781 SW Pratt-Whitney Road	410861	Sep-16	Jan-21	2,908	182	1	3,091	$ 82,299	X
East	SOUTHFORK	9781 SW Pratt-Whitney Road	410862	Feb-19	Jul-22	983	537	1	1,521	$ 3,373,858	X
Broward	SOUTHSIDE	200 SW 7th St	705531	Dec-20	Nov-22	602	157	8	767	$ 13,703	X
Broward	SOUTHSIDE	200 SW 7th St	705532	Dec-20	Nov-22	978	168	16	1,162	$ 7,836	
Broward	SOUTHSIDE	200 SW 7th St	705538	Jul-19	Aug-22	1,660	348	4	2,012	$ 706,005	X
Broward	SOUTHSIDE	200 SW 7th St	705564	Dec-20	Nov-22	1,895	163	2	2,060	$ 16,263	X
Dade	SPOONBILL	16975 NW 97th Ave	811162	Oct-15	May-21	3,099	597	4	3,700	$ 183,611	X
Broward	SPRINGTREE	8801 NW 44th St	704661	Oct-19	Aug-22	2,382	308	5	2,695	$ 719,986	X
North	SPRUCE	5831 Airport Rd	106461	Sep-18	Sep-21	3,213	427	3	3,643	$ 1,926,369	X
North	SPRUCE	5831 Airport Rd	106464	Dec-19	Sep-22	1,357	61	3	1,421	$ 458,982	X
North	SPRUCE	5831 Airport Rd	106465	Sep-19	Sep-22	2,494	186	6	2,686	$ 1,174,588	X
East	SQUARE LAKE	9202 Howell Ln	407731	Jan-18	Oct-21	2,492	161	-	2,653	$ 586,141	
East	SQUARE LAKE	9202 Howell Ln	407732	Jan-18	Dec-21	1,587	257	1	1,845	$ 1,261,244	
East	SQUARE LAKE	9202 Howell Ln	407734	Dec-20	Nov-22	863	61	-	924	$ 15,042	X
East	SQUARE LAKE	9202 Howell Ln	407735	Jun-18	Sep-21	1,683	57	-	1,740	$ 356,324	X
North	ST AUGUSTINE	132 Cedar St	100231	Nov-17	Apr-21	1,239	145	12	1,396	$ 435,864	X
North	ST AUGUSTINE	132 Cedar St	100232	Jul-19	Oct-21	450	323	2	775	$ 452,669	X
North	ST AUGUSTINE	132 Cedar St	100234	Jun-18	Sep-22	104	274	4	382	$ 510,119	X
North	ST AUGUSTINE	132 Cedar St	100235	Nov-17	Jun-21	1,497	236	8	1,741	$ 26,503	X
North	ST AUGUSTINE	132 Cedar St	100236	Nov-19	Sep-22	1,084	309	9	1,402	$ 211,843	X
North	ST JOE	N/O St. Joe Rd on Old Kings Hwy	102364	Jun-20	Mar-23	2,582	153	8	2,743	$ 23,666	X
North	STARKE	Colley Rd & Laura St (SR 261)	303161	Aug-18	Apr-21	572	85	1	658	$ 1,173,286	X
North	STARKE	Colley Rd & Laura St (SR 261)	303162	Jun-17	Jun-21	727	106	1	834	$ 39,754	X
Broward	STIRLING	3941 Thomas St	701732	Nov-18	May-22	949	128	1	1,078	$ 2,651,202	X
Broward	STIRLING	3941 Thomas St	701739	Nov-18	May-22	517	190	1	708	$ 2,412,816	X
Broward	STONEBRIDGE	6600 S Flamingo Rd	704761	Jan-20	Aug-22	2,583	229	6	2,818	$ 1,606,069	X
Broward	STONEBRIDGE	6600 S Flamingo Rd	704763	Aug-14	Jul-21	2,301	257	9	2,567	$ 33,857	
Broward	STONEBRIDGE	6600 S Flamingo Rd	704764	Aug-19	Jan-22	1,623	128	4	1,755	$ 1,514,972	X
Broward	STONEBRIDGE	6600 S Flamingo Rd	704765	Jun-19	Mar-21	2,324	97	3	2,424	$ 46,623	X
Broward	STONEBRIDGE	6600 S Flamingo Rd	704766	Oct-19	Aug-22	1,714	132	1	1,847	$ 1,126,823	X
Broward	STONEBRIDGE	6600 S Flamingo Rd	704767	Dec-17	Mar-22	2,646	72	11	2,729	$ 1,935,377	X
West	SUMMIT	191 Weber Blvd N	509061	Aug-16	Jun-21	3,166	189	3	3,358	$ 78,943	X
Dade	SUNILAND	12250 Sw 82nd Ave	806533	Apr-15	Dec-21	581	125	8	714	$ 909,303	X
North	SUNTREE	7855 N Wickham Rd	204362	Jan-19	Jun-21	2,725	139	-	2,864	$ 348,034	X
North	SUNTREE	7855 N Wickham Rd	204363	Sep-20	Sep-22	2,638	231	-	2,869	$ 584,772	X
North	SUNTREE	7855 N Wickham Rd	204364	Jul-19	Nov-21	569	110	-	679	$ 1,057,956	X
East	SWEATT	31500 NW 224th ST	409363	Sep-17	Jun-21	311	141	2	454	$ 8,978	X
Dade	SWEETWATER	13655 NW 6th St	809765	Aug-18	Jun-23	2,633	186	-	2,819	$ 2,930,975	X
Dade	SWEETWATER	13655 NW 6th St	809767	Aug-18	Mar-22	2,509	30	-	2,539	$ 1,251,523	X
North	SYKES CREEK	970 E. Merritt Island Cswy	201731	Nov-18	Dec-21	457	314	-	771	$ 1,601,032	X
North	SYKES CREEK	970 E. Merritt Island Cswy	201735	Nov-18	Oct-21	1,069	91	-	1,160	$ 2,013,570	X
North	SYKES CREEK	970 E. Merritt Island Cswy	201736	Nov-18	Dec-21	1,564	119	2	1,685	$ 4,287,108	X
North	SYLVAN	7370 Markham Rd	205933	Jun-20	Nov-21	962	123	-	1,085	$ 844,921	X
North	SYLVAN	7370 Markham Rd	205937	Nov-19	Sep-22	745	72	4	821	$ 444,286	X
East	TARTAN	N/O SR 804 on Military Tr	407862	Nov-16	May-21	2,308	108	4	2,420	$ 282,930	X
North	TAYLOR	5055 Spruce Creek Road	104832	Nov-19	Nov-21	1,219	164	2	1,385	$ 1,208,220	
North	TAYLOR	5055 Spruce Creek Road	104833	Jun-20	Nov-21	1,215	24	3	1,242	$ 724,932	X
North	TAYLOR	5055 Spruce Creek Road	104837	Jun-19	May-21	836	19	-	855	$ 176,887	X
East	TERMINAL	1145 23rd St	402131	Oct-13	Oct-20	1,627	161	7	1,795	$ 17,819	X
East	TERMINAL	1145 23rd St	402134	Jul-18	Jan-22	1,265	233	4	1,502	$ 867,374	X
East	TERMINAL	1145 23rd St	402137	Oct-14	Jun-21	2,586	164	-	2,750	$ 497,364	X
East	TESORO	3290 SE Southbend Blvd	411961	Sep-16	Mar-21	1,553	123	-	1,676	$ 32,421	X
West	TICE	10675 SR 80	501832	Feb-19	Jun-22	2,236	193	2	2,431	$ 2,138,769	X
West	TICE	10675 SR 80	501833	Feb-17	May-21	2,230	155	49	2,434	$ 27,039	X
West	TICE	10675 SR 80	501835	Oct-18	Jul-21	2,743	303	36	3,082	$ 9,657	X
Broward	TIMBERLAKE	5300 S University Dr	705231	Nov-18	Mar-22	1,070	261	5	1,336	$ 2,377,615	X
Broward	TIMBERLAKE	5300 S University Dr	705232	Feb-19	Jun-21	634	338	3	975	$ 61,609	X
Broward	TIMBERLAKE	5300 S University Dr	705234	Oct-19	Jul-22	1,606	212	3	1,821	$ 3,371,556	X
Broward	TIMBERLAKE	5300 S University Dr	705235	Jul-18	Jun-21	2,385	398	-	2,783	$ 365,211	X
Broward	TIMBERLAKE	5300 S University Dr	705237	Aug-16	May-21	1,929	175	2	2,106	$ 93,245	X
North	TITUSVILLE	917 Tropic St	200331	Sep-19	Jun-22	696	397	1	1,094	$ 3,009,747	X
North	TITUSVILLE	917 Tropic St	200332	Sep-19	Sep-22	2,037	83	1	2,121	$ 574,538	X
North	TITUSVILLE	917 Tropic St	200333	Nov-19	Sep-22	1,908	308	1	2,217	$ 1,014,579	X
North	TOLOMATO	US#1 AND Beefalo Rd	107631	Sep-18	Sep-21	1,417	194	5	1,616	$ 633,260	X
North	TOLOMATO	US#1 AND Beefalo Rd	107632	Nov-19	Nov-21	668	172	6	846	$ 585,439	X
Broward	TRACE	S/O Saddle Club Rd, 1 mile W/O Bonaventure Blvd	705761	Jun-19	Mar-22	2,499	226	2	2,727	$ 1,968,629	X
Broward	TRACE	S/O Saddle Club Rd, 1 mile W/O Bonaventure Blvd	705767	Jun-19	Aug-21	2,181	156	3	2,340	$ 18,316	X
Broward	TRAIN	1395 S Flagler Ave	706531	Oct-19	Aug-22	551	255	4	810	$ 723,158	X
Broward	TRAIN	1395 S Flagler Ave	706534	Nov-16	Aug-20	1,098	112	-	1,210	$ 96,757	X
Broward	TRAIN	1395 S Flagler Ave	706535	Oct-19	Aug-22	756	28	1	785	$ 277,438	X
North	TROPICANA	103 George J King Blvd	201233	Jul-19	Nov-21	487	181	3	671	$ 1,412,358	X
East	TURNPIKE	2300 SW Bayshore Blvd	406166	Mar-16	Mar-21	2,255	124	-	2,379	$ 8,978	X
West	TUTTLE	2890 8th St	504534	Nov-18	Nov-21	2,084	158	3	2,245	$ 1,281,157	X
Broward	TWINLAKES	4501 Powerline Rd	707933	Jun-19	Jun-21	141	182	-	323	$ 19,386	X
Dade	ULETA	16150 NE Miami Dr	806332	Nov-16	Jul-21	90	164	2	256	$ 95,185	X
Dade	ULETA	16150 NE Miami Dr	806336	Jul-14	Jun-21	2,267	92	3	2,362	$ 125,276	X
Dade	URBAN	10590 NW 90th St	812362	Jul-19	Apr-21	485	154	-	639	$ 25,201	X
Broward	VALENCIA	200 SW 130th Ave	706261	Jul-19	Aug-22	2,233	206	4	2,443	$ 1,103,058	X
Broward	VALENCIA	200 SW 130th Ave	706262	Oct-19	Aug-22	2,907	249	6	3,162	$ 1,251,585	X
Broward	VALENCIA	200 SW 130th Ave	706263	Dec-20	Mar-23	2,510	125	11	2,646	$ 6,734	X
Broward	VALENCIA	200 SW 130th Ave	706264	Aug-16	Jun-21	1,289	379	4	1,672	$ 3,330	X
Broward	VALENCIA	200 SW 130th Ave	706266	Oct-17	Jul-22	1,580	196	1	1,777	$ 6,009,985	X
West	VAMO	1851 Marcia St	505564	Nov-18	Sep-21	2,335	232	-	2,567	$ 1,323,455	
West	VANDERBILT	Immokalee Rd, Collier-Orange River 230kV line	506761	May-18	Nov-21	3,528	387	52	3,967	$ 616,077	X
West	VANDERBILT	Immokalee Rd, Collier-Orange River 230kV line	506763	Apr-18	Jun-21	2,738	205	7	2,950	$ 367,987	X

Region	Substation	Substation Address	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
West	VANDERBILT	Immokalee Rd, Collier-Orange River 230kV line	506764	Oct-18	Feb-22	3,090	270	14	3,374	$ 593,168	X
Dade	VENETIAN	1925 West Ave	804437	Oct-14	May-21	720	99	6	825	$ 81,563	X
Dade	VENETIAN	1925 West Ave	804438	Oct-15	Apr-21	815	55	1	871	$ 187,530	X
West	VENICE	425 Albee Farms Rd	500331	May-18	Jun-21	1,881	180	7	2,068	$ 345,536	X
West	VENICE	425 Albee Farms Rd	500337	Nov-18	Nov-21	2,044	39	9	2,092	$ 2,309,600	X
Broward	VERENA	1401 NE Flagler Dr	700632	Nov-18	May-22	962	160	6	1,128	$ 2,754,368	X
Broward	VERENA	1401 NE Flagler Dr	700635	Oct-19	Aug-22	903	116	8	1,027	$ 824,838	X
Broward	VERENA	1401 NE Flagler Dr	700636	Oct-18	Jul-22	1,670	118	6	1,794	$ 3,367,516	X
Broward	VERENA	1401 NE Flagler Dr	700640	Oct-19	Aug-22	813	75	1	889	$ 253,976	X
Broward	VERENA	1401 NE Flagler Dr	700641	Oct-19	Aug-22	1,032	160	2	1,194	$ 505,621	X
Broward	VERENA	1401 NE Flagler Dr	700642	Mar-15	Jan-21	2,702	229	2	2,933	$ 66,912	X
North	VIERA	2950 Subline Rd	209761	Jun-20	Nov-21	1,214	112	43	1,369	$ 668,833	X
East	WABASSO	8095 66 Ave	400661	Nov-16	May-21	1,093	71	-	1,164	$ 70,827	X
East	WABASSO	8095 66 Ave	400662	Apr-20	Jun-23	1,136	284	12	1,432	$ 2,993	X
West	WALKER	908 35th Ave W	506034	Feb-19	Dec-22	780	94	4	878	$ 268,558	X
Dade	WATKINS	1680 NW 72nd Ave	811431	Jun-19	Sep-21	-	48	-	48	$ 614,762	X
Dade	WATKINS	1680 NW 72nd Ave	811432	Nov-15	Dec-21	189	170	-	359	$ 1,019,760	X
Dade	WATKINS	1680 NW 72nd Ave	811433	Jun-19	Sep-21	-	64	-	64	$ 561,772	X
North	WELLBORN	8813 CR 137	309332	Aug-18	Jun-21	170	35	-	205	$ 6,447	
East	WEST PALM BEACH	810 Charlotte Ave	400135	Dec-15	Jun-22	93	45	-	138	$ 113,593	
East	WEST PALM BEACH	810 Charlotte Ave	400138	Sep-20	Jul-22	271	102	-	373	$ 71,743	
Broward	WESTINGHOUSE	12100 Wiles Rd	703931	Dec-20	Mar-23	504	374	-	878	$ 5,552	X
Broward	WESTINGHOUSE	12100 Wiles Rd	703933	Jun-19	Apr-21	888	98	3	989	$ 42,669	X
Broward	WESTINGHOUSE	12100 Wiles Rd	703935	Dec-20	Nov-22	1,646	353	-	1,999	$ 12,955	X
Broward	WESTINGHOUSE	12100 Wiles Rd	703937	Dec-20	Mar-23	983	602	1	1,586	$ 11,774	X
Dade	WESTON VILLAGE	18701 NW 2nd Ave	807832	Jan-19	Jul-22	1,452	244	-	1,696	$ 854,508	X
Dade	WESTON VILLAGE	18701 NW 2nd Ave	807835	Apr-15	Nov-20	1,080	241	2	1,323	$ 29,477	X
East	WESTWARD	5601 Okeechobee Blvd	404034	Jul-18	Dec-21	3,176	161	3	3,340	$ 680,962	X
East	WHEELER	Wheeler Way	413232	Aug-16	Jul-21	567	97	3	667	$ 125,526	X
East	WHITE CITY	641 W Weatherbee Rd	401431	Nov-18	Jun-22	1,386	201	1	1,588	$ 2,421,501	X
West	WHITFIELD	1851 Whitfield Ave	500832	Feb-19	Feb-22	6	185	4	195	$ 1,447,438	X
West	WHITFIELD	1851 Whitfield Ave	500833	Nov-18	Dec-21	1,732	164	2	1,898	$ 2,112,658	X
West	WHITFIELD	1851 Whitfield Ave	500834	Dec-15	Feb-21	1,393	158	2	1,553	$ 37,113	X
West	WHITFIELD	1851 Whitfield Ave	500837	Aug-19	Jun-22	1,415	268	3	1,686	$ 1,409,696	X
North	WILLOW	4646 Clyde Morris Blvd	103832	Nov-20	Aug-22	755	15	-	770	$ 10,592	X
North	WILLOW	4646 Clyde Morris Blvd	103836	Jul-20	Nov-22	1,837	111	1	1,949	$ 7,049	X
West	WINKLER	3150 Winkler Ave	505465	Sep-17	Jun-23	1,720	716	-	2,436	$ 818,715	X
North	WIREMILL	14163 Arnold Rhoden Rd	301562	Jul-18	Nov-21	332	89	3	424	$ 396,298	X
Broward	WOODLANDS	5440 NW 44th St	703237	Nov-18	Jul-22	3,350	318	2	3,670	$ 3,757,207	X
West	WOODS	6308 33rd St	506965	Nov-18	Apr-22	3,392	123	10	3,525	$ 2,352,858	
North	WRIGHT	1399 Wright St	109034	Dec-19	Sep-22	2,003	249	-	2,252	$ 605,947	X
North	WYOMING	2525 Quarry Ave SE	207362	Jul-19	Sep-22	3,106	69	1	3,176	$ 2,030,620	X
North	WYOMING	2525 Quarry Ave SE	207364	Feb-16	May-21	1,679	100	1	1,780	$ 44,801	X
North	YORKE	5075 Korbin Ave	209861	Nov-19	Sep-22	607	244	1	852	$ 755,818	X
North	YORKE	5075 Korbin Ave	209863	Nov-19	Nov-21	3,036	218	1	3,255	$ 1,516,027	X
North	YULEE	40 Harts Road	301463	Sep-18	Sep-21	2,156	167	4	2,327	$ 2,630,005	X

Notes:

(1) Start date reflects estimated/actual date when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, customer outreach)

(2) Completion date reflects the estimated date when all project costs will be final

Appendix E: FPL 2020 Project Level Detail
Lateral Hardening (Undergrounding) - Distribution Program

Region	Substation	City/County	Lateral #	Phase	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
Dade	62ND AVE	Miami-Dade	86454990006	Design & Outreach	801733	Jun-20	Dec-21	103	-	-	103	$ 112,044	X
East	ACREAGE	Acreage	66530470202S	Design & Outreach	406767	Feb-20	Dec-21	138	4	-	142	$ 467,597	X
East	ACREAGE	Acreage	66530471209N	Design & Outreach	406767	Feb-20	Dec-21	205	5	-	210	$ 869,461	X
Dade	AIRPORT	Miami Springs	86657776109	Design & Outreach	802631	Jun-20	Dec-21	-	2	-	2	$ 28,384	X
Dade	AIRPORT	Miami Springs	86657833102	Design & Outreach	802631	Jun-20	Dec-21	71	3	-	74	$ 13,445	X
Dade	AIRPORT	Miami Springs	86757118606	Design & Outreach	802631	Dec-19	Dec-21	112	5	-	117	$ 88,141	X
Dade	AIRPORT	Miami Springs	86757188604	Design & Outreach	802631	Dec-19	Dec-21	7	-	-	7	$ 11,951	
Dade	AIRPORT	Miami Springs	86757867803	Design & Outreach	802631	Sep-19	Dec-21	21	-	-	21	$ 4,482	
Dade	AIRPORT	Miami Springs	86757897605	Design & Outreach	802631	Sep-19	Dec-21	20	1	-	21	$ 2,988	
Dade	AIRPORT	Miami Springs	86758431308	Construction	802631	Apr-20	Nov-20	11	-	-	11	$ 119,196	X
Dade	AIRPORT	Miami Springs	86757398005	Design & Outreach	802635	Jun-20	Dec-21	45	1	-	46	$ 52,287	X
Dade	AIRPORT	Miami Springs	86757414108	Design & Outreach	802635	Jun-20	Dec-21	19	-	-	19	$ 14,939	X
Dade	AIRPORT	Miami Springs	86757478009	Construction	802635	Dec-19	Oct-20	38	-	-	38	$ 99,330	X
Dade	AIRPORT	Miami Springs	86757548201	Construction	802635	Apr-20	Nov-20	31	-	-	31	$ 456,917	X
Dade	AIRPORT	Miami Springs	86757565700	Construction	802635	Sep-19	Oct-20	14	1	-	15	$ 109,263	
Dade	AIRPORT	Miami Springs	86757635708	Construction	802635	Nov-19	Aug-20	17	1	-	18	$ 99,330	X
Dade	AIRPORT	Miami Springs	86757894509	Construction	802635	Apr-20	Jun-20	36	2	-	38	$ 99,330	
East	ALEXANDER	Palm Beach County	67139917905	Construction	408562	Apr-19	Oct-20	37	5	-	42	$ 969,296	X
West	ALLIGATOR	Collier	76581585101	Construction	503562	Jul-19	Apr-20	93	2	-	95	$ 85,004	X
West	ALLIGATOR	Collier	76581261704	Construction	503563	Aug-19	Aug-20	10	29	-	39	$ 180,259	X
East	ATLANTIC	Boca Raton	87797221308E	Construction	403231	Jul-19	Feb-20	31	-	-	31	$ 126,256	
Dade	AVOCADO	Miami-Dade	85239499000	Design & Outreach	810061	Jun-20	Dec-21	13	1	-	14	$ 26,891	
Dade	AVOCADO	Miami-Dade	85240567307	Design & Outreach	810061	Jun-20	Dec-21	2	-	-	2	$ 23,903	
Dade	AVOCADO	Miami-Dade	85241202400	Design & Outreach	810061	Jun-20	Dec-21	5	1	-	6	$ 22,409	X
Dade	AVOCADO	Miami-Dade	85241232015	Design & Outreach	810061	Jun-20	Dec-21	2	-	-	2	$ 4,482	
North	BABCOCK	Palm Bay	48313399401	Construction	204261	Jul-19	Apr-20	49	1	-	50	$ 738,535	X
West	BENEVA	Sarasota	51866272909	Design & Outreach	504132	Aug-19	Dec-21	20	-	-	20	$ 20,915	
West	BENEVA	Sarasota	51866342907	Design & Outreach	504132	Aug-19	Dec-21	22	-	-	22	$ 25,397	
West	BENEVA	Sarasota	51866422901	Design & Outreach	504132	Aug-19	Dec-21	20	-	-	20	$ 22,409	
West	BENEVA	Sarasota	51866512802N	Design & Outreach	504132	Aug-19	Dec-21	20	-	-	20	$ 23,903	
West	BENEVA	Sarasota	51866512802S	Design & Outreach	504132	Aug-19	Dec-21	18	-	-	18	$ 25,397	
West	BENEVA	Sarasota	51765890601	Construction	504133	May-19	Jun-20	83	1	-	84	$ 874,792	X
West	BENEVA	Sarasota	51765920607	Construction	504133	May-19	May-20	42	3	-	45	$ 2,000	X
West	BENEVA	Sarasota	51765920658	Construction	504133	Aug-18	Apr-20	27	-	-	27	$ 37,502	X
West	BENEVA	Sarasota	51864198604	Construction	504133	Aug-18	Apr-20	24	-	-	24	$ 2,000	X
West	BENEVA	Sarasota	51765790606S	Construction	504133	Aug-19	Dec-20	193	1	-	194	$ 1,599,326	X
West	BENEVA	Sarasota	51766223004	Construction	504136	Apr-19	Jul-20	43	-	-	43	$ 265,763	X
West	BENEVA	Sarasota	51766273001N	Construction	504136	Apr-19	Apr-20	21	-	-	21	$ 2,000	
West	BENEVA	Sarasota	51665603409	Design & Outreach	504137	Aug-19	Dec-21	156	4	-	160	$ 183,752	X
Broward	BEVERLY	Hollywood	87270122006	Construction	700834	Aug-19	Mar-20	173	71	-	244	$ 538,036	X
Broward	BEVERLY	Hollywood	87171059300	Construction	700839	Aug-19	Mar-20	153	-	-	153	$ 1,109,935	X
Broward	BEVERLY	Hollywood	87372080015	Construction	700840	Sep-19	Mar-20	133	81	-	214	$ 466,850	X
Dade	BISCAYNE	Miami-Dade	87163689201	Design & Outreach	801837	Jun-20	Dec-21	225	35	-	260	$ 300,278	X
Dade	BISCAYNE	Miami-Dade	87262846700	Design & Outreach	801838	Jun-20	Dec-21	83	3	-	86	$ 71,708	X
Dade	BISCAYNE	Miami-Dade	87262856004	Design & Outreach	801838	Jun-20	Dec-21	41	6	-	47	$ 47,805	X
East	BOCA RATON	Boca Raton	88097383201	Construction	400740	Jul-19	Feb-20	41	-	-	41	$ 281,263	X
West	BONITA SPRINGS	Bonita Springs	76195274711	Construction	502168	Aug-19	Oct-20	47	2	-	49	$ 254,512	X
Dade	BOULEVARD	Miami-Dade	87462472300	Design & Outreach	808732	Jun-20	Dec-21	57	3	-	60	$ 43,324	X
Dade	BOULEVARD	Biscayne Park	87362888109	Construction	808733	Aug-19	Sep-20	141	1	-	142	$ 1,305,062	X
Dade	BOULEVARD	Miami Shores	87361924411	Design & Outreach	808734	Nov-19	Dec-21	21	-	-	21	$ 25,397	
East	BOYNTON	Boynton Beach	68108208004	Construction	400535	Jul-19	Mar-20	55	-	-	55	$ 663,282	X
Dade	BUENA VISTA	Miami	87358404305	Design & Outreach	800332	Jun-20	Dec-21	39	1	-	40	$ 43,324	X
Dade	BUENA VISTA	Miami	87358413801E	Design & Outreach	800332	Jun-20	Dec-21	23	1	-	24	$ 26,891	
Dade	BUENA VISTA	Miami	87358413801W	Design & Outreach	800332	Jun-20	Dec-21	32	2	-	34	$ 16,433	X
North	BULOW	Volusia	37514149529	Construction	102032	Jun-19	Sep-20	101	4	-	105	$ 939,545	X
North	BULOW	Volusia	37514490006	Construction	102032	Jun-19	Nov-20	121	-	-	121	$ 1,410,817	X
North	BULOW	Volusia	37416964503	Construction	102033	Jul-19	Dec-20	38	5	-	43	$ 380,018	
North	BULOW	Volusia	37417720501	Construction	102033	Aug-19	Aug-20	74	1	-	75	$ 549,776	X
North	BULOW	Volusia	37515326102	Construction	102033	Oct-19	Feb-20	39	3	-	42	$ 227,261	X
East	CALDWELL	Boca Raton	88098037004	Design & Outreach	408034	Feb-20	Dec-21	242	1	-	243	$ 274,881	X
Broward	CHAPEL	Southwest Ranches	85973606708	Construction	706961	Nov-19	Sep-20	4	-	-	4	$ 258,257	X
North	CITY POINT	Cocoa	47644683508E	Construction	201532	Jun-19	Apr-20	82	2	-	84	$ 1,035,299	X
West	CLARK	Sarasota	51763645901W	Design & Outreach	500531	Aug-19	Dec-21	94	4	-	98	$ 106,068	X
West	CLARK	Sarasota	51763244507S	Design & Outreach	500532	Aug-19	Dec-21	130	2	-	132	$ 138,934	X
West	CLARK	Sarasota	51762174408	Construction	500534	Aug-19	Aug-20	107	2	-	109	$ 1,849,588	X
West	CLARK	Sarasota	51562715500N	Design & Outreach	500534	Aug-19	Dec-21	174	13	-	187	$ 147,898	X
West	CLARK	Sarasota	51661728509	Construction	500537	Aug-19	Apr-20	151	2	-	153	$ 300,014	X
West	CLARK	Sarasota	51662856403	Construction	500538	Mar-19	Jul-20	72	1	-	73	$ 804,288	X
West	CLARK	Sarasota	51762119300	Construction	500538	Aug-19	Apr-20	20	-	-	20	$ 2,000	X
West	CLARK	Sarasota	51662848397N	Construction	500538	Aug-19	Apr-20	103	1	-	104	$ 1,175,306	X
North	COCOA BEACH	Cocoa Beach	48542437606	Construction	200731	Jul-19	Feb-20	32	-	-	32	$ 457,272	X
Dade	COCONUT GROVE	Miami	86950078206	Construction	800436	Dec-18	Nov-20	34	2	-	36	$ 1,099,052	X
Dade	COCONUT GROVE	Miami	86950259502	Construction	800436	Dec-18	Nov-20	18	3	-	21	$ 2,000	X
Dade	COCONUT GROVE	Miami	86950199101S	Construction	800436	Dec-18	Nov-20	36	5	-	41	$ 2,000	X
West	COLONIAL	Fort Myers	55715290102	Design & Outreach	502631	Sep-19	Dec-21	142	4	-	146	$ 225,582	X
West	COLONIAL	Fort Myers	55714319409	Construction	502635	Jun-19	Oct-20	66	3	-	69	$ 1,489,821	X
West	COLONIAL	Fort Myers	55715803304	Construction	502636	Aug-19	Sep-20	18	-	-	18	$ 548,276	X
West	COLONIAL	Fort Myers	55816094801	Construction	502636	Aug-19	Sep-20	6	-	-	6	$ 216,510	X
West	COLONIAL	Fort Myers	55816220009W	Construction	502636	Aug-19	Sep-20	22	-	-	22	$ 515,775	X
West	COLONIAL	Fort Myers	55715901098	Construction	502637	Aug-19	Apr-20	11	-	-	11	$ 192,509	
Dade	COUNTY LINE	Miami Gardens	87269312000	Construction	804833	Aug-18	Dec-20	108	-	-	108	$ 1,299,062	X
Broward	COUNTY LINE	West Park	87269653605	Construction	804833	Aug-19	Mar-20	205	1	-	206	$ 1,062,828	X
Dade	COUNTY LINE	Miami Gardens	87068633108	Construction	804837	Jul-19	May-20	20	-	-	20	$ 2,000	
Dade	COUNTY LINE	Miami Gardens	87068743116	Construction	804837	Jul-19	May-20	76	-	-	76	$ 1,259,810	
Broward	CROSSBOW	Southwest Ranches	86074821703	Construction	707661	Nov-19	Sep-20	6	-	-	6	$ 89,397	
Broward	CROSSBOW	Southwest Ranches	86174841001	Construction	707661	Nov-19	Sep-20	-	6	-	6	$ 178,794	
Broward	CROSSBOW	Southwest Ranches	86174847409	Construction	707661	Dec-19	Sep-20	78	5	-	83	$ 297,989	
Dade	CUTLER	Pinecrest	86545804007	Construction	802037	May-18	Nov-20	4	-	-	4	$ 170,758	X
Dade	CUTLER	Pinecrest	86545987403	Design & Outreach	802037	Aug-19	Dec-21	51	1	-	52	$ 143,416	X
Dade	CUTLER	Pinecrest	86545924100N	Construction	802037	May-18	Nov-20	2	1	-	3	$ 2,000	X
Dade	CUTLER	Pinecrest	86545985605S	Construction	802037	May-18	Nov-20	6	-	-	6	$ 2,000	X
Dade	DADE	Miami Springs	86557899903	Design & Outreach	805433	Jun-20	Dec-21	27	-	-	27	$ 20,915	X
Dade	DADE	Miami Springs	86558621101	Design & Outreach	805433	Feb-20	Dec-21	31	5	-	36	$ 4,482	X
Dade	DADE	Miami Springs	86558621704	Design & Outreach	805433	Feb-20	Dec-21	16	-	-	16	$ 13,445	X
Dade	DADE	Miami Springs	86558654505	Construction	805433	Sep-19	Oct-20	12	1	-	13	$ 79,464	X
Dade	DADE	Miami Springs	86558655102	Design & Outreach	805433	Dec-19	Dec-21	12	-	-	12	$ 11,951	X
Dade	DADE	Miami Springs	86558722616	Construction	805433	Sep-19	Dec-20	10	-	-	10	$ 59,598	X
Dade	DADE	Miami Springs	86558733804	Construction	805433	Sep-19	Oct-20	10	-	-	10	$ 69,531	X
Dade	DADE	Miami Springs	86558782503	Design & Outreach	805433	Dec-19	Dec-21	11	-	-	11	$ 11,951	X
Dade	DADE	Miami Springs	86558842506	Design & Outreach	805433	Dec-19	Dec-21	11	1	-	12	$ 11,951	X
Dade	DADE	Miami Springs	86558881706	Design & Outreach	805433	Oct-19	Dec-21	19	-	-	19	$ 13,445	X

Region	Substation	City/County	Lateral #	Phase	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
Dade	DADE	Miami Springs	86558890802	Design & Outreach	805433	Oct-19	Dec-21	56	3	-	59	$ 62,745	X
Dade	DADE	Miami Springs	86657109315	Construction	805433	Sep-19	Nov-20	5	1	-	6	$ 19,866	X
Dade	DADE	Miami Springs	86657475508	Design & Outreach	805433	Jun-20	Dec-21	13	6	-	19	$ 31,372	X
Dade	DADE	Miami Springs	86558619009S	Design & Outreach	805433	Dec-19	Dec-21	27	-	-	27	$ 46,311	X
Broward	DANIA	Dania Beach	87674509404	Construction	701534	Aug-19	Mar-20	95	6	-	101	$ 174,015	X
Broward	DEERFIELD BEACH	Lighthouse Point	88092163903	Design & Outreach	703537	Jan-20	Dec-21	20	-	-	20	$ 20,915	
Broward	DEERFIELD BEACH	Lighthouse Point	88092233901N	Design & Outreach	703537	Dec-19	Dec-21	19	-	-	19	$ 19,421	
Broward	DEERFIELD BEACH	Lighthouse Point	88092018300	Design & Outreach	703540	Jan-20	Dec-21	17	-	-	17	$ 20,915	X
Broward	DEERFIELD BEACH	Lighthouse Point	88092218201	Design & Outreach	703540	Mar-20	Dec-21	21	2	-	23	$ 40,336	
Broward	DEERFIELD BEACH	Lighthouse Point	88092298302	Design & Outreach	703540	Jun-20	Dec-21	82	4	-	86	$ 16,433	
Broward	DEERFIELD BEACH	Lighthouse Point	88092298400	Design & Outreach	703540	Jun-20	Dec-21	71	2	-	73	$ 16,433	
Broward	DEERFIELD BEACH	Lighthouse Point	88092377393	Design & Outreach	703540	Feb-20	Dec-21	7	-	-	7	$ 19,421	
Broward	DRIFTWOOD	Hollywood	87074461402S	Construction	702032	Aug-19	Sep-20	31	3	-	34	$ 268,190	X
Broward	DRIFTWOOD	Hollywood	87072010306	Construction	702034	Aug-19	Jun-20	40	-	-	40	$ 250,206	X
Broward	DRIFTWOOD	Hollywood	87072124409	Construction	702034	Aug-19	Mar-20	153	-	-	153	$ 907,701	X
Broward	ELY	Pompano Beach	87987059709	Construction	702637	Nov-19	Dec-20	3	32	-	35	$ 238,391	
Broward	FAIRMONT	Fort Lauderdale	87380636302	Construction	700735	Aug-19	Sep-20	37	4	-	41	$ 297,989	
Broward	FASHION	Lighthouse Point	87990413305	Design & Outreach	704463	Feb-20	Dec-21	11	1	-	12	$ 10,457	X
Broward	FASHION	Lighthouse Point	88090083902	Design & Outreach	704463	Jan-20	Dec-21	25	-	-	25	$ 26,891	
Broward	FASHION	Lighthouse Point	88090103105	Design & Outreach	704463	Mar-20	Dec-21	5	1	-	6	$ 17,927	
Dade	FIREHOUSE	Miami	87253178201	Design & Outreach	813139	Jun-20	Dec-21	108	37	-	145	$ 80,672	X
Broward	FLAMINGO	Miramar	86369631904	Construction	707263	Aug-19	Mar-20	26	1	-	27	$ 923,767	X
West	FRUITVILLE	Sarasota	51868964506	Construction	501062	Aug-19	Jun-20	130	13	-	143	$ 292,514	X
West	FRUITVILLE	Sarasota	52067396301	Construction	501063	Aug-19	Apr-20	18	11	-	29	$ 37,502	X
West	FRUITVILLE	Sarasota	52268957001	Construction	501064	Sep-19	Apr-20	519	13	-	532	$ 512,774	X
West	FRUITVILLE	Sarasota	52268358507	Construction	501065	Sep-19	Apr-20	1	-	-	1	$ 2,000	
West	FT MYERS	Fort Myers	55716815608	Construction	501131	Aug-19	Apr-20	43	-	-	43	$ 488,523	X
West	FT MYERS	Fort Myers	55817842704W	Design & Outreach	501133	May-20	Dec-21	20	3	-	23	$ 13,445	X
West	FT MYERS	Fort Myers	56019081311	Design & Outreach	501136	Aug-19	Dec-21	139	8	-	147	$ 239,027	X
North	FT PIERCE	St. Lucie	66078993000	Construction	401534	Sep-19	Aug-20	30	-	-	30	$ 414,770	
Dade	FULFORD	Miami-Dade	87364387808	Design & Outreach	801435	Jun-20	Dec-21	49	1	-	50	$ 55,275	X
Dade	FULFORD	Miami-Dade	87365234606	Design & Outreach	801435	Jun-20	Dec-21	114	-	-	114	$ 119,514	X
Dade	FULFORD	Miami-Dade	87365252604	Design & Outreach	801435	Jun-20	Dec-21	123	-	-	123	$ 107,562	X
Dade	FULFORD	Miami-Dade	87365253601	Design & Outreach	801435	Dec-19	Dec-21	90	1	-	91	$ 104,574	X
Dade	FULFORD	North Miami Beach	87366837002	Construction	801436	Aug-18	Sep-20	106	1	-	107	$ 1,120,303	X
Dade	GALLOWAY	Miami-Dade	86450782204	Design & Outreach	805732	Dec-19	Dec-21	1	-	-	1	$ 7,470	X
Dade	GALLOWAY	Miami-Dade	86450783308	Design & Outreach	805732	Dec-19	Dec-21	13	-	-	13	$ 19,421	X
Dade	GALLOWAY	Miami-Dade	86450800334	Design & Outreach	805732	Dec-19	Dec-21	18	1	-	19	$ 80,672	X
Dade	GARDEN	Miami Gardens	86966593903	Construction	804139	Aug-19	Jul-20	-	46	-	46	$ 191,009	X
North	GARVEY	Palm Bay	48016308607	Design & Outreach	211061	Feb-20	Dec-21	209	3	-	212	$ 503,451	X
North	GARVEY	Palm Bay	48017322107	Design & Outreach	211061	Feb-20	Dec-21	46	1	-	47	$ 95,611	
North	GARVEY	Palm Bay	47816823500N	Design & Outreach	211061	Mar-20	Dec-21	149	2	-	151	$ 490,006	X
North	GARVEY	Palm Bay	48016308909E	Design & Outreach	211061	Feb-20	Dec-21	65	-	-	65	$ 132,959	
North	GARVEY	Palm Bay	48016308909W	Design & Outreach	211061	Feb-20	Dec-21	91	1	-	92	$ 252,472	X
North	GARVEY	Palm Bay	48016309603E	Design & Outreach	211061	Feb-20	Dec-21	18	-	-	18	$ 28,384	X
North	GARVEY	Palm Bay	48016309603W	Design & Outreach	211061	Feb-20	Dec-21	82	-	-	82	$ 129,971	X
North	GARVEY	Palm Bay	48017532306N	Design & Outreach	211061	Feb-20	Dec-21	73	1	-	74	$ 149,392	
North	GARVEY	Palm Bay	48017532306S	Design & Outreach	211061	Feb-20	Dec-21	22	-	-	22	$ 32,866	
North	GARVEY	Palm Bay	48017582303S	Design & Outreach	211061	Feb-20	Dec-21	6	1	-	7	$ 14,939	
North	GATOR	St. Augustine	35155789106	Design & Outreach	108362	Feb-20	Dec-21	58	-	-	58	$ 355,553	X
North	GATOR	St. Augustine	34858422505W	Design & Outreach	108362	Mar-20	Dec-21	68	7	-	75	$ 442,200	X
West	GOLDEN GATE	Collier	77085075006	Construction	504963	Aug-19	Dec-20	81	-	-	81	$ 971,046	X
West	GOLDEN GATE	Collier	77084178006	Construction	504965	Jun-19	Aug-20	31	-	-	31	$ 473,023	X
West	GOLDEN GATE	Collier	77085170301	Construction	504965	Aug-19	Dec-20	38	-	-	38	$ 2,000	X
West	GOLDEN GATE	Collier	77085170904	Construction	504965	Aug-19	Dec-20	59	1	-	60	$ 2,000	X
West	GOLDEN GATE	Collier	77085171200N	Construction	504965	Aug-19	Dec-20	119	-	-	119	$ 2,078,099	X
East	GOLF	Boynton Beach	68008001401	Construction	404131	Jun-19	Oct-20	59	1	-	60	$ 968,761	X
East	GREENACRES	Palm Springs	67716938204	Design & Outreach	401031	Jan-20	Dec-21	24	5	-	29	$ 32,866	X
East	GREENACRES	Palm Springs	67716938808	Design & Outreach	401031	Jan-20	Dec-21	34	4	-	38	$ 32,866	X
East	GREENACRES	Palm Springs	67716939308	Design & Outreach	401031	Jan-20	Dec-21	32	9	-	41	$ 32,866	
East	GREENACRES	Palm Springs	67716939901	Design & Outreach	401031	Jan-20	Dec-21	41	4	-	45	$ 29,878	
East	GREENACRES	Palm Springs	67816459916	Design & Outreach	401031	Jan-20	Dec-21	225	-	-	225	$ 261,436	X
East	GREENACRES	Palm Springs	67817200401	Design & Outreach	401031	Jan-20	Dec-21	11	2	-	13	$ 29,878	
East	GREENACRES	Palm Springs	67817260404	Design & Outreach	401031	Jan-20	Dec-21	10	-	-	10	$ 10,457	
East	GREENACRES	Palm Springs	67817660305	Design & Outreach	401031	Jan-20	Dec-21	57	4	-	61	$ 76,190	X
East	GREENACRES	Palm Springs	67817775404	Design & Outreach	401031	Jan-20	Dec-21	268	-	-	268	$ 367,504	X
East	GREENACRES	Palm Springs	67817530304S	Design & Outreach	401031	Feb-20	Dec-21	6	4	-	10	$ 14,939	
West	HANSON	Fort Myers	55816746302	Design & Outreach	508531	Aug-19	Dec-21	242	8	-	250	$ 231,557	X
West	HANSON	Fort Myers	55916223707	Construction	508531	Aug-19	Apr-20	49	3	-	52	$ 339,266	X
Dade	HIALEAH	Miami Springs	86658013303	Construction	800732	Sep-19	Sep-20	18	-	-	18	$ 99,330	X
Dade	HIALEAH	Miami Springs	86658655909	Design & Outreach	800732	Dec-19	Dec-21	13	-	-	13	$ 13,445	X
Dade	HIALEAH	Miami Springs	86658661607	Construction	800732	Sep-19	Nov-20	18	-	-	18	$ 89,397	
Dade	HIALEAH	Miami Springs	86658825308	Construction	800732	Dec-19	Oct-20	22	-	-	22	$ 168,861	
Dade	HIALEAH	Miami Springs	86658904607	Construction	800732	Dec-19	Oct-20	8	-	-	8	$ 59,598	X
Dade	HIALEAH	Miami Springs	86658275901E	Design & Outreach	800732	Dec-19	Dec-21	94	1	-	95	$ 119,514	X
Dade	HIALEAH	Miami Springs	86658284501W	Construction	800732	Sep-19	Oct-20	65	-	-	65	$ 486,716	X
Dade	HIALEAH	Miami Springs	86658755903W	Design & Outreach	800732	Sep-19	Dec-21	12	1	-	13	$ 8,964	X
Dade	HIALEAH	Miami Springs	86657869301	Construction	800738	Sep-19	Oct-20	24	-	-	24	$ 148,995	X
Dade	HIALEAH	Miami Springs	86657938974	Design & Outreach	800738	Dec-19	Dec-21	68	1	-	69	$ 77,684	X
Dade	HIALEAH	Miami Springs	86658647108	Construction	800738	Sep-19	Dec-20	7	-	-	7	$ 39,732	X
Dade	HIALEAH	Miami Springs	86658647159	Design & Outreach	800738	Sep-19	Dec-21	13	-	-	13	$ 13,445	X
Dade	HIALEAH	Miami Springs	86658662620	Design & Outreach	800738	Dec-19	Dec-21	11	-	-	11	$ 11,951	X
Dade	HIALEAH	Miami Springs	86658663103	Design & Outreach	800738	Dec-19	Dec-21	21	-	-	21	$ 11,951	X
Dade	HIALEAH	Miami Springs	86658671106	Design & Outreach	800738	Sep-19	Dec-21	54	-	-	54	$ 73,202	X
Dade	HIALEAH	Miami Springs	86658720506	Design & Outreach	800738	Dec-19	Dec-21	17	1	-	18	$ 23,903	X
Dade	HIALEAH	Miami Springs	86658821639	Construction	800738	Sep-19	Oct-20	93	15	-	108	$ 456,917	
Dade	HIALEAH	Miami Springs	86658831006	Design & Outreach	800738	Sep-19	Dec-21	27	-	-	27	$ 20,915	X
Dade	HIALEAH	Miami Springs	86658842610	Design & Outreach	800738	Dec-19	Dec-21	12	1	-	13	$ 13,445	X
Dade	HIALEAH	Miami Springs	86658911409	Design & Outreach	800738	Dec-19	Dec-21	38	22	-	60	$ 28,384	X
Dade	HIALEAH	Miami Springs	86758011724	Construction	800738	Sep-19	Oct-20	56	6	-	62	$ 168,861	
Dade	HIALEAH	Miami Springs	86758102207	Construction	800738	Nov-19	Dec-20	-	3	-	3	$ 19,866	X
North	HIELD	Palm Bay	47918866603W	Construction	208165	May-19	Jul-20	23	-	-	23	$ 312,515	X
East	HILLS	Tequesta	67740929741	Construction	407333	Sep-19	Dec-20	122	3	-	125	$ 1,000,048	
East	HILLSBORO	Boca Raton	87896647300E	Construction	404732	May-19	May-20	43	-	-	43	$ 397,769	X
Broward	HOLLYWOOD	Hollywood	87672656108	Construction	700232	Aug-19	Mar-20	153	3	-	156	$ 500,411	X
Broward	HOLLYWOOD	Hollywood	87471977010E	Construction	700237	Aug-19	Mar-20	276	11	-	287	$ 715,174	X
Broward	HOLMBERG	Parkland	87095876806	Design & Outreach	706462	Jun-20	Dec-21	-	-	-	-	$ 73,202	
Broward	HOLMBERG	Parkland	87193089201	Construction	706462	Oct-19	Dec-20	40	1	-	41	$ 605,911	X
Broward	HOLMBERG	Parkland	87195115901	Construction	706462	Apr-20	Dec-20	-	-	-	-	$ 39,732	
Broward	HOLMBERG	Parkland	87294448211	Design & Outreach	706462	Sep-19	Dec-21	226	25	-	251	$ 38,842	X
Broward	HOLMBERG	Parkland	87193229101S	Construction	706462	Apr-20	Dec-20	40	3	-	43	$ 605,911	X
Broward	HOLMBERG	Parkland	87193359101S	Construction	706462	Apr-20	Dec-20	24	1	-	25	$ 605,911	X
Broward	HOLMBERG	Parkland	87193809000	Construction	706463	Sep-19	Dec-20	41	-	-	41	$ 139,062	
Broward	HOLMBERG	Parkland	87293008901	Design & Outreach	706463	Nov-19	Dec-21	43	-	-	43	$ 109,056	X
Broward	HOLMBERG	Parkland	87193879008S	Construction	706463	Oct-19	Dec-20	-	5	-	5	$ 586,045	X

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Broward	HOLMBERG	Parkland	87093839300	Construction	706465	Oct-19	Dec-20	46	1	-	47	$ 695,308	
Broward	HOLY CROSS	Fort Lauderdale	87884411802	Design & Outreach	701937	Aug-19	Dec-21	2	5	-	7	$ 53,781	
Broward	HOLY CROSS	Fort Lauderdale	87884512102	Construction	701937	Sep-19	Jun-20	31	-	-	31	$ 268,190	
Broward	HOLY CROSS	Fort Lauderdale	87784923805	Construction	701940	Jul-19	Jun-20	32	1	-	33	$ 317,855	X
West	HYDE PARK	Sarasota	51767156301	Design & Outreach	500431	Aug-19	Dec-21	164	2	-	166	$ 162,837	X
West	HYDE PARK	Sarasota	51667926108N	Construction	500431	Jun-19	Apr-20	32	-	-	32	$ 47,252	X
West	HYDE PARK	Sarasota	51566728509E	Construction	500432	Oct-19	Aug-20	50	1	-	51	$ 861,291	X
West	HYDE PARK	Sarasota	51666513004S	Construction	500433	Jul-18	Apr-20	36	-	-	36	$ 37,252	X
West	HYDE PARK	Sarasota	51567423507	Design & Outreach	500437	Jul-19	Dec-21	67	6	-	73	$ 95,611	X
West	HYDE PARK	Sarasota	516673534005	Design & Outreach	500437	Sep-19	Dec-21	84	3	-	87	$ 92,623	X
Broward	IMAGINATION	Southwest Ranches	86275893801	Construction	704261	Nov-19	Sep-20	1	-	-	1	$ 39,732	
Broward	IMAGINATION	Southwest Ranches	86475088514	Design & Outreach	704261	Nov-19	Dec-21	12	2	-	14	$ 22,409	X
Broward	IMAGINATION	Southwest Ranches	86475198514	Design & Outreach	704261	Jun-20	Dec-21	1	2	-	3	$ 10,457	
Broward	IMAGINATION	Southwest Ranches	86475858506	Construction	704261	Nov-19	Sep-20	10	2	-	12	$ 268,190	X
Broward	IMAGINATION	Southwest Ranches	86374456708	Construction	704262	Nov-19	Dec-20	2	-	-	2	$ 119,196	
Broward	IMAGINATION	Southwest Ranches	86374458107	Construction	704262	Nov-19	Dec-20	2	-	-	2	$ 79,464	
Broward	IMAGINATION	Southwest Ranches	86375453206	Construction	704262	Nov-19	Dec-20	2	2	-	4	$ 188,726	X
Broward	IMAGINATION	Southwest Ranches	85974600207	Construction	704264	Dec-19	Sep-20	-	1	-	1	$ 69,531	
Broward	IMAGINATION	Southwest Ranches	85974601301	Construction	704264	Nov-19	Sep-20	17	-	-	17	$ 486,716	X
Broward	IMAGINATION	Southwest Ranches	86075265006	Construction	704264	Nov-19	Sep-20	1	-	-	1	$ 29,799	
Broward	IMAGINATION	Southwest Ranches	86075822011	Construction	704264	Nov-19	Sep-20	3	-	-	3	$ 89,397	
Broward	IMAGINATION	Southwest Ranches	86275117402	Construction	704264	Dec-19	Sep-20	-	3	-	3	$ 208,592	
Broward	IMAGINATION	Southwest Ranches	85974594801E	Construction	704264	Dec-19	Sep-20	1	2	-	3	$ 69,531	
West	IMPERIAL	Bonita Springs	76496516403	Design & Outreach	507063	Oct-19	Dec-21	11	-	-	11	$ 14,939	
West	IMPERIAL	Bonita Springs	76496616408	Design & Outreach	507063	Oct-19	Dec-21	28	-	-	28	$ 13,445	
West	IMPERIAL	Bonita Springs	76496746409	Design & Outreach	507063	Oct-19	Dec-21	18	-	-	18	$ 14,939	X
West	IMPERIAL	Bonita Springs	76496816407	Design & Outreach	507063	Oct-19	Dec-21	28	-	-	28	$ 13,445	X
West	IMPERIAL	Bonita Springs	76496886405	Design & Outreach	507063	Oct-19	Dec-21	21	-	-	21	$ 8,964	X
West	IMPERIAL	Bonita Springs	76596066601	Design & Outreach	507063	Oct-19	Dec-21	7	-	-	7	$ 52,287	X
West	IMPERIAL	Bonita Springs	76596147309	Design & Outreach	507063	Oct-19	Dec-21	7	-	-	7	$ 19,421	
West	IMPERIAL	Bonita Springs	76496546400N	Design & Outreach	507063	Oct-19	Dec-21	21	-	-	21	$ 13,445	
West	IMPERIAL	Bonita Springs	76496546400S	Design & Outreach	507063	Oct-19	Dec-21	26	-	-	26	$ 14,939	X
West	IMPERIAL	Bonita Springs	76496616408S	Design & Outreach	507063	Oct-19	Dec-21	35	1	-	36	$ 14,939	
West	IMPERIAL	Bonita Springs	76496686490N	Design & Outreach	507063	Oct-19	Dec-21	20	-	-	20	$ 13,445	
West	IMPERIAL	Bonita Springs	76496686490S	Design & Outreach	507063	Oct-19	Dec-21	120	26	-	146	$ 168,813	X
West	IMPERIAL	Bonita Springs	76496746409S	Design & Outreach	507063	Oct-19	Dec-21	32	-	-	32	$ 13,445	
West	IMPERIAL	Bonita Springs	76496816407S	Design & Outreach	507063	Oct-19	Dec-21	23	-	-	23	$ 14,939	X
West	IMPERIAL	Bonita Springs	76496886405S	Design & Outreach	507063	Oct-19	Dec-21	21	-	-	21	$ 14,939	
West	IMPERIAL	Bonita Springs	76496946408N	Design & Outreach	507063	Oct-19	Dec-21	23	-	-	23	$ 16,433	X
West	IMPERIAL	Bonita Springs	76496946408S	Design & Outreach	507063	Oct-19	Dec-21	31	-	-	31	$ 17,927	
West	IMPERIAL	Bonita Springs	76596066601E	Design & Outreach	507063	Oct-19	Dec-21	32	-	-	32	$ 28,384	X
West	INTERSTATE	Sarasota	52163994105	Construction	508162	Aug-19	Apr-20	3	-	-	3	$ 89,504	X
Dade	IVES	Miami-Dade	87368731104	Construction	806732	Jul-19	Aug-20	20	-	-	20	$ 321,765	X
North	JENSEN	Martin	66660958805	Construction	403439	Aug-19	Jun-20	43	-	-	43	$ 376,268	X
East	JUPITER	Jupiter	67838977707W	Construction	401837	Jul-19	May-20	71	3	-	74	$ 868,791	X
West	KELLY	Collier	76777339997	Design & Outreach	503569	Aug-19	Dec-21	288	11	-	299	$ 107,562	X
East	LAKE IDA	Delray Beach	67705951301	Construction	409533	Jul-19	Sep-20	82	5	-	87	$ 953,045	
East	LAKE IDA	Delray Beach	67905214206	Construction	409533	Sep-19	Aug-20	242	3	-	245	$ 2,876,507	X
Dade	LEMON CITY	Miami	87360925007	Construction	807731	Aug-19	Dec-20	49	-	-	49	$ 498,024	X
Dade	LEMON CITY	Miami Shores	87361772000	Design & Outreach	807731	Jun-20	Dec-21	14	-	-	14	$ 17,927	
Dade	LEMON CITY	Miami Shores	87361812001	Design & Outreach	807731	Jun-20	Dec-21	13	-	-	13	$ 16,433	
Dade	LEMON CITY	Miami Shores	87361900105	Design & Outreach	807731	Jun-20	Dec-21	75	3	-	78	$ 97,105	X
Dade	LEMON CITY	Miami Shores	87361900202	Design & Outreach	807731	Jun-20	Dec-21	5	-	-	5	$ 14,939	
Dade	LEMON CITY	Miami Shores	87361901802	Design & Outreach	807731	Nov-19	Dec-21	12	-	-	12	$ 25,397	
Dade	LEMON CITY	Miami Shores	87461030508	Design & Outreach	807731	Jun-20	Dec-21	25	-	-	25	$ 25,397	X
Dade	LEMON CITY	Miami-Dade	87360919309E	Design & Outreach	807731	Jun-20	Dec-21	46	1	-	47	$ 49,299	X
Dade	LEMON CITY	Miami	87359425519	Design & Outreach	807734	Oct-19	Dec-21	36	1	-	37	$ 47,805	X
Dade	LEMON CITY	Miami	87359456708	Design & Outreach	807734	Jan-20	Dec-21	78	-	-	78	$ 77,684	X
Dade	LEMON CITY	Miami	87359488308	Construction	807734	Oct-19	Nov-20	60	1	-	61	$ 347,654	X
Dade	LEMON CITY	Miami	87359497200	Design & Outreach	807734	Jan-20	Dec-21	72	-	-	72	$ 65,732	X
Dade	LEMON CITY	Miami	87359497706	Design & Outreach	807734	Jan-20	Dec-21	47	1	-	48	$ 47,805	X
East	LINTON	Delray Beach	68006746302	Design & Outreach	401935	Feb-20	Dec-21	74	4	-	78	$ 119,514	X
East	LINTON	Delray Beach	68006756201	Design & Outreach	401935	Feb-20	Dec-21	120	12	-	132	$ 183,752	X
East	LINTON	Delray Beach	68006770301N	Design & Outreach	401935	Feb-20	Dec-21	229	11	-	240	$ 268,905	X
East	LINTON	Delray Beach	68006770301S	Design & Outreach	401935	Feb-20	Dec-21	172	16	-	188	$ 107,562	X
Dade	LITTLE RIVER	Miami	87358609705	Construction	800637	Mar-19	Nov-20	89	2	-	91	$ 981,547	X
West	LIVINGSTON	Collier	76582762405	Construction	506664	Aug-19	Aug-20	25	-	-	25	$ 431,771	X
East	LOXAHATCHEE	Wellington	66720404505	Construction	407662	Sep-19	May-20	49	1	-	50	$ 1,134,804	X
East	LOXAHATCHEE	Wellington	66620805790	Construction	407663	Sep-19	Nov-20	125	3	-	128	$ 1,932,842	X
Broward	LYONS	Pompano Beach	87887942400	Construction	701133	Sep-19	Mar-20	80	5	-	85	$ 635,710	X
Broward	LYONS	Pompano Beach	87987096001	Construction	701133	Aug-19	Mar-20	22	1	-	23	$ 302,880	X
Broward	LYONS	Pompano Beach	87887044908	Design & Outreach	701135	Sep-19	Dec-21	123	-	-	123	$ 56,769	X
Broward	LYONS	Pompano Beach	87887244702	Construction	701135	Jul-19	Jun-20	38	-	-	38	$ 307,922	X
Dade	MIAMI SHORES	Miami-Dade	87061825508	Design & Outreach	803437	Aug-19	Dec-21	33	1	-	34	$ 34,360	X
North	MILLS	Callahan	13000911605	Design & Outreach	308063	Jan-20	Dec-21	63	-	-	63	$ 209,149	
North	MILLS	Callahan	13100102802	Design & Outreach	308063	Jan-20	Dec-21	39	1	-	40	$ 88,141	
North	MILLS	Callahan	13100252707	Design & Outreach	308063	Jan-20	Dec-21	38	1	-	39	$ 91,129	
North	MILLS	Callahan	13100402091N	Design & Outreach	308063	Jan-20	Dec-21	115	3	-	118	$ 551,256	X
Broward	MOFFETT	Hollywood	87471961709	Design & Outreach	704133	Sep-19	Dec-21	184	3	-	187	$ 149,392	X
Broward	MOFFETT	Hollywood	87471963604	Design & Outreach	704133	Jun-20	Dec-21	27	-	-	27	$ 16,433	X
Broward	MOFFETT	Hollywood	87771429700	Construction	704136	Aug-19	Mar-20	68	3	-	71	$ 615,844	X
East	MONET	Palm Beach Gardens	67933053700	Construction	403738	Sep-19	Dec-20	300	3	-	303	$ 4,256,703	X
East	MONET	Palm Beach Gardens	67933076203	Construction	403738	Sep-19	Aug-20	190	5	-	195	$ 3,181,902	X
East	MORAY	Palm Beach Gardens	67933943501	Construction	411234	Sep-19	Nov-20	65	2	-	67	$ 3,216,403	
West	NAPLES	Naples	76283658704	Construction	501235	Apr-19	Sep-20	67	2	-	69	$ 583,028	X
West	NAPLES	Naples	76284640701W	Construction	501235	Aug-19	Apr-20	110	8	-	118	$ 409,770	X
West	NAPLES	Naples	76282558803	Construction	501237	Mar-19	Apr-20	16	1	-	17	$ 121,006	X
West	NAPLES	Naples	76282968793	Design & Outreach	501238	Aug-19	Dec-21	77	4	-	81	$ 185,246	X
West	NAPLES	Naples	76283684403	Design & Outreach	501238	Aug-19	Dec-21	75	-	-	75	$ 86,647	X
West	NAPLES	Naples	76283733404	Design & Outreach	501238	Aug-19	Dec-21	93	3	-	96	$ 118,020	X
West	NAPLES	Naples	76383073208	Design & Outreach	501238	Aug-19	Dec-21	87	-	-	87	$ 98,599	X
West	NAPLES	Naples	76280838906	Design & Outreach	501239	Aug-19	Dec-21	53	12	-	65	$ 29,878	X
West	NAPLES	Naples	76280875208	Design & Outreach	501239	Aug-19	Dec-21	103	4	-	107	$ 180,764	X
West	NAPLES	Naples	76379145909	Design & Outreach	501240	Aug-19	Dec-21	56	8	-	64	$ 86,647	X
West	NAPLES	Naples	76379188209	Design & Outreach	501240	Aug-19	Dec-21	23	3	-	26	$ 76,190	X
Dade	NATOMA	Miami	87052518908	Design & Outreach	805234	Oct-19	Dec-21	102	2	-	104	$ 67,226	X
Broward	NOB HILL	Plantation	86780916700	Construction	706662	Aug-19	Jun-20	-	11	-	11	$ 317,855	
Broward	NOB HILL	Plantation	86581013308	Construction	706663	Aug-19	Jun-20	8	2	-	10	$ 556,247	
Broward	OAKLAND PARK	Fort Lauderdale	87883345601	Construction	700436	Jul-19	Sep-20	36	-	-	36	$ 297,989	X
Dade	OPA LOCKA	Miami-Dade	86962737102	Construction	801234	Aug-19	Jun-20	73	8	-	81	$ 1,255,810	X
West	ORTIZ	Fort Myers	56118858302E	Construction	503861	Aug-19	Aug-20	40	-	-	40	$ 856,791	X
West	PARK	Sarasota	51771785708	Design & Outreach	505363	Sep-19	Dec-21	11	-	-	11	$ 13,445	
West	PARK	Sarasota	51771825700	Design & Outreach	505363	Sep-19	Dec-21	50	-	-	50	$ 56,769	
West	PARK	Sarasota	51771970700	Construction	505363	Apr-20	Aug-20	53	-	-	53	$ 138,257	X
West	PARK	Sarasota	51771994706	Design & Outreach	505363	Sep-19	Dec-21	11	-	-	11	$ 4,482	

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West	PARK	Sarasota	51871002744	Construction	505363	Aug-19	Aug-20	24	-	-	24	$ 2,000	X
West	PARK	Sarasota	51871072700	Construction	505363	Aug-19	Aug-20	25	2	-	27	$ 717,284	X
West	PARK	Sarasota	51972260907	Construction	505363	Aug-19	Dec-20	70	1	-	71	$ 24,251	
West	PARK	Sarasota	51771745609S	Design & Outreach	505363	Sep-19	Dec-21	21	-	-	21	$ 41,830	
West	PARK	Sarasota	51771993904W	Design & Outreach	505363	Sep-19	Dec-21	15	-	-	15	$ 17,927	
West	PAYNE	Sarasota	51470270602	Construction	502834	Aug-19	Dec-20	110	5	-	115	$ 644,031	X
West	PAYNE	Sarasota	51470141004E	Construction	502834	Aug-19	Aug-20	21	-	-	21	$ 321,765	X
Broward	PERRY	Miramar	86969605104	Construction	702837	Aug-19	Mar-20	197	4	-	201	$ 1,082,694	X
West	PHILLIPPI	Sarasota	51564505502	Design & Outreach	503031	Aug-19	Dec-21	109	15	-	124	$ 128,477	X
West	PHILLIPPI	Sarasota	51563482100W	Design & Outreach	503031	Sep-18	Dec-21	165	7	-	172	$ 103,080	X
West	PHILLIPPI	Sarasota	51565510208E	Design & Outreach	503032	Jul-19	Dec-21	51	9	-	60	$ 62,745	X
West	PHILLIPPI	Sarasota	51364898303	Design & Outreach	503033	Nov-19	Dec-21	10	1	-	11	$ 25,397	X
West	PHILLIPPI	Sarasota	51565327713	Design & Outreach	503034	Jul-19	Dec-21	76	55	-	131	$ 128,477	
West	PHILLIPPI	Sarasota	51564919706W	Design & Outreach	503034	Oct-19	Dec-21	66	8	-	74	$ 91,129	X
West	PHILLIPPI	Sarasota	51364950208	Construction	503037	Jun-19	Aug-20	30	-	-	30	$ 335,266	X
West	PINE RIDGE	Collier	76289738700E	Design & Outreach	504370	Aug-19	Dec-21	25	19	-	44	$ 31,372	X
West	PINE RIDGE	Collier	76289738700W	Design & Outreach	504370	Oct-19	Dec-21	129	2	-	131	$ 104,574	X
Broward	PINEHURST	Fort Lauderdale	87778138301	Design & Outreach	700333	Jun-20	Dec-21	61	1	-	62	$ 71,708	X
Broward	PINEHURST	Fort Lauderdale	87579965701	Design & Outreach	700335	Aug-19	Dec-21	111	8	-	119	$ 61,251	X
Broward	PINEHURST	Fort Lauderdale	87578292304	Construction	700337	Aug-19	Mar-20	55	-	-	55	$ 347,654	X
Broward	PLANTATION	Plantation	87080349708	Design & Outreach	701632	Aug-19	Dec-21	47	-	-	47	$ 115,032	X
Broward	PLANTATION	Plantation	87080599704	Construction	701632	Aug-19	Mar-20	65	-	-	65	$ 769,429	X
Broward	PLANTATION	Plantation	87279555207S	Construction	701639	Aug-19	Mar-20	30	-	-	30	$ 268,190	X
Broward	PLAYLAND	Davie	87076876405	Design & Outreach	701233	Feb-20	Dec-21	76	6	-	82	$ 37,348	X
Broward	PLAYLAND	Davie	87175139715	Design & Outreach	701233	Feb-20	Dec-21	26	1	-	27	$ 61,251	X
Broward	PLAYLAND	Davie	87175768143	Design & Outreach	701233	Jun-20	Dec-21	4	9	-	13	$ 82,166	
Broward	PLAYLAND	Davie	87176343308	Design & Outreach	701233	Jun-20	Dec-21	38	2	-	40	$ 67,226	X
Broward	PLAYLAND	Davie	87076636609N	Design & Outreach	701233	Jun-20	Dec-21	91	4	-	95	$ 47,805	X
West	POLO	Sarasota	52068129200	Design & Outreach	507163	Aug-19	Dec-21	87	-	-	87	$ 152,380	X
North	PORT SEWALL	Martin	67153168001	Construction	404939	Jul-19	Sep-20	54	1	-	55	$ 706,541	X
North	PORT SEWALL	Martin	67153216901	Construction	404939	Jun-19	May-20	37	-	-	37	$ 413,020	X
West	PROCTOR	Sarasota	51965696002	Design & Outreach	505161	Aug-19	Dec-21	171	-	-	171	$ 170,307	X
West	PROCTOR	Sarasota	52265061406	Design & Outreach	505165	Aug-19	Dec-21	19	-	-	19	$ 17,927	
West	PROCTOR	Sarasota	52265241501	Design & Outreach	505165	Aug-19	Dec-21	11	-	-	11	$ 14,939	
West	PROCTOR	Sarasota	52265241510	Design & Outreach	505165	Aug-19	Dec-21	20	-	-	20	$ 17,927	X
West	PROCTOR	Sarasota	52265242001	Design & Outreach	505165	Aug-19	Dec-21	15	-	-	15	$ 16,433	
West	PROCTOR	Sarasota	52265242010	Design & Outreach	505165	Aug-19	Dec-21	20	-	-	20	$ 19,421	
West	PROCTOR	Sarasota	52265243105E	Design & Outreach	505165	Aug-19	Dec-21	20	-	-	20	$ 17,927	
West	PROCTOR	Sarasota	52265243105W	Design & Outreach	505165	Aug-19	Dec-21	39	-	-	39	$ 37,348	X
West	PROCTOR	Sarasota	52265243601E	Design & Outreach	505165	Aug-19	Dec-21	17	-	-	17	$ 19,421	X
West	PROCTOR	Sarasota	52265245507E	Design & Outreach	505165	Aug-19	Dec-21	59	-	-	59	$ 76,190	X
West	PROCTOR	Sarasota	52265245507W	Design & Outreach	505165	Aug-19	Dec-21	21	-	-	21	$ 17,927	
West	PROCTOR	Sarasota	52265252503E	Design & Outreach	505165	Aug-19	Dec-21	20	-	-	20	$ 19,421	X
West	PROCTOR	Sarasota	52265252503W	Design & Outreach	505165	Aug-19	Dec-21	18	-	-	18	$ 19,421	X
Broward	PROGRESSO	Fort Lauderdale	87682740101	Construction	709262	Apr-19	Jun-20	110	6	-	116	$ 546,314	X
Broward	PROGRESSO	Fort Lauderdale	87782182506	Construction	709263	Aug-19	Mar-20	85	1	-	86	$ 546,314	X
West	PUNTA GORDA	Punta Gorda	54638561506	Design & Outreach	501534	Sep-19	Dec-21	14	-	-	14	$ 20,915	
West	RATTLESNAKE	Collier	77178131107	Design & Outreach	507762	Jul-19	Dec-21	13	-	-	13	$ 46,311	X
Broward	RESERVATION	Hollywood	87274026303N	Construction	703434	Aug-19	Mar-20	16	19	-	35	$ 265,820	X
Broward	ROHAN	Fort Lauderdale	87378539303	Design & Outreach	703032	Jun-20	Dec-21	35	9	-	44	$ 52,287	X
Broward	ROHAN	Fort Lauderdale	87378669908	Design & Outreach	703032	Jun-20	Dec-21	24	1	-	25	$ 17,927	
Broward	ROHAN	Fort Lauderdale	87378679393	Design & Outreach	703032	Jun-20	Dec-21	28	-	-	28	$ 22,409	X
Broward	ROHAN	Fort Lauderdale	87478112405	Construction	703034	Oct-19	Dec-20	30	2	-	32	$ 248,324	X
Broward	ROHAN	Fort Lauderdale	87278902507	Construction	703035	Aug-19	Jun-20	36	-	-	36	$ 253,968	
Broward	ROHAN	Fort Lauderdale	87377759903	Design & Outreach	703035	Jun-20	Dec-21	14	-	-	14	$ 29,878	X
Broward	ROHAN	Fort Lauderdale	87378970403	Construction	703035	Mar-19	Jun-20	31	3	-	34	$ 675,442	X
North	ROSEDALE	Vero Beach	65788457003	Design & Outreach	410762	Feb-20	Dec-21	52	1	-	53	$ 128,477	X
North	ROSEDALE	Vero Beach	65788527001	Design & Outreach	410762	Feb-20	Dec-21	10	2	-	12	$ 31,372	X
North	ROSEDALE	Vero Beach	65788597000	Design & Outreach	410762	Feb-20	Dec-21	14	-	-	14	$ 38,842	
North	ROSEDALE	Vero Beach	65788727001	Design & Outreach	410762	Feb-20	Dec-21	11	-	-	11	$ 32,866	X
North	ROSEDALE	Vero Beach	65788757007	Design & Outreach	410762	Feb-20	Dec-21	12	1	-	13	$ 34,360	
North	ROSEDALE	Vero Beach	65788797009	Design & Outreach	410762	Feb-20	Dec-21	14	-	-	14	$ 29,878	X
North	ROSEDALE	Vero Beach	65788857010	Design & Outreach	410762	Feb-20	Dec-21	12	-	-	12	$ 34,360	X
North	ROSEDALE	Vero Beach	65789222301	Design & Outreach	410762	Feb-20	Dec-21	77	-	-	77	$ 123,995	X
North	ROSEDALE	Vero Beach	65888454801	Design & Outreach	410762	Feb-20	Dec-21	168	-	-	168	$ 247,991	X
North	ROSEDALE	Vero Beach	65788317007N	Design & Outreach	410762	Feb-20	Dec-21	159	5	-	164	$ 107,562	
North	ROSEDALE	Vero Beach	65788317007S	Design & Outreach	410762	Feb-20	Dec-21	16	1	-	17	$ 34,360	X
North	ROSEDALE	Vero Beach	65788387005N	Design & Outreach	410762	Feb-20	Dec-21	60	-	-	60	$ 71,708	X
North	ROSEDALE	Vero Beach	65788387005S	Design & Outreach	410762	Feb-20	Dec-21	8	-	-	8	$ 32,866	X
North	ROSEDALE	Vero Beach	65788667008N	Design & Outreach	410762	Feb-20	Dec-21	17	-	-	17	$ 32,866	X
North	ROSEDALE	Vero Beach	65788667008S	Design & Outreach	410762	Feb-20	Dec-21	27	-	-	27	$ 32,866	X
North	ROSEDALE	Vero Beach	65888517209E	Design & Outreach	410762	Feb-20	Dec-21	75	1	-	76	$ 155,368	X
Broward	SAMPLE ROAD	Lighthouse Point	87991733001	Design & Outreach	701033	Jan-20	Dec-21	18	15	-	33	$ 19,421	X
Broward	SAMPLE ROAD	Lighthouse Point	88091130301	Design & Outreach	701033	Jan-20	Dec-21	11	-	-	11	$ 8,964	
Broward	SAMPLE ROAD	Lighthouse Point	88091340208	Design & Outreach	701033	Jun-20	Dec-21	33	4	-	37	$ 32,866	
Broward	SAMPLE ROAD	Lighthouse Point	88901292105	Design & Outreach	701033	Feb-20	Dec-21	23	-	-	23	$ 32,866	X
Broward	SAMPLE ROAD	Lighthouse Point	87991504207	Design & Outreach	701035	Jun-20	Dec-21	45	1	-	46	$ 8,964	X
Broward	SAMPLE ROAD	Lighthouse Point	88091005417	Design & Outreach	701035	Jan-20	Dec-21	14	-	-	14	$ 17,927	X
Broward	SAMPLE ROAD	Lighthouse Point	88091215004	Design & Outreach	701035	Feb-20	Dec-21	18	-	-	18	$ 22,409	
Broward	SAMPLE ROAD	Lighthouse Point	88091295008	Design & Outreach	701035	Jun-20	Dec-21	15	1	-	16	$ 20,915	
Broward	SAMPLE ROAD	Lighthouse Point	87991795805S	Design & Outreach	701035	Jan-20	Dec-21	34	-	-	34	$ 34,360	
Broward	SAMPLE ROAD	Lighthouse Point	87991935500S	Design & Outreach	701035	Jan-20	Dec-21	24	-	-	24	$ 29,878	
Broward	SAMPLE ROAD	Lighthouse Point	87991499505	Design & Outreach	701043	Jun-20	Dec-21	168	8	-	176	$ 35,854	X
Broward	SAMPLE ROAD	Lighthouse Point	87991498304S	Design & Outreach	701043	Jun-20	Dec-21	191	13	-	204	$ 29,878	X
West	SARASOTA	Sarasota	51470645908	Design & Outreach	500131	Aug-19	Dec-21	66	1	-	67	$ 79,178	X
West	SARASOTA	Sarasota	51568698402E	Construction	500135	Aug-19	Oct-20	24	-	-	24	$ 588,028	X
Dade	SEMINOLA	Miami Springs	86659101401	Design & Outreach	808533	Dec-19	Dec-21	21	-	-	21	$ 50,793	
West	SHADE	Sarasota	51571699309	Construction	506262	Jun-19	Apr-20	4	-	-	4	$ 152,007	X
West	SHADE	Sarasota	51471494806	Construction	506264	Aug-19	Sep-20	13	-	-	13	$ 331,516	X
Broward	SISTRUNK	Fort Lauderdale	87880082103	Construction	700134	Aug-19	Mar-20	37	2	-	39	$ 377,453	X
Broward	SISTRUNK	Fort Lauderdale	87880113807	Design & Outreach	700134	Sep-19	Dec-21	23	2	-	25	$ 38,842	
Broward	SISTRUNK	Fort Lauderdale	87481822507	Design & Outreach	700139	Jun-20	Dec-21	145	6	-	151	$ 201,679	X
Broward	SISTRUNK	Fort Lauderdale	87481957003	Design & Outreach	700139	Jan-20	Dec-21	117	-	-	117	$ 132,959	X
Broward	SISTRUNK	Fort Lauderdale	87481998800	Design & Outreach	700139	Jun-20	Dec-21	276	9	-	285	$ 304,760	X
Broward	SISTRUNK	Fort Lauderdale	87580489004	Design & Outreach	700139	Feb-20	Dec-21	115	6	-	121	$ 32,866	X
Broward	SISTRUNK	Fort Lauderdale	87581015405	Design & Outreach	700139	Jan-20	Dec-21	124	3	-	127	$ 126,983	X
Broward	SISTRUNK	Fort Lauderdale	87581059003	Design & Outreach	700139	Jan-20	Dec-21	129	3	-	132	$ 174,789	X
Broward	SISTRUNK	Fort Lauderdale	87581422400	Design & Outreach	700139	Jan-20	Dec-21	128	4	-	132	$ 125,489	X
Broward	SISTRUNK	Fort Lauderdale	87581853010	Design & Outreach	700139	Jun-20	Dec-21	113	8	-	121	$ 73,202	X
Broward	SISTRUNK	Fort Lauderdale	87479478411	Construction	700143	Oct-19	Dec-20	21	17	-	38	$ 248,324	
Dade	SNAPPER CREEK	Pinecrest	86646635002	Construction	808831	Aug-19	Jun-20	25	1	-	26	$ 557,777	X
Dade	SNAPPER CREEK	Pinecrest	86746090608	Construction	808831	Jan-19	Nov-20	51	-	-	51	$ 1,028,549	
Dade	SNAPPER CREEK	Pinecrest	86648231308	Construction	808834	Aug-19	Nov-20	36	2	-	38	$ 550,026	X
West	SOLANA	Collier	76384179204E	Design & Outreach	503132	Aug-19	Dec-21	62	1	-	63	$ 70,214	X
West	SOLANA	Collier	76384179808E	Design & Outreach	503132	Aug-19	Dec-21	62	1	-	63	$ 52,287	X

Region	Substation	City/County	Lateral #	Phase	Feeder #	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
West	SOLANA	Naples	76284980901	Construction	503133	Aug-19	Apr-20	29	9	-	38	$ 194,009	X
Broward	SOUTHSIDE	Plantation	87679881000	Design & Outreach	705532	Jul-19	Dec-21	39	2	-	41	$ 28,384	
Broward	SOUTHSIDE	Plantation	87679883002	Design & Outreach	705532	Sep-19	Dec-21	42	-	-	42	$ 41,830	X
Broward	SOUTHSIDE	Plantation	87579224507	Construction	705564	Jul-19	Jun-20	152	16	-	168	$ 417,185	X
Broward	STONEBRIDGE	Southwest Ranches	86373276609	Design & Outreach	704761	Jun-20	Dec-21	3	-	-	3	$ 11,951	X
Broward	STONEBRIDGE	Southwest Ranches	86373346607	Design & Outreach	704761	Dec-19	Dec-21	4	-	-	4	$ 20,915	X
Broward	STONEBRIDGE	Southwest Ranches	86373467901	Design & Outreach	704761	Dec-19	Dec-21	1	1	-	2	$ 4,482	
Broward	STONEBRIDGE	Southwest Ranches	86373536708	Design & Outreach	704761	Jun-20	Dec-21	4	-	-	4	$ 11,951	X
Broward	STONEBRIDGE	Southwest Ranches	86373586705	Design & Outreach	704761	Jun-20	Dec-21	1	-	-	1	$ 8,964	X
Broward	STONEBRIDGE	Southwest Ranches	86373656703	Design & Outreach	704761	Jun-20	Dec-21	2	-	-	2	$ 11,951	
Broward	STONEBRIDGE	Southwest Ranches	86373736707	Design & Outreach	704761	Jun-20	Dec-21	3	-	-	3	$ 11,951	X
Broward	STONEBRIDGE	Southwest Ranches	86373786704	Design & Outreach	704761	Dec-19	Dec-21	7	1	-	8	$ 11,951	
Broward	STONEBRIDGE	Southwest Ranches	86373866708	Design & Outreach	704761	Jun-20	Dec-21	1	-	-	1	$ 7,470	
Broward	STONEBRIDGE	Southwest Ranches	86374004700	Design & Outreach	704761	Jun-20	Dec-21	1	1	-	2	$ 4,482	X
Broward	STONEBRIDGE	Southwest Ranches	86374044701	Design & Outreach	704761	Jun-20	Dec-21	3	-	-	3	$ 23,903	X
Broward	STONEBRIDGE	Southwest Ranches	86374264701	Design & Outreach	704761	Jun-20	Dec-21	4	-	-	4	$ 10,457	X
Broward	STONEBRIDGE	Southwest Ranches	86374451307	Design & Outreach	704761	Dec-19	Dec-21	3	1	-	4	$ 26,891	
Broward	STONEBRIDGE	Southwest Ranches	86374451901	Design & Outreach	704761	Dec-19	Dec-21	13	-	-	13	$ 77,684	
Broward	STONEBRIDGE	Southwest Ranches	86473076705	Design & Outreach	704761	Dec-19	Dec-21	6	1	-	7	$ 31,372	X
Broward	STONEBRIDGE	Southwest Ranches	86473136805	Design & Outreach	704761	Jun-20	Dec-21	2	1	-	3	$ 13,445	
Broward	STONEBRIDGE	Southwest Ranches	86473266806	Design & Outreach	704761	Dec-19	Dec-21	2	-	-	2	$ 19,421	X
Broward	STONEBRIDGE	Southwest Ranches	86473426803	Design & Outreach	704761	Dec-19	Dec-21	3	-	-	3	$ 11,951	X
Broward	STONEBRIDGE	Southwest Ranches	86473726807	Design & Outreach	704761	Dec-19	Dec-21	1	-	-	1	$ 5,976	X
Broward	STONEBRIDGE	Southwest Ranches	86374194606N	Design & Outreach	704761	Jun-20	Dec-21	2	-	-	2	$ 5,976	
Broward	STONEBRIDGE	Southwest Ranches	86374194606S	Design & Outreach	704761	Dec-19	Dec-21	3	-	-	3	$ 25,397	X
Broward	STONEBRIDGE	Southwest Ranches	86374374701S	Design & Outreach	704761	Jun-20	Dec-21	1	1	-	2	$ 5,976	X
Broward	STONEBRIDGE	Southwest Ranches	8637486470 9S	Design & Outreach	704761	Jun-20	Dec-21	4	-	-	4	$ 14,939	X
Broward	STONEBRIDGE	Southwest Ranches	86474404706	Design & Outreach	704763	Dec-19	Dec-21	6	1	-	7	$ 16,433	
Broward	STONEBRIDGE	Southwest Ranches	86474104702S	Design & Outreach	704763	Dec-19	Dec-21	7	1	-	8	$ 34,360	X
Dade	SUNILAND	Pinecrest	86446502308	Design & Outreach	806531	Oct-19	Dec-21	26	2	-	28	$ 77,684	X
Dade	SUNILAND	Pinecrest	86446821705	Design & Outreach	806531	Oct-19	Dec-21	3	-	-	3	$ 5,976	
Dade	SUNILAND	Pinecrest	86446879304	Design & Outreach	806533	Jun-20	Dec-21	54	-	-	54	$ 150,886	X
Dade	SUNILAND	Pinecrest	86546879817	Design & Outreach	806533	Jun-20	Dec-21	32	1	-	33	$ 89,635	X
Dade	SUNILAND	Pinecrest	86547871500	Design & Outreach	806533	Jun-20	Dec-21	27	-	-	27	$ 106,068	X
Dade	SUNILAND	Pinecrest	86445377801	Design & Outreach	806534	Jun-18	Dec-21	7	-	-	7	$ 10,457	X
Dade	SUNILAND	Pinecrest	86445418907S	Design & Outreach	806534	Apr-18	Dec-21	4	-	-	4	$ 5,976	X
Dade	SUNILAND	Pinecrest	86646486503	Construction	806535	Jan-19	May-20	2	-	-	2	$ 2,000	X
Dade	SUNILAND	Pinecrest	86646495600	Construction	806535	Jan-19	May-20	8	-	-	8	$ 202,010	X
Dade	SUNILAND	Pinecrest	86647462501	Construction	806535	Feb-19	Dec-20	77	2	-	79	$ 1,114,553	X
East	TERMINAL	West Palm Beach	68125353106	Construction	402133	Sep-19	Apr-20	42	-	-	42	$ 537,276	X
Dade	TROPICAL	Miami-Dade	86353281801	Design & Outreach	803037	Dec-19	Dec-21	22	-	-	22	$ 32,866	X
Dade	TROPICAL	Miami-Dade	86353534203	Design & Outreach	803037	Dec-19	Dec-21	25	-	-	25	$ 28,384	X
West	TUTTLE	Sarasota	51868219401	Construction	504532	Oct-19	Sep-20	22	-	-	22	$ 487,273	X
West	TUTTLE	Sarasota	51667089001	Construction	504535	Aug-19	Apr-20	18	1	-	19	$ 316,265	X
West	TUTTLE	Sarasota	51568952708	Design & Outreach	504536	Oct-19	Dec-21	124	1	-	125	$ 115,032	X
West	TUTTLE	Sarasota	51668112708	Design & Outreach	504536	Oct-19	Dec-21	105	-	-	105	$ 119,514	X
Dade	ULETA	North Miami Beach	87466009906	Construction	806336	Jul-18	Oct-20	36	-	-	36	$ 424,520	X
Broward	VALENCIA	Davie	86576094117	Design & Outreach	706266	Dec-19	Dec-21	22	8	-	30	$ 77,412	X
West	VANDERBILT	Collier	76491670005	Construction	506762	Aug-19	Apr-20	355	18	-	373	$ 37,252	X
West	VANDERBILT	Collier	76591431203	Design & Outreach	506765	Oct-19	Dec-21	123	14	-	137	$ 50,793	X
West	VANDERBILT	Collier	76591431700	Design & Outreach	506765	Oct-19	Dec-21	28	-	-	28	$ 35,854	X
West	VANDERBILT	Collier	76591431718	Design & Outreach	506765	Oct-19	Dec-21	14	1	-	15	$ 14,939	
West	VANDERBILT	Collier	76591432404	Design & Outreach	506765	Oct-19	Dec-21	28	-	-	28	$ 29,878	X
West	VANDERBILT	Collier	76591432412	Design & Outreach	506765	Oct-19	Dec-21	63	1	-	64	$ 14,939	
West	VANDERBILT	Collier	76591433109	Design & Outreach	506765	Oct-19	Dec-21	78	-	-	78	$ 56,769	X
West	VANDERBILT	Collier	76591433117	Design & Outreach	506765	Oct-19	Dec-21	36	2	-	38	$ 47,805	X
West	VANDERBILT	Collier	76591433702	Design & Outreach	506765	Oct-19	Dec-21	55	1	-	56	$ 47,805	X
West	VANDERBILT	Collier	76591433711	Design & Outreach	506765	Oct-19	Dec-21	46	3	-	49	$ 55,275	X
West	VANDERBILT	Collier	76591434407	Design & Outreach	506765	Oct-19	Dec-21	41	1	-	42	$ 53,781	X
West	VANDERBILT	Collier	76591434415	Design & Outreach	506765	Oct-19	Dec-21	27	-	-	27	$ 14,939	X
West	VANDERBILT	Collier	76591435110	Design & Outreach	506765	Oct-19	Dec-21	14	-	-	14	$ 13,445	X
West	VANDERBILT	Collier	76591435705	Design & Outreach	506765	Aug-19	Dec-21	69	2	-	71	$ 149,392	X
West	VANDERBILT	Collier	76591435713W	Design & Outreach	506765	Oct-19	Dec-21	11	1	-	12	$ 13,445	X
West	VANDERBILT	Collier	76591436400E	Design & Outreach	506765	Oct-19	Dec-21	22	-	-	22	$ 14,939	
Broward	VERENA	Fort Lauderdale	87882188600	Construction	700635	Aug-19	Jun-20	33	-	-	33	$ 258,257	X
Broward	VERENA	Fort Lauderdale	87882473100	Construction	700636	Aug-19	Jun-20	34	-	-	34	$ 387,386	X
Broward	VERENA	Fort Lauderdale	87982089707N	Design & Outreach	700636	Oct-19	Dec-21	50	2	-	52	$ 37,348	
Broward	VERENA	Fort Lauderdale	87781433505	Design & Outreach	700639	Oct-19	Dec-21	73	9	-	82	$ 38,842	X
Broward	VERENA	Fort Lauderdale	87881803009	Design & Outreach	700641	Oct-19	Dec-21	14	18	-	32	$ 40,336	X
West	WALKER	Bradenton	51179873909E	Design & Outreach	506033	Sep-19	Dec-21	214	1	-	215	$ 222,594	X
West	WALKER	Bradenton	51180622108	Construction	506034	Mar-19	Apr-20	35	1	-	36	$ 493,274	X
Dade	WATKINS	Miami Springs	86557668103	Design & Outreach	805433	Feb-20	Dec-21	142	-	-	142	$ 143,416	X
Dade	WATKINS	Miami Springs	86558630002	Design & Outreach	805433	Feb-20	Dec-21	8	2	-	10	$ 5,976	X
Dade	WESTON VILLAGE	Miami Gardens	87167655009	Construction	807831	Dec-18	Dec-20	87	-	-	87	$ 337,266	X
Dade	WESTON VILLAGE	Miami Gardens	87267588008	Construction	807833	Aug-19	Jun-20	89	1	-	90	$ 977,547	
Dade	WESTON VILLAGE	Miami Gardens	87267378003N	Construction	807835	Mar-19	May-20	74	1	-	75	$ 531,025	X
East	WESTWARD	West Palm Beach	67923571007	Construction	404038	Jun-18	May-20	81	1	-	82	$ 965,546	X
West	WINKLER	Fort Myers	56015443502	Construction	505464	Aug-18	Apr-20	497	10	-	507	$ 42,002	X
West	WOODS	Manatee	51676096503	Construction	506964	Apr-20	Jul-20	381	3	-	384	$ 377,768	X
North	WRIGHT	Volusia	37507450100	Construction	109031	Jun-19	Aug-20	70	-	-	70	$ 437,521	X
North	WYOMING	Palm Bay	48313557503E	Construction	207362	Sep-19	Apr-20	15	-	-	15	$ 264,513	X

Notes:

(1) Start date reflects estimated/actual date when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, customer outreach)

(2) Completion date reflects the estimated/actual date when all project costs will be final

Appendix E: FPL 2020 Project Level Detail
Substation Storm Surge / Flood Mitigation Program

Region	Substation	Substation Address	Substation Type	Estimated / Actual Start Date[1]	Current Estimated Completion Date[2]	Residential Customers	Commercial Customers	Industrial Customers	Total Customers	2020 Project Cost	Irma / Matthew Outage
St. Johns	St. Augustine	106 Riberia St, St. Augustine, FL 32084	Distribution	8/1/2020	12/31/2021	5013	1536	38	6587	$ 3,000,000	X

Notes:
(1) Start date reflects estimated/actual date when initial project costs will begin to accrue (e.g., preliminary engineering/design, site preparations, customer outreach)
(2) Completion date reflects the estimated date when all project costs will be final