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DOCKET NO. 20230045-EI

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March 31, 2023

VIA ELECTRONIC FILING

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

Re: Docket No. 2023_

Petition of Florida Power & Light Company for Approval of Revisions to the Underground Residential Differential Tariff, Underground Commercial Differential Tariff, and Overhead to Underground Conversion Tariff

Dear Mr. Teitzman:

Florida Power & Light Company ("FPL") herein files the enclosed Petition, together with supporting Appendices 1 through 3, and requests approval of certain revisions to its Underground Residential Differential Tariffs, Underground Commercial Differential Tariffs, Overhead to Underground Conversion Tariff, and associated Underground Facilities Conversion Agreement.

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

Respectfully submitted,

/sChristopher T. Wright____

Christopher T. Wright Fla. Auth. House Counsel No. 1007055

Enclosures

cc: Kenneth A. Hoffman

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Florida Power & Light Company Petition for Approval of Revisions to Underground Residential Differential Tariff, Underground Commercial Differential Tariff, and Overhead to Underground Conversion Tariff Docket No. 2023_____

Filed: March 31, 2023

PETITION OF FLORIDA POWER & LIGHT COMPANY FOR APPROVAL OF REVISIONS TO UNDERGROUND RESIDENTIAL DIFFERENTIAL TARIFF, UNDERGROUND COMMERCIAL DIFFERENTIAL TARIFF, AND <u>OVERHEAD TO UNDERGROUND CONVERSION TARIFF</u>

I. <u>INTRODUCTION</u>

Florida Power & Light Company ("FPL") hereby files this petition (the "Petition") requesting that the Florida Public Service Commission ("Commission") approve revisions to its Underground Residential Differential ("URD") and Underground Commercial Differential ("UCD") Tariffs to update the cost differential for underground service. In addition, FPL requests approval to revise its Overhead to Underground Conversion ("OH/UG Conversion") Tariff and associated Underground Facilities Conversion Agreement to clarify the existing facilities cost to be excluded from the calculation of the contribution-in-aid-of-construction ("CIAC") for underground conversion of non-hardened facilities. In support of this Petition, FPL states as follows:

1. The names and addresses of Petitioner is:

Florida Power & Light Company 700 Universe Blvd Juno Beach, FL 33408 2. FPL is a corporation organized and existing under the laws of the State of Florida and is an electric utility as defined in Section 366.02(2), Florida Statutes ("F.S.").

3. All pleadings, motions, notices, orders, or other documents required to be served upon the Petitioners or filed by any party to this proceeding should be served upon the following individuals:

Kenneth A. Hoffman	Christopher T. Wright
Vice President, Regulatory Affairs	Senior Counsel
Florida Power & Light Company	Florida Power & Light Company
215 South Monroe Street, Suite 810	700 Universe Boulevard (LAW/JB)
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4. The Commission has jurisdiction pursuant to Section 366.05(1)(d), F.S., and Rules 25-6.033, 25-6.078(3), and 25-6.115(12), Florida Administrative Code ("F.A.C.").

5. In this proceeding, FPL is seeking approval of three tariff modifications. First, FPL seeks approval of an update to the cost differential for residential underground service and associated URD Tariff Sheets. Second, FPL seeks approval of an update to the cost differential for commercial underground service and the associated UCD Tariff Sheets. Third, FPL seeks approval of a clarification of the existing facilities cost to be excluded from the calculation of CIAC for underground conversion of non-hardened facilities in the OH/UG Conversion Tariff Sheet No. 6.300 and the associated Underground Facilities Conversion Agreement Tariff Sheet No. 9.722.

6. Each of the foregoing tariff modifications is further described below and in the supporting Appendices. FPL submits that these tariff modifications are just, fair, and consistent with established Commission practice.

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II. URD TARIFF

7. Rule 25.6.078(1), F.A.C., provides that each utility is required to obtain Commission approval of and to maintain tariff rules and regulations on the installation of underground facilities in new residential subdivisions. These tariff provisions are required to include an estimated average cost differential, if any, between the cost of an underground system and an equivalent overhead system at the time service is extended. The charges to the applicant for underground facilities in new residential subdivisions are not to be more than the estimated difference in cost of an underground system and an equivalent overhead system. Rule 25-6.078(1), F.A.C.

8. Rule 25-6.078(3), F.A.C., requires each utility to file with the Commission, on or before October 15 of each year, the Division of Economic Regulation Form PSC/ECR 13-E, Schedule 1. If the cost differential for underground service as calculated in Schedule 1 varies from the then current Commission-approved differential by plus or minus 10% or more, the utility must file a written policy and supporting data and analyses as prescribed in Sections (1), (4), and (5) of Rule 25-6.078, F.A.C., on or before April 1 of the following year. Additionally, Rule 25-6.078(3), F.A.C., requires each utility to file a written policy and supporting data and analyses at least once every three years regardless of whether the 10% threshold is met.

9. FPL's last URD tariff filing was approved by Commission Order No. PSC-2019-0360-TRF-EI that was made effective and final by Consummating Order No. PSC-2019-0389-CO-EI issued in Docket No. 20190081-EI on September 20, 2019. Subsequently, by Order No. PSC-2022-0191-FOF-EI issued in Docket No. 20220012-EI, FPL was granted a temporary waiver to defer filing its next revised URD Tariff until April 1, 2023.¹ Consistent therewith, FPL herein

¹ Commission Order No. PSC-2022-0191-FOF-EI is available on the Commission's website at the following link: https://www.floridapsc.com/pscfiles/library/filings/2022/03078-2022/03078-2022.pdf.

submits this Petition to update its URD Tariff. This Petition includes updated tariff sheets and written policy and supporting analyses as prescribed by Rule 25-6.078(1), (4) and (5), F.A.C.

10. FPL seeks Commission approval of the following revised URD Tariff Sheets: 6.095, 6.100, 6.110, 6,115, 6.120, 6.125, and 6.130. Copies of these revised tariff sheets in both legislative and final formats are provided in **Appendices 1.1 and 1.2**, respectively.

11. **Appendix 1.3** sets forth the basis for the estimated average cost differential, which supports the proposed changes to FPL's URD Tariff Sheets identified above. **Appendix 1.4** provides the supporting cost data and calculations for the tariff changes.

12. The information set forth in **Appendix 1** (Appendices 1.1 through 1.4), filed herewith and incorporated herein by reference, provide the information required under Rule 25-6.078, F.A.C., and the necessary support for the revised URD Tariff Sheets. FPL respectfully requests that the revised URD Tariff Sheets, as set forth in **Appendices 1.1 and 1.2**, be approved.

III. <u>UCD TARIFF</u>

13. Although not required by the Commission, FPL is also following its customary practice of simultaneously filing a revised UCD Tariff and supporting data, analyses, and cost justification in support of proposed revisions to its UCD Tariff.

14. FPL seeks Commission approval of the following revised UCD Tariff Sheets: 6.520, 6.530, and 6.540. Copies of these revised tariff sheets in both legislative and final formats are provided in **Appendices 2.1 and 2.2**, respectively.

15. **Appendix 2.3** sets forth the basis for the estimated average cost differential, which supports the proposed changes to FPL's UCD Tariff Sheets identified above. **Appendix 2.4** provides the supporting cost data and calculations for the tariff changes.

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16. Unlike the URD tariffs, FPL's UCD Tariff is not governed by Rule 25-6.078, F.A.C., or any other rule that requires the UCD Tariff to reflect the impact of storm hardening or the operational cost differential (including storm costs). Nonetheless, FPL has incorporated the cost effects of hardening its overhead system into the calculation of its UCD Tariff charges.

17. With respect to the operational cost differential, FPL has concluded that it is not appropriate or feasible to apply the operational cost differential developed for the URD Tariff to the UCD Tariff. The UCD Tariff charges are generally tailored to specific equipment and materials that are utilized to provide underground service to a single or limited number of commercial or industrial customers in distinct and widely varying circumstances, unlike the URD Tariff that is designed to apply to an entire residential subdivision. Given these unique, individual types of construction activities that would apply to the UCD Tariff, FPL has not reflected adjustments for the effects of operational costs in the calculation of its UCD Tariff charges.

18. The information set forth in **Appendix 2** (Appendices 2.1 through 2.4), filed herewith and incorporated herein by reference, provide the information necessary to support the revised UCD Tariff Sheets. FPL respectfully requests that the revised UCD Tariff Sheets, as set forth in **Appendices 2.1 and 2.2**, be approved.

IV. <u>OH/UG CONVERSION TARIFFS</u>

19. FPL's current OH/UG Conversion Tariff Sheet No. 6.300 excludes the existing facility costs for non-storm hardened overhead feeders from the CIAC calculation for underground conversions. As explained below, FPL seeks to revise Tariff Sheet No. 6.300 to clarify that the costs for all existing non-storm hardened overhead distribution facilities (*i.e.*, not just feeders) are excluded from the CIAC calculation for the conversion of overhead to underground distribution facilities. FPL also seeks to revise the current Underground Facilities Conversion Agreement

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Tariff Sheet No. 9.722 to better clarify the scope of the facilities to be converted and avoid or mitigate potential customer/applicant confusion.

20. Rule 25-6.115, F.A.C., and FPL's Tariff Sheet No. 6.300 provide the terms under which applicants are to pay CIAC for the conversion of existing overhead distribution facilities to underground. The CIAC is intended to cover the incremental costs FPL incurs resulting from a conversion, over and above the cost of serving the conversion area with overhead distribution facilities. The purpose of the CIAC paid by an applicant is to ensure that the general body of customers do not bear any costs associated with the voluntary customer conversion.

21. The formula to calculate CIAC is defined in Rule 25-6.115(8), F.A.C. One component of the CIAC calculation requires FPL to include the estimated remaining net book value of the existing facilities to be removed less the estimated net salvage value of the facilities to be removed (referred to as the "existing facilities cost"). Rule 25-6.115(8)(b), F.A.C.

22. Rule 25-6.115(12), F.A.C., allows a utility to waive all or any portion of the cost for providing underground facilities. If the utility waives any charge, the utility is required to reduce net plant in service unless the Commission determines that there is a quantifiable benefit to the general body of customers commensurate with the waived charge.

23. On June 23, 2017, FPL filed a petition in Docket No. 20170148-EI seeking a determination under Rule 25-6.115(12), F.A.C., and approval of an associated revised Tariff Sheet 6.300 that would allow FPL to exclude the existing facilities cost for non-hardened overhead distribution facilities from the calculation of CIAC for underground conversions that otherwise would be subject to hardening under FPL's Storm Hardening Plans that were in effect at that time. In Order No. PSC-2018-0050-TRF-EI issued on January 22, 2018, the Commission determined there was a quantifiable benefit to the general body of customers to exclude the existing facilities

cost for non-hardened overhead distribution feeders from the CIAC calculation for underground

conversions and approved FPL's revised Tariff Sheet 6.300.²

24. FPL's current Tariff Sheet 6.300 provides, in relevant part, as follows:

<u>CONTRIBUTION-IN-AID-OF-CONSTRUCTION (CIAC)</u> – The CIAC to be paid by an Applicant under this tariff section shall be the result of the following formula:

CIAC =

- 1) The estimated cost to install the requested underground facilities;
- + 2) The estimated cost to remove the existing overhead facilities;^a
- + 3) The net book value of the existing overhead facilities;^a
- 4) The estimated cost that would be incurred to install new overhead facilities, in lieu of underground, to replace the existing overhead facilities (the "Hypothetical Overhead Facilities");
- 5) The estimated salvage value of the existing overhead facilities to be removed;^a
- + 6) The 30-year net present value of the estimated non-storm underground v. overhead operational costs differential,
- 7) The 30-year net present value of the estimated average Avoided Storm Restoration Costs ("ASRC")^b.

^a In calculating the Applicant's CIAC, elements 2, 3, and 5 of the CIAC formula above are to be excluded from CIAC due from an applicant who submits an application providing a binding notification that said applicant intends to convert *existing non-hardened overhead feeder facilities* to underground feeder facilities.

^b Lines 6 & 7 will be combined to calculate a per mile credit.

See FPL's Seventh Revised Sheet No. 6.300 (emphasis added).³

25. As approved by Commission Order No. PSC-2018-0050-TRF-EI, FPL's Tariff

Sheet No. 6.300 currently only excludes the existing facilities cost for non-hardened overhead

feeder facilities from the CIAC calculation for the underground conversions consistent with FPL's

Storm Hardening Plans that were in effect at that time.

² Commission Order No. PSC-2018-0050-TRF-EI is available on the Commission's website at the following link: <u>https://www.floridapsc.com/pscfiles/library/filings/2018/00543-2018/00543-2018.pdf</u>.

³ Available at: <u>https://www.fpl.com/content/dam/fplgp/us/en/rates/pdf/electric-tariff-section6.pdf</u>.

26. Subsequently, on June 27, 2019, the Governor of Florida signed CS/CS/CS/SB 796 addressing Storm Protection Plans ("SPP") and Storm Protection Plan Cost Recovery ("SPPCRC"), 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." Section 366.96(1), F.S.

27. The Florida Legislature directed each utility to file a ten-year SPP that explains the storm hardening programs and projects the utility will implement to achieve the legislative objectives of reducing restoration costs and outage times associated with extreme weather events. *See* Section 366.96(3), F.S. Each utility is required to file an updated SPP at least every three years that covers the utility's immediate ten-year planning period. *See* Section 366.96(6), F.S. and Rule 25-6.030, F.A.C.⁴ As a direct result of this legislation, these SPPs have superseded and replaced the legacy Storm Hardening Plans.

28. On April 10, 2020, FPL filed its 2020-2029 SPP in Docket No. 20200071-EI, which was approved by Commission Order No. PSC-2020-0293-AS-EI issued on August 28, 2020.⁵ On April 11, 2022, FPL filed a new 2023-2032 SPP in Docket No. 20220051-EI. The programs and projects included in the FPL 2023-2032 SPP were approved, with certain modifications, by Commission Order PSC-2022-0389-FOF-EI issued on November 10, 2022.⁶ A true and correct

⁴ The Florida Legislature also directed the Commission to conduct an annual proceeding to determine the utility's prudently incurred SPP costs and to allow the utility to recover such costs through a charge separate and apart from its base rates, to be referenced as the SPPCRC. *See* Section 366.96(7), F.S.

⁵ Commission Order No. PSC-2020-0293-AS-EI is available on the Commission's website at the following link: <u>https://www.floridapsc.com/pscfiles/library/filings/2020/05279-2020/05279-2020.pdf</u>.

⁶ Commission Order No. PSC-2022-0389-FOF-EI is available on the Commission's website at the following link: <u>https://www.floridapsc.com/pscfiles/library/filings/2022/11033-2022/11033-2022.pdf</u>.

copy of the current FPL 2023-2032 SPP is available in Docket No. 20220051-EI at: https://www.floridapsc.com/pscfiles/library/filings/2022/11240-2022/11240-2022.pdf.

29. FPL's Commission-approved SPPs include, among other things, a Distribution Feeder Hardening Program and a Distribution Lateral Hardening Program. Under the Distribution Feeder Hardening Program, FPL hardens existing distribution feeders and certain critical distribution poles, as well as designs and constructs new pole lines and major planned work, to meet the National Electrical Safety Code's extreme wind loading criteria. Under the Distribution Lateral Hardening Program, FPL 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. The FPL Distribution Lateral Hardening Program also includes protocols for evaluating when a lateral may be overhead hardened as opposed to being placed underground. The reasonable and prudently incurred costs for both the Distribution Feeder Hardening Program and a Distribution Lateral Hardening Program are and will be recovered through the SPPCRC upon annual review and approval by the Commission.

30. In this filing, FPL seeks to revise Tariff Sheet No. 6.300 to exclude the existing facilities cost for all non-hardened overhead distribution facilities (*i.e.*, both feeders and laterals) from the calculation of CIAC for underground conversions consistent with the Distribution Feeder Hardening Program and a Distribution Lateral Hardening Program included in FPL's Commission-approved SPPs. Legislative and clean formats of the revised Tariff Sheet No. 6.300 are provided in **Appendices 3.1 and 3.2**, respectively.

31. It has been FPL's experience that most municipalities and entities that seek to voluntarily convert the distribution system that serves them from overhead to underground seek to

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convert entire sections/segments of that distribution system (*i.e.*, both feeders and laterals) rather than just overhead feeders.

32. Much like the currently excluded existing facilities cost for non-hardened overhead feeders, an applicant that voluntarily converts existing non-hardened overhead laterals to underground are hardening those facilities and, thereby, saving all FPL customers from the cost of hardening those facilities. Further, the applicants who pay to underground these non-hardened overhead distribution facilities (*i.e.*, both feeders and laterals) are effectively accelerating the timeline under which FPL would have hardened them under the SPP, which provides benefits to the general body of customers through lower storm restoration costs and reduced outage times. Additionally, as reported in FPL's Annual Reliability Reports, underground feeders and laterals have significantly better day-to-day reliability than overhead or hybrid facilities.

33. FPL submits that its proposed revision to Tariff Sheet No. 6.300 is fair, reasonable, appropriate, and provides benefits to the general body of customers, including:

- a. Such undergrounding conversions will not result in additional costs for the general body of customers because, absent these voluntary conversions, the existing facilities costs would be borne by the general body of customers as a part of FPL's plan to harden all overhead distribution facilities under its SPP;
- b. Underground distribution facilities are significantly more storm resilient than hardened overhead facilities, so the voluntary underground conversion will reduce or mitigate the need for storm restoration work in the converted area and, thus, make those resources available to help quickly respond to storm restoration in other portions of FPL's system;

- c. Even in instances where FPL's SPP would have kept the facilities overhead but hardened, undergrounding provides greater storm resiliency and day-to-day reliability from which all customers will benefit;
- d. Because the converting customer is accelerating the timing of when FPL would have hardened the facilities, the general body of customers will receive the benefits of such hardening on an accelerated basis;
- e. FPL's proposed revision to Tariff Sheet No. 6.300 to exclude the existing costs for all non-hardened overhead distribution facilities (*i.e.*, both feeders and laterals) from the calculation of CIAC for conversion to underground may further incentivize even more customers to voluntarily pay for the conversion of non-hardened facilities; and
- f. Any such conversion will reduce the total number of hardening projects that the general body of customers will ultimately pay through the SPPCRC and, at the same time, will accelerate the benefits of storm hardening realized by all customers.

34. FPL requests that the Commission determine there are "quantifiable benefits" that will accrue to FPL's general body of customers by excluding the existing facilities cost for all non-hardened overhead distribution facilities (*i.e.*, both feeders and laterals) from the calculation of CIAC for underground conversions, rather than limiting the exclusion to only the existing facilities cost for non-hardened laterals as currently provided in FPL's OH/UG Conversion Tariff. FPL's requested determination will promote underground conversions of facilities, provide the benefits to FPL's general body of customers enumerated above, and allow applicants to make decisions on

future conversion projects more quickly and with increased certainty, all while easing the administrative burden on the applicants, FPL, and the Commission.

35. FPL notes that its proposed revision to Tariff Sheet No. 6.300 is consistent with a similar tariff revision recently approved for Duke Energy Florida, LLC by Commission Order No. PSC-2022-0336-TRF-EI in Docket No. 20220089-EI.⁷

36. Based on the foregoing, FPL submits that its revised Tariff Sheet No. 6.300, as set forth in **Appendices 3.1 and 3.2**, is fair, reasonable, consistent with FPL's SPP, meets the requirements of Rule 25-6.115(12), F.A.C., and should be approved.

37. Finally, FPL seeks approval of revised Tariff Sheet No. 9.722 of its Underground Facilities Conversion Agreement to clarify and better reflect that all overhead distribution facilities associated with a proposed underground conversion project must be converted from overhead to underground. Legislative and clean formats of the revised Tariff Sheet No. 9.722 are provided in **Appendices 3.3 and 3.4**, respectively.

38. The proposed revisions to Tariff Sheet No. 9.722 are not a substantive change in the application of the Underground Facilities Conversion Agreement but, rather, are intended to better clarify the scope of the underground conversion project and avoid or reduce customer confusion. Specifically, the proposed revision will help ensure that customers/applicants are aware that all facilities within the project are to be converted to underground, which will reduce the potential for misunderstandings about converting only portions of the overhead line within the project area.

39. FPL submits that putting only one portion of a distribution line segment underground while still retaining a rest of the distribution line in the project area as overhead would

⁷ Commission Order No. PSC-2022-0336-TRF-EI is available on the Commission's website at the following link: <u>https://www.floridapsc.com/pscfiles/library/filings/2022/08219-2022/08219-2022.pdf</u>.

duplicate inspection and maintenance costs, defeat the aesthetic benefits of undergrounding sought by many customers and municipalities, and would provide less customer benefits in the context of storm hardening and reliability. It is FPL's experience that municipalities and entities that voluntarily seek to underground their overhead distribution facilities want to convert all of the overhead distribution facilities in order to achieve the storm hardening, reliability, and aesthetic benefits of undergrounding on an accelerated basis.

40. For these reasons, FPL has and will continue to apply Tariff Sheet No. 9.722 to require that all overhead distribution facilities associated with a proposed underground conversion project be converted from overhead to underground. The proposed revision will better reflect FPL's actual practice and experience, while minimizing the potential for customer confusion. Accordingly, FPL submits that its revised Tariff Sheet No. 9.722, as set forth in **Appendices 3.3 and 3.4**, is fair, reasonable, and should be approved.

WHEREFORE, FPL respectfully requests that the Commission:

- (a) Approve FPL's revised URD Tariff Sheets set forth in **Appendices 1.1 and 1.2** to become effective thirty (30) days after the date of the Commission's vote approving said revised tariff sheets;
- (b) Approve FPL's revised UCD Tariff Sheets set forth in **Appendices 2.1 and 2.2** to become effective thirty (30) days after the date of the Commission's vote approving said revised tariff sheets;
- (c) Find and determine that FPL's proposal to exclude the existing facilities costs for all nonhardened overhead distribution facilities (*i.e.*, both feeders and laterals) from the calculation of CIAC for conversion to underground will provide "quantifiable benefits" under Rule 25-6.115(12), F.A.C.;
- (d) Approve FPL's revised Tariff Sheet No. 6.300 set forth in **Appendices 3.1 and 3.2** to become effective thirty (30) days after the date of the Commission's vote approving said revised tariff sheet; and

(e) Approve FPL's revised Tariff Sheet No. 9.722 set forth in **Appendices 3.3 and 3.4** to become effective thirty (30) days after the date of the Commission's vote approving said revised tariff sheet.

Respectfully submitted this 31st day of March 2023,

By: <u>s/Christopher T. Wright</u> Christopher T. Wright Fla. Auth. House Counsel No. 1007055 Senior Counsel Florida Power & Light Company 700 Universe Boulevard (LAW/JB) Juno Beach, FL 33408-0420 Phone: 561-691-7144 Fax: 561-691-7135 Email: <u>christopher.wright@fpl.com</u> Appendix 1 - Underground Residential Differential (URD) Tariffs

Appendix 1.1 - Legislative Format of Revised URD Tariffs

(Continued from Sheet No. 6.090)

10.2.8.1 <u>Credit for TUGs</u>

If the Applicant installs the permanent electric service entrance such that FPL's service lateral can be subsequently installed and utilized to provide that building's construction service, the Applicant shall receive a credit in the amount of <u>\$81.4480.03</u> per service lateral, subject to the following requirements:

- a) TUGs must be inspected and approved by the local inspecting authority.
- b) All service laterals within the subdivision must be installed as TUGs.
- c) FPL must be able to install the service lateral, energize the service lateral, and set the meter to energize the load side of the meter can, all in a single trip. Subsequent visits other than routine maintenance or meter readings will void the credit.
- d) Thereafter, acceptance and receipt of service by the Customer shall constitute certification that the Customer has met all inspection requirements, complied with all applicable codes and rules and, subject to section 2.7 Indemnity to Company, or section 2.71 Indemnity to Company – Governmental, FPL's General Rules and Regulations, the Customer releases, holds harmless and agrees to indemnify the Company from and against loss or liability in connection with the provision of electrical services to or through such Customer-owned electrical installations.
- e) The Applicant shall be held responsible for all electric service used until the account is established in the succeeding occupant's name.

This credit applies only when FPL installs the service - it does not apply when the applicant installs the service conduits, or the service conduits and cable.

10.2.9. Location of Distribution Facilities

Underground distribution facilities will be located, as determined by the Company, to maximize their accessibility for maintenance and operation. The Applicant shall provide accessible locations for meters when the design of a dwelling unit or its appurtenances limits perpetual accessibility for reading, testing, or making necessary repairs and adjustments.

10.2.10. Special Conditions

The costs quoted in these rules are based on conditions which permit employment of rapid construction techniques. The Applicant shall be responsible for necessary additional hand digging expenses other than what is normally provided by the Company. The Applicant is responsible for clearing, compacting, boulder and large rock removal, stump removal, paving, and addressing other special conditions. Should paving, grass, landscaping or sprinkler systems be installed prior to the construction of the underground distribution facilities, the Applicant shall pay the added costs of trenching and backfilling and be responsible for restoration of property damaged to accommodate the installation of underground facilities.

10.2.11. Point of Delivery

The point of delivery shall be determined by the Company. When a location for a point of delivery different from that designated by the Company is requested by the Applicant, and approved by the Company, the Applicant shall pay the additional cost in excess of that which would have been incurred to reach the point of delivery designated by the Company. The estimated full cost of service lateral length, including labor and materials, required in excess of that which would have been needed to reach the Company's designated point of service. The additional cost per trench foot is \$. Where an existing trench is utilized, the additional cost per trench foot is \$. Where an existing trench is utilized, the additional cost per trench foot is \$. Where the Applicant provides the trenching, installs Company provided conduit according to Company specifications and backfilling, the cost per additional trench foot is \$. Any point of delivery change requested by the Applicant shall conform to good safety and construction practices as determined by the Company. Service laterals shall be installed, where possible, in a direct line to the point of delivery.

(Continued on Sheet No. 6.096)

FLORIDA POWER & LIGHT COMPANY

SECTION 10.3 UNDERGROUND DISTRIBUTION FACILITIES FOR RESIDENTIAL SUBDIVISIONS AND DEVELOPMENTS

10.3.1. Availability

When requested by the Applicant, the Company will provide underground electric distribution facilities, other than for multiple occupancy buildings, in accordance with its standard practices in:

- a) Recognized new residential subdivision of five or more building lots.
- b) Tracts of land upon which five or more separate dwelling units are to be located.

For residential buildings containing five or more dwelling units, see SECTION 10.6 of these Rules.

10.3.2. Contribution by Applicant

a) The Applicant shall pay the Company the average differential cost for single phase residential underground distribution service based on the number of service laterals required or the number of dwelling units, as follows:

1.	Whe	re density is 6.0 or more dwelling units per acre:	Apj <u>Con</u>	plicant's tribution
	1.1	Buildings that do not exceed four units, townhouses, and mobile homes – per service lateral.	\$	0.00
	1.2	Mobile homes having Customer-owned services from meter center installed adjacent to the FPL primary trench route - per dwelling unit.	\$	0.00
2.	Whe per a	re density is 0.5 or greater, but less than 6.0 dwelling units cre:		
		Buildings that do not exceed four units, townhouses, and mobile homes – per service lateral	\$	0.00

3. Where the density is less than 0.5 dwelling units per acre, or the Distribution System is of non-standard design, individual cost estimates will be used to determine the differential cost as specified in Paragraph 10.2.5.

Additional charges specified in Paragraphs 10.2.10 and 10.2.11 may also apply.

b) The above costs are based upon arrangements that will permit serving the local underground distribution system within the subdivision from overhead feeder mains. If feeder mains within the subdivision are deemed necessary by the Company to provide and/or maintain adequate service and are required by the Applicant or a governmental agency to be installed underground, the Applicant shall pay the Company the average differential cost between such underground feeder mains within the subdivision and equivalent overhead feeder mains, as follows:

Applicant's

	<u>Contribution</u>
Cost per foot of feeder trench within the subdivision	
(excluding switches)	\$ 13.31<u>32.72</u>
Cost per above ground padmounted switch package	\$ 29,911.04<u>43,680.63</u>

(Continued on Sheet No. 6.110)

1. 1. A ... 1.

(Continued from Sheet No. 6.100)

c) Where primary laterals are needed to cross open areas such as golf courses, parks, other recreation areas and water retention areas, the Applicant shall pay the average differential costs for these facilities as follows:

Cost per foot of primary lateral trench within the subdivision

1) Single Phase - per foot	\$ 2.00 <u>3.95</u>
2) Two Phase - per foot	\$4 .39 8.87
3) Three Phase - per foot	\$ 6.27 <u>13.47</u>

d) For requests for service where underground facilities to the lot line are existing and a differential charge was previously paid for these facilities, the cost to install an underground service lateral to the meter is as follows:

Density less than 6.0 dwelling units per acre:	\$ 476.61 <u>583.70</u>
Density 6.0 or greater dwelling units per acre:	\$ 353.76<u>4</u>34.01

10.3.3. Contribution Adjustments

 a) Credits will be allowed to the Applicant's contribution in Section 10.3.2. where, by mutual agreement, the Applicant provides all trenching and backfilling for the Company's distribution system, excluding feeder.

				Credit to Applicant	is Contribution
	1.	Wh	ere density is 6.0 or more dwelling units per acre:	Backbone	Service
		1.1	Buildings that do not exceed fourunits, townhouses, and mobile homes - per service lateral.	\$ 202.48<u>198.96</u>	\$ 212.56<u>208.87</u>
		1.2	Mobile homes having Customer-owned services from meter center installed adjacent to the FPL primary trench route - per dwelling unit.	\$ <u>167.44164.53</u>	N/A
	2.	Wh thar	ere density is 0.5 or greater, but less n 6.0 dwelling units per acre:		
			Buildings that do not exceed fourunits, townhouses, and mobile homes - per service lateral	\$ 335.37 <u>329.54</u>	\$ 297.58 292.41
b) Credits will be allowed to the Applicant's contribution in Section 10.3.2. where, by mutual agreement, the Applicant installs all Company-provided conduit excluding feeder per FPL instructions. This credit is:		reement, the credit is:			
	1.	Wh	ere density is 6.0 or more dwelling units per acre:	Backbone	Service
		1.1	Buildings that do not exceed fourunits, townhouses, and mobile homes - per service lateral.	\$ 84.25<u>82.79</u>	\$ 65.15 64.02
			(Continued on Sheet No. 6.115)		

(Continued from Sheet No. 6.110)

			Credit to Applicant's Contribution	
			Backbone	Service
	1.2	Mobile homes having Customer-owned services from meter center installed adjacent to the FPL primary trench route - per dwelling unit.	\$ <u>68.7167.51</u>	N/A
2.	Whe 6.0 c	ere density is .5 or greater, but lessthan dwelling units per acre, per servicelateral.	\$ 135.03 <u>132.68</u>	\$ 79.81 78.42

c) Credits will be allowed to the Applicant's contribution in Section 10.3.2. where, by mutual agreement, the Applicant provides a portion of trenching and backfilling for the Company's facilities, per foot of trench – $\frac{\$4.724.64}{1000}$.

d) Credits will be allowed to the Applicant's contribution in section 10.3.2. where, by mutual agreement, the Applicant installs a portion of Company-provided PVC conduit, per FPL instructions (per foot of conduit): 2" PVC - \$0.810.80; larger than 2" PVC - \$1.14.

e) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided feeder splice box, per FPL instructions, per box - \$902.36886.68.

f) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided primary splice box, per FPL instructions, per box - \$315.99310.50.

g) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided secondary connection ("handhole"), per FPL instructions, per handhole: small handhole - \$29.3228.81; intermediate handhole; - \$83.0781.63; large/all concrete handhole - \$315.99310.50.

h) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided concrete pad for a pad-mounted transformer or capacitor bank, per FPL instructions, per pad - \$81.4480.03.

i) Credit will be allowed to the Applicant's contribution in Section 10.3.2., where, by mutual agreement, the Applicant installs a portion of Company-provided flexible HDPE conduit, per FPL instructions (per foot of conduit): \$0.16.

 j) Credit will be allowed to the Applicant's contribution in Section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided concrete pad and cable chamber for a pad-mounted feeder switch, per pad and cable chamber - \$767.16753.84.

Issued by: Tiffany Cohen, Senior Director, Regulatory Rates, Cost of Service and SystemsExecutive Director, Rate Development & Strategy Effective: January 1, 2022

SECTION 10.4 UNDERGROUND SERVICE LATERALSFROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS

10.4.1. <u>New Underground Service Laterals</u>

When requested by the Applicant, the Company will install underground service laterals from overhead systems to newly constructed residential buildings containing less than five separate dwelling units.

10.4.2. <u>Contribution by Applicant</u>

a) The Applicant shall pay the Company the following differential cost between an overhead service and an underground service lateral, as follows:

1.	For any density:	Applicant's Contribution
	Buildings that do not exceed fourunits, townhouses, and mobile homes	
	a) per service lateral (includes service riser installation)b) per service lateral (from existing handhole or PM TX)	\$ 873.5 4 <u>997.84</u> \$4 76.61 <u>583.70</u>
2.	For any density, the Company will provide a riser to a handhole at the base of a pole	\$ 879.50 940.71

Additional charges specified in Paragraphs 10.2.10 and 10.2.11 may also apply. Underground service or secondary extensions beyond the boundaries of the property being served will be subject to additional differential costs as determined by individual cost estimates.

10.4.3. Contribution Adjustments

a) Credit will be allowed to the Applicant's contribution in Section 10.4.2 where, by mutual agreement, the Applicant provides trenching and backfilling for the Company's facilities. This credit is:

Credit To
Applicant's
Contribution

1. For any density:

Buildings that do not exceed fourunits, townhouses, and mobile homes - perfoot

\$4.72<u>4.64</u>

(Continued on Sheet No. 6.125)

(Continued from Sheet No. 6.120)

b) Credit will be allowed to the Applicant's contribution in Section 10.4.2, where, by mutual agreement, the Applicant installs Company-provided conduit, per FPL instructions, as follows:

1. For any density:

Buildings that do not exceed fourunits, townhouses, and mobile homes - per foot: 2" PVC \$0.810.80 Larger than 2" PVC \$1.141.12

- c) Credit will be allowed to the Applicant's contribution in Section 10.4.2, where, by mutual agreement, the Applicant requests the underground service to be installed as a TUG (subject to the conditions specified in Section 10.2.8.1), per service lateral, as follows:
 - 1. For any density:

Buildings that do not exceed fourunits, townhouses, and mobile homes -per service lateral:

\$81.4480.03

SECTION 10.5 UNDERGROUND SERVICE LATERALS REPLACING EXISTING RESIDENTIAL OVERHEAD AND UNDERGROUND SERVICES

10.5.1. Applicability

When requested by the Applicant, the Company will install underground service laterals from existing systems as replacements for existing overhead and underground services to existing residential buildings containing less than five individual dwelling units.

10.5.2. <u>Rearrangement of Service Entrance</u>

The Applicant shall be responsible for any necessary rearranging of his existing electric service entrance facilities to accommodate the proposed underground service lateral in accordance with the Company's specifications.

10.5.3. Trenching and Conduit Installation

The Applicant shall also provide, at no cost to the Company, a suitable trench, perform the backfilling and any landscape, pavement or other similar repairs and install Company provided conduit according to Company specifications. When requested by the Applicant and approved by the Company, the Company may supply the trench and conduit and the Applicant shall pay for this work based on a specific cost estimate. Should paving, grass, landscaping or sprinkler systems need repair or replacement during construction, the Applicant shall be responsible for restoring the paving, grass, landscaping or sprinkler systems to the original condition.

10.5.4. Contribution by Applicant

a)	The charge per service lateral replacing an existing Company-owned overhead service for any density shall be:		
		Applicant's <u>Contribution</u>	
	1. Where the Company provides an underground service lateral:	\$ 729.31 908.75	
	2. Where the Company provides a riser to a handhole at the base of t	the pole: $\$\frac{1,084.161,194.45}{1,084.161,194.45}$	
b)	The charge per service lateral replacing an existing Company-owned underground service at Applicant's request for any density shall be:		
	1. Where the service is from an overhead system:	\$ 798.64<u>1,032.44</u>	
	2. Where the service is from an underground system:	\$ 685.69 904.80	
c)	The charge per service lateral replacing an existing Customer-owned underground service from an overhead system for any density shall be	: \$ 524.65 655.01	
d)	The charge per service lateral replacing an existing Customer-owned underground service from an underground system for any density shall be:	\$ 127.72 240.87	

The above charges include conversion of the service lateral from the last FPL pole to the meter location. Removal of any other facilities such as poles, down guys, spans of secondary, etc. will be charged based on specific cost estimates for the requested additional work.

Appendix 1.2 - Clean Format of Revised URD Tariffs

(Continued from Sheet No. 6.090)

10.2.8.1 Credit for TUGs

If the Applicant installs the permanent electric service entrance such that FPL's service lateral can be subsequently installed and utilized to provide that building's construction service, the Applicant shall receive a credit in the amount of \$80.03 per service lateral, subject to the following requirements:

- a) TUGs must be inspected and approved by the local inspecting authority.
- b) All service laterals within the subdivision must be installed as TUGs.
- c) FPL must be able to install the service lateral, energize the service lateral, and set the meter to energize the load side of the meter can, all in a single trip. Subsequent visits other than routine maintenance or meter readings will void the credit.
- d) Thereafter, acceptance and receipt of service by the Customer shall constitute certification that the Customer has met all inspection requirements, complied with all applicable codes and rules and, subject to section 2.7 Indemnity to Company, or section 2.71 Indemnity to Company – Governmental, FPL's General Rules and Regulations, the Customer releases, holds harmless and agrees to indemnify the Company from and against loss or liability in connection with the provision of electrical services to or through such Customer-owned electrical installations.
- e) The Applicant shall be held responsible for all electric service used until the account is established in the succeeding occupant's name.

This credit applies only when FPL installs the service - it does not apply when the applicant installs the service conduits, or the service conduits and cable.

10.2.9. Location of Distribution Facilities

Underground distribution facilities will be located, as determined by the Company, to maximize their accessibility for maintenance and operation. The Applicant shall provide accessible locations for meters when the design of a dwelling unit or its appurtenances limits perpetual accessibility for reading, testing, or making necessary repairs and adjustments.

10.2.10. Special Conditions

The costs quoted in these rules are based on conditions which permit employment of rapid construction techniques. The Applicant shall be responsible for necessary additional hand digging expenses other than what is normally provided by the Company. The Applicant is responsible for clearing, compacting, boulder and large rock removal, stump removal, paving, and addressing other special conditions. Should paving, grass, landscaping or sprinkler systems be installed prior to the construction of the underground distribution facilities, the Applicant shall pay the added costs of trenching and backfilling and be responsible for restoration of property damaged to accommodate the installation of underground facilities.

10.2.11. Point of Delivery

The point of delivery shall be determined by the Company. When a location for a point of delivery different from that designated by the Company is requested by the Applicant, and approved by the Company, the Applicant shall pay the additional cost in excess of that which would have been incurred to reach the point of delivery designated by the Company. The estimated full cost of service lateral length, including labor and materials, required in excess of that which would have been needed to reach the Company's designated point of service. The additional cost per trench foot is \$8.05. Where an existing trench is utilized, the additional cost per trench foot is \$2.93. Where the Applicant provides the trenching, installs Company provided conduit according to Company specifications and backfilling, the cost per additional trench foot is \$2.05. Any point of delivery change requested by the Applicant shall conform to good safety and construction practices as determined by the Company. Service laterals shall be installed, where possible, in a direct line to the point of delivery.

(Continued on Sheet No. 6.096)

FLORIDA POWER & LIGHT COMPANY

SECTION 10.3 UNDERGROUND DISTRIBUTION FACILITIES FOR RESIDENTIAL SUBDIVISIONS AND DEVELOPMENTS

Availability 10.3.1. When requested by the Applicant, the Company will provide underground electric distribution facilities, other than for multiple occupancy buildings, in accordance with its standard practices in: Recognized new residential subdivision of five or more building lots. a) Tracts of land upon which five or more separate dwelling units are to be located. b) For residential buildings containing five or more dwelling units, see SECTION 10.6 of these Rules. 10.3.2. Contribution by Applicant a) The Applicant shall pay the Company the average differential cost for single phase residential underground distribution service based on the number of service laterals required or the number of dwelling units, as follows: Applicant's **Contribution** Where density is 6.0 or more dwelling units per acre: 1. 1.1 Buildings that do not exceed four units, 0.00 \$ townhouses, and mobile homes - per service lateral. 1.2 Mobile homes having Customer-owned services from meter center installed adjacent to the FPL primary trench route - per dwelling unit. \$ 0.00 2. Where density is 0.5 or greater, but less than 6.0 dwelling units per acre: Buildings that do not exceed four units, townhouses, and mobile homes - perservice lateral \$ 0.00

3. Where the density is less than 0.5 dwelling units per acre, or the Distribution System is of non-standard design, individual cost estimates will be used to determine the differential cost as specified in Paragraph 10.2.5.

Additional charges specified in Paragraphs 10.2.10 and 10.2.11 may also apply.

b) The above costs are based upon arrangements that will permit serving the local underground distribution system within the subdivision from overhead feeder mains. If feeder mains within the subdivision are deemed necessary by the Company to provide and/or maintain adequate service and are required by the Applicant or a governmental agency to be installed underground, the Applicant shall pay the Company the average differential cost between such underground feeder mains within the subdivision and equivalent overhead feeder mains, as follows:

	Applicant's
	Contribution
Cost per foot of feeder trench within the subdivision	
(excluding switches)	\$32.72
Cost per above ground padmounted switch package	\$43,680.63

(Continued on Sheet No. 6.110)

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(Continued from Sheet No. 6.100)

c) Where primary laterals are needed to cross open areas such as golf courses, parks, other recreation areas and water retention areas, the Applicant shall pay the average differential costs for these facilities as follows:

Cost per foot of primary lateral trench within the subdivision

1)	Single Phase - per foot	\$3.95
2)	Two Phase - per foot	\$8.87
3)	Three Phase - per foot	\$13.47

d) For requests for service where underground facilities to the lot line are existing and a differential charge was previously paid for these facilities, the cost to install an underground service lateral to the meter is as follows:

Density less than 6.0 dwelling units per acre:	\$583.70
Density 6.0 or greater dwelling units per acre:	\$434.01

10.3.3. Contribution Adjustments

a) Credits will be allowed to the Applicant's contribution in Section 10.3.2. where, by mutual agreement, the Applicant provides all trenching and backfilling for the Company's distribution system, excluding feeder.

		****		Credit to Applicant's	Contribution
	1.	Wh	ere density is 6.0 or more dwelling units per acre:	Backbone	Service
		1.1	Buildings that do not exceed fourunits,		
			townhouses, and mobile homes	\$100.07	** **
			- per service lateral.	\$198.96	\$208.87
		1.2	Mobile homes having Customer-owned		
			services from meter center		
			installed adjacent to the		
			FPL primary trench route		
			- per dwelling unit.	\$164.53	N/A
	2.	Wh	ere density is 0.5 or greater, but less		
		thar	n 6.0 dwelling units per acre:		
			Buildings that do not exceed fourunits.		
			townhouses, and mobile homes		
			- per service lateral	\$329.54	\$292.41
b)	Cr	edits	will be allowed to the Applicant's contribution in Section 10.3.2	where, by mutual agree	ement, the
-)	Ap	plica	nt installs all Company-provided conduit excluding feeder per F	PL instructions. This cre	edit is:
	1	Wh	ere density is 6.0 or more dwelling units per acre-		
	1.	** 11	the density is 0.0 or more dwenning dimes per dere.	Backbone	Service
		1.1	Buildings that do not exceed fourunits.		
			townhouses, and mobile homes		
			- per service lateral.	\$82.79	
			\$64.02 (Continued on Sheet No. 6.1	15)	
			904.02 (Continued off Sheet No. 0.)	15)	

Issued by: Tiffany Cohen, Executive Director, Rate Development & Strategy Effective:

(Continued from Sheet No. 6.110)

			Credit to Applica	Credit to Applicant's Contribution	
			Backbone	Service	
	1.2	Mobile homes having Customer-owned services from meter center installed adjacent to the FPL primary trench route - per dwelling unit.	\$67.51	N/A	
2.	Whe 6.0 c	re density is .5 or greater, but lessthan lwelling units per acre, per servicelateral.	\$132.68	\$78.42	

c) Credits will be allowed to the Applicant's contribution in Section 10.3.2. where, by mutual agreement, the Applicant provides a portion of trenching and backfilling for the Company's facilities, per foot of trench – \$4.64.

d) Credits will be allowed to the Applicant's contribution in section 10.3.2. where, by mutual agreement, the Applicant installs a portion of Company-provided PVC conduit, per FPL instructions (per foot of conduit): 2" PVC - \$0.80; larger than 2" PVC - \$1.14.

e) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided feeder splice box, per FPL instructions, per box - \$886.68.

f) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided primary splice box, per FPL instructions, per box - \$310.50.

g) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided secondary connection ("handhole"), per FPL instructions, per handhole: small handhole - \$28.81; intermediate handhole; - \$81.63; large/all concrete handhole - \$310.50.

h) Credit will be allowed to the Applicant's contribution in section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided concrete pad for a pad-mounted transformer or capacitor bank, per FPL instructions, per pad - \$80.03.

i) Credit will be allowed to the Applicant's contribution in Section 10.3.2., where, by mutual agreement, the Applicant installs a portion of Company-provided flexible HDPE conduit, per FPL instructions (per foot of conduit): \$0.16.

j) Credit will be allowed to the Applicant's contribution in Section 10.3.2., where, by mutual agreement, the Applicant installs an FPL-provided concrete pad and cable chamber for a pad-mounted feeder switch, per pad and cable chamber - \$753.84.

Issued by: Tiffany Cohen, Executive Director, Rate Development & Strategy Effective:

SECTION 10.4 UNDERGROUND SERVICE LATERALSFROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS

10.4.1. <u>New Underground Service Laterals</u>

When requested by the Applicant, the Company will install underground service laterals from overhead systems to newly constructed residential buildings containing less than five separate dwelling units.

10.4.2. <u>Contribution by Applicant</u>

a) The Applicant shall pay the Company the following differential cost between an overhead service and an underground service lateral, as follows:

1.	For any density:	Applicant's <u>Contribution</u>
	Buildings that do not exceed fourunits, townhouses, and mobile homes	
	a) per service lateral (includes service riser installation)b) per service lateral (from existing handhole or PM TX)	\$997.84 \$583.70
2.	For any density, the Company will provide a riser to a handhole at the base of a pole	\$940.71

Additional charges specified in Paragraphs 10.2.10 and 10.2.11 may also apply. Underground service or secondary extensions beyond the boundaries of the property being served will be subject to additional differential costs as determined by individual cost estimates.

10.4.3. Contribution Adjustments

a) Credit will be allowed to the Applicant's contribution in Section 10.4.2 where, by mutual agreement, the Applicant provides trenching and backfilling for the Company's facilities. This credit is:

		Credit To Applicant's <u>Contribution</u>
1.	For any density:	
	Buildings that do not exceed fourunits, townhouses, and mobile homes - per foot	\$4.64

(Continued on Sheet No. 6.125)

Issued by: Tiffany Cohen, Executive Director, Rate Development & Strategy Effective:

(Continued from Sheet No. 6.120)

b) Credit will be allowed to the Applicant's contribution in Section 10.4.2, where, by mutual agreement, the Applicant installs Company-provided conduit, per FPL instructions, as follows:

1. For any density:

Buildings that do not exceed four units, townhouses, and mobile homes - per foot: 2" PVC \$0.80 Larger than 2" PVC \$1.12

- c) Credit will be allowed to the Applicant's contribution in Section 10.4.2, where, by mutual agreement, the Applicant requests the underground service to be installed as a TUG (subject to the conditions specified in Section 10.2.8.1), per service lateral, as follows:
 - 1. For any density:

Buildings that do not exceed fourunits, townhouses, and mobile homes -per service lateral:

\$80.03

SECTION 10.5 UNDERGROUND SERVICE LATERALS REPLACING EXISTING RESIDENTIAL OVERHEAD AND UNDERGROUND SERVICES

10.5.1. Applicability

When requested by the Applicant, the Company will install underground service laterals from existing systems as replacements for existing overhead and underground services to existing residential buildings containing less than five individual dwelling units.

10.5.2. <u>Rearrangement of Service Entrance</u>

The Applicant shall be responsible for any necessary rearranging of his existing electric service entrance facilities to accommodate the proposed underground service lateral in accordance with the Company's specifications.

10.5.3. Trenching and Conduit Installation

The Applicant shall also provide, at no cost to the Company, a suitable trench, perform the backfilling and any landscape, pavement or other similar repairs and install Company provided conduit according to Company specifications. When requested by the Applicant and approved by the Company, the Company may supply the trench and conduit and the Applicant shall pay for this work based on a specific cost estimate. Should paving, grass, landscaping or sprinkler systems need repair or replacement during construction, the Applicant shall be responsible for restoring the paving, grass, landscaping or sprinkler systems to the original condition.

10.5.4. Contribution by Applicant

a)	The charge per service lateral replacing an existing Company-owned overhead service for any density shall be:	
		Applicant's <u>Contribution</u>
	1. Where the Company provides an underground service lateral:	\$908.75
	2. Where the Company provides a riser to a handhole at the base of the pole:	\$1,194.45
b)	The charge per service lateral replacing an existing Company-owned underground service at Applicant's request for any density shallbe:	
	1. Where the service is from an overhead system:	\$1,032.44
	2. Where the service is from an underground system:	\$904.80
c)	The charge per service lateral replacing an existing Customer-owned underground service from an overhead system for any density shall be:	\$655.01
d)	The charge per service lateral replacing an existing Customer-owned underground service from an underground system for any density shall be:	\$240.87

The above charges include conversion of the service lateral from the last FPL pole to the meter location. Removal of any other facilities such as poles, down guys, spans of secondary, etc. will be charged based on specific cost estimates for the requested additional work.

Appendix 1.3 - Estimated Average Cost Differential for URD

BASIS FOR UNDERGROUND RESIDENTIAL DISTRIBUTION DIFFERENTIAL

New Underground Subdivision with Overhead Feeder Mains.

The average differential costs for Underground Residential Distribution (URD) stated in the FPL Rules and Regulations were derived from cost estimates of underground facilities and their equivalent overhead designs. The high density subdivision used for these estimates was developed by the group of Florida Electric Utilities in response to Florida Public Service Commission Orders No. 6031 and 6031-B. The low density subdivision was also developed by the group of Florida Electric Utilities and was approved by Florida Public Service Commission Order No. PSC-96-0026-FOF-EI. They represent average conditions in Florida Subdivisions served by FPL. Densities range from 0.5 to 6.0 lots per acre for low density subdivisions. The low density subdivision contains 210 lots; the high density subdivision 176 lots. Subdivision plats are shown in subsequent pages below. Differential cost estimates were made from engineering layouts of underground and overhead facilities. These included primary laterals, transformers, secondary lines and services, but not three phase feeders. These estimates employed standard Company design and estimating practices and the system-wide unit cost for labor and material which were in use at the end of 2020.

Design criteria included the following:

Design Customer Demand	7.25 KVA, including 2 1/2 tons of air conditioning for high density model and 9.35 KVA including 3 1/2 tons of air conditioning for low density model according to DERM. (1)
Primary Voltage	13200/7620 Volts
Underground Design	Rear/Front lot construction - All C-I-C (2)
Overhead Design	Front lot construction, extreme wind (145 MPH)

(1) FPL Distribution Engineering Reference Manual

(2) All cables are to be installed in PVC conduit.

The post-operational cost differentials for low density, high density, and meter pedestal reflect the net present value of operational costs, including average historical storm restoration, as contemplated by Rule 25-6.078(4), F.A.C. FPL has addressed operational cost differential as two separate components, covering non-storm and storm costs.

FPL does not believe that there is a significant difference in the storm cost differentials for low-density versus highdensity projects.

Estimates are broken down into a uniform format adopted as a standard by the participating companies.

Case 1.	<u>Low Density</u> Where density is 0.5 or greater, but less than 6 dwelling units per acre: Buildings that do not exceed four units, townhouses, and mobile homes – per service lateral.
Case 2.	<u>High Density</u> Where density is 6.0 or more dwelling units per acre: Buildings that do not exceed four units, townhouses, and mobile homes – per service lateral.
Case 3.	<u>Meter Pedestal</u> Where density is 6.0 or more dwelling units per acre: Mobile homes having Customer-owned services from meter centers installed adjacent to the FPL primary trench route — per dwelling unit.
Low Density	Per Lot Cost Differential

Low Density	Differential
Pre-Operational Cost	\$908.62
Non-Storm Operational Cost	(\$2,208)
Stonn Operational Cost	(\$1,388)
Post-Operational Cost (Note 1)	\$0.00

High Density	
Pre-Operational Cost	\$396.47
Non-Storm Operational Cost	(\$1,877)
Storm Operational Cost	(\$1,388)
Post-Operational Cost (Note 1)	\$0.00

Meter Pedestal	
Pre-Operational Cost (Note 2)	\$0.00
Non-Storm Operational Cost	(\$1,877)
Storm Operational Cost	(\$1,388)
Post-Operational Cost (Note 1)	\$0.00

Note 1: Where the "Post-Operational" Costs are negative, the differentials have been set to \$0. Note 2: The 'Pre-Operational Cost' differential has been set to \$0 since it is a negative amount.

10.4.2 UG Service Laterals from Overhead Lines.

Service lateral costs are included in the differential costs previously stated except in Case 3. The costs of service laterals were estimated separately to determine the differential cost between a standard overhead service and a similar length underground service from an overhead line. This differential cost was calculated by adding the differential service lateral cost to the pole-conduit terminal cost.

The average pole-conduit terminal cost was found to be \$414.14 per service lateral.

Service lateral differential cost	\$583.70
Pole-conduit cost	<u>\$414.14</u>
Total cost	\$997.84
Service lateral differential cost fed from an existing UG source	<u>\$583.70</u>

A URD riser to a handhole at the base of the pole had a differential cost of \$940.71

10.5.4 Replacement of an Existing Service with an Underground Service.

Costs were also estimated for replacing existing services with underground service laterals. These costs were based on the applicant providing the trench because of the wide variations in the cost of excavating established, landscaped areas. Additional costs are associated with removal and premature retirement of existing services. Accordingly, adjustments were made to the cost of a new service lateral by adding the costs involved with the retirement of an existing service drop and subtracting trenching costs. The costs were estimated to be:

A. Cost per service lateral to replace Company-owned Overhead Service with:

	Company UG <u>Service</u>	Riser to <u>Handhole</u>
UG service lateral cost	\$997.84	\$0.00
Riser to handhole cost	\$0.00	\$940.71
Less trenching credit	(\$292.41)	\$0.00
Less conduit installation credit	(\$50.42)	\$0.00
Remaining value of existing service	. \$185.95	\$185.95
Removal cost of existing service	\$67.79	\$67.79
Salvage	<u>\$0.00</u>	\$0.00
Total cost	\$908.75	\$1,194.45
Round To	\$908.75	\$1,194.45
B. Cost per service lateral to replace Company-owned Underground Service.

	<u>OH</u> Source	UG Source
UG service lateral cost	\$583.70	\$583.70
Handhole for connection to existing riser X .25	\$127.64	\$0.00
Less trenching credit	(\$292.41)	(\$292.41)
Less conduit credit	(\$50.42)	(\$50.42)
Remaining value of existing service	\$ 622.11	\$622.11
Removal cost of existing service	\$ 41.82	\$41.82
Salvage	<u>\$0.00</u>	<u>\$0.00</u>
Total Cost	\$1,032.44	\$904.80
Round To	\$1,032.44	\$904.80

C. Cost to replace Customer-owned Underground Service from an Overhead System.

UG service lateral cost	\$583.70
Pole-conduit cost	\$414.14
Less trenching credit	(\$292.41)
Less conduit installation credit	<u>(\$50.42</u>)
TOTAL	\$655.01
Round To	\$655.01

D. Cost to replace Customer-owned Underground Service from an Underground System.

UG service lateral cost	\$583.70
Less trenching credit	(\$292.41)
Less conduit installation credit	(\$50.42)
TOTAL	\$240.87

Underground Feeder/Lateral Cost.

Cost estimates were made for underground and overhead feeders and laterals necessary to serve residential communities in the model subdivisions. The average differential costs per foot were then determined. These results are shown the **subs**equent pages below.

Underground feeders/laterals were assumed to be installed in conduit with above grade switch cabinets. Overhead feeder costs included wood pole costs.

Appendix 1.4 - Supporting Data and Calculations for URD

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LOW DENSITY

OVERHEAD VS. UNDERGROUND SUMMARY SHEET

Low Density 210 Lot Subdivision Cost per Service Lateral

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
LABOR	\$1 ,180.88	\$1,623.51	\$442.63
MATERIAL	\$1,363.04	\$1,829.03	\$465.99
TOTAL (1)	\$2,543.92	\$3,452.54	\$908.62

(1) Does not include storm or operational costs

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

Low Density 210 Lot Subdivision

ITEM	MATERIAL(1)	LABOR(4)	TOTAL
Service(2)	\$380.85	\$410.45	\$791.30
Primary	\$657.35	\$241.73	\$899.08
Secondary	\$152.88	\$111.75	\$264.63
Transformers	\$385.90	\$86.69	\$472.59
Prim. & Sec. Trenching	č <u></u>	\$329.54	\$329.54
Service Trenching	· · · · · · · · · · · · · · · · · · ·	\$292.4 1	\$292.41
Sub-Total	\$1,576.98	\$1,472.57	\$3,049.55
Stores Handling(3)	\$82.00	·	\$82.00
SubTotal	\$1,658.98	\$1,472.57	\$3,131.55
Engineering(5)	\$170.05	\$150.94	\$320.99
TOTAL(6)	\$1,829.03	\$1,623.5 1	\$3,452.54

1 - Includes Sales Tax.

2 - Includes Meters.

3 - 5.2 % of All Material.

4 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

5 - 10.25 % of All Material and Labor.

6 - Does not include storm or operational costs.

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

Low Density 210 Lot Subdivision

ITEM	MATERIAL(1)	LABOR(4)	TOTAL
Service(2)	\$380.85	\$410.45	\$791.30
Primary	\$657.35	\$241.73	\$899.08
Secondary	\$152.88	\$111.75	\$264.63
Transformers	\$385.90	\$86.69	\$472.59
Prim. & Sec. Trenching	· <u> </u>	\$329.54	\$329.54
Service Trenching		\$292.4 1	\$292.41
Sub-Total	\$1,576.98	\$1,472.57	\$3,049.55
Stores Handling(3)	\$82.00	×	\$82.00
SubTotal	\$1,658.98	\$1,472.57	\$3,131.55
Engineering(5)	\$170.05	\$150.94	\$320.99
TOTAL(6)	\$1,829.03	\$1,623.5 1	\$3,452.54

1 - Includes Sales Tax.

2 - Includes Meters.

3 - 5.2 % of All Material.

4 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

5 - 10.25 % of All Material and Labor.

6 - Does not include storm or operational costs.



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2023 OH LOW DENSITY LAYOUT WITH 3.5 TON A/C

WR Number: 677824

2023 210	NUMBER OF LOTS =
4.00%	MECA STORES LDG % =
5.20%	ACTUAL STORES LDG % =
10.25%	ACTUAL EO =
0.00%	ADJUSTED CO =

	ACCOUNT	MATERIAL	COST/LOT	LABOR	COST/LOT	MATERIAL
		2023	2023	2023	2023	2023
Service Overhead	369.100	\$23,184.95		\$35,063.14		
Meter Equip-1st Installation Expense	586.380	¢20.012.00	¢05 20	\$7,654.08		
		\$20,013.00	\$95.30 \$201.46	\$42 717 22	\$203.42	\$404.88
SERVICE SOBT W/O STORES EDG		ψ2,000.22	φ201.40	ΨτΖ,/ 1/.ΖΖ	φ200.42	ψ-000
Cond, Primary, AL, thru 3/O	365.002	\$9,196.83		\$26,545.80		
Reclosure, 1 Phase	365.601	\$32,994.63		\$939.99		
PRIMARY SUBT W/O STORES LDG		\$40,568.71	\$193.18	\$27,485.78	\$130.88	\$324.06
Cond, Secondary, AL, thru 4/O	365.040	\$6,290.30		\$18,167.21		
Cable, Secondary, TPX, All	365.091	\$6,766.62		\$7,082.52		
Maintenance of Duct System	594.680	\$0.76		\$16.40		
SEC SUBT W/O STORES LDG		\$12,555.46	\$59.79	\$25,266.13	\$120.31	\$180.10
Poles, Wood, 35/40/45 ft	364.135	\$52,509.38		\$83,439.33		
POLE SUBT W/O STORES LDG		\$50,489.79	\$240.43	\$83,439.33	\$397.33	\$637.76
Transformer, 10-25 KVA	368.001	\$91,685.66		\$42,249.76		
Transformer, 50-75 KVA	368.012	\$13,223.02		\$3,772.30		
TRANSFORMER SUBT W/O STORES LDG		\$100,873.73	\$480.35	\$46,022.06	\$219.15	\$699.50
SUB-TOTAL		\$246,793.91	\$1,175.21	\$224,930.52	\$1,071.09	\$2,246.30
MATERIAL SUBTOTAL MINUS METER MATERI	AL		\$1.079.91			
STORES LDG. %			5.20%			
METER STORES LDG %			5.20%			
TOTAL STORES LDG \$			\$61.11			\$61.11
SUBTOTAL			\$1,236.32		\$1,071.09	\$2,307.41
EO			\$126.72		\$109.79	\$236.51
TOTAL			\$1,363.04		\$1,180.88	\$2,543.92

2023 UG LOW DENSITY LAYOUT WITH 3.5 TON A/C

WR Number 1459058

NUMBER OF LOTS=	2023 210
MECA STORES LDG %=	4.00%
ACTUAL STORES LDG=	5.20%
ACTUAL EO=	10.25%
ADJUSTED CO=	0.00%

	ACCOUNT					
CLASSIFICATION	ACCOUNT	MATERIAI	COSTIOT	LABOR		
		2023	2023	2023	2023	2023
Service UG In Duct	369,600	\$62,363,61	2020	\$139.947.68	LULU	2020
Meter Equin-1st Installation Expense	586.380	4 - <u>-</u> ,		\$7.654.08		
Meter Cost (Material)		\$20.013.00	\$95.30	•••••		
Service Trench (Labor)		•	•	(\$61.406.38)		
SERVICE SUBT W/0 STORES LDG		\$79,978.01	\$380.85	\$86,195.38	\$410.45	\$791.30
Duct, Buried (PVC)	366.201	\$96,374.10		\$99,807.60		
Maintenance of Overhead Lines	593.180	\$0.00		\$295.97		
Cable, Primary, 1/C, 2/C, All	367.201	\$47,190.29		\$19,864.62		
PRI/SEC TRENCH				(\$69,204.02)		
PRIMARY SUBT W/0 STORES LDG		\$138,042.68	\$657.35	\$50,764.17	\$241.73	\$899.08
Cable, 600V, AL, All	367.122	\$33,389.00		\$23,467.80		
SEC SUBT W/0 STORES LDG		\$32,104.80	\$152.88	\$23,467.80	\$111.75	\$264.63
Pad, TX	366.801	\$6,303.75		\$7,662.77		
Transfonmer, Padmount All	368.501	\$77,977.56		\$10,542.25		
TRANSFORMER SUBT W/0 STORES LDG		\$81,039.73	\$385.90	\$18,205.02	\$86.69	\$472.59
PRI/SEC TRENCH				\$69.204.02	\$329.54	\$329.54
SVC TRENCH				\$61,406.38	\$292.41	\$292.41
SUB·TOTAIL		\$331,165.22	\$1,576.98	\$309,242.77	\$1,472.57	\$3,049.55
MATERIAL SUBTOTAL MINUS METER MATE	ERIAL		\$1,481.68			
STORES LDG. %			5.20%			
METER STORES LDG %			5.20%			
TOTAL STORES LDG			\$82.00			\$82.00
SUBTOTAL			\$1,658.98		\$1,472.57	\$3,131.55
EO			\$170.05		\$150.94	\$320.99
TOTAL			\$1,829.03		\$1,623.51	\$3,452.54

OPERATIONAL COSTS DIFFERENTIAL - LOW DENSITY

30-Year NPV (\$ per pole-line mile)

	<u>0&M</u>	<u>Capital</u>	Total	<u>Cost per Lot</u>
Operational Cost Differential (Non-Storm) Avoided Storm Restoration Cost (Storm)	(\$12,037) (\$119,597)	(\$178,256)	(\$190,293) (\$119,59 <u>7)</u>	(\$2,208) (\$1,387)
Total Operational Cost				(\$3,595)
Pre-Operational Cost Post-Operational Cost			Note 1	\$908.62 \$0.00

Note 1: Where the "Post-Operational" Costs are negative, the differentials have been set to \$0.

HIGH DENSITY

OVERHEAD VS. UNDERGROUND SUMMARY SHEET

High Density 176 Lot Subdivision Company Owned Service Laterals Cost per Service Lateral

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
LABOR	\$919.04	\$1,132.63	\$213.59
MATERIAL	\$1,002.46	\$1,185.34	\$182.88
TOTAL (1) (2)	\$1,921.50	\$2,317.97	\$396.47

(1) Does not include storm or operational costs

(2) The differential has been set to \$0 in the URD filing since the differential is a negative amount.

COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

High Density 176 Lot Subdivision Company Owned Service Laterals

ITEM	MATERIAL(1)	LABOR(4)	TOTAL
Service(2)	\$176.98	\$184.06	\$361.04
Primary	\$95.76	\$66.19	\$161.95
Secondary	\$100.09	\$155.99	\$256.08
Poles	\$181.57	\$311.84	\$493.41
Transformers	\$309.92	\$115.52	\$425.44
Sub-Total	\$864.32	\$833.60	\$1,697.92
Stores Handling(3)	\$44.94		\$44.94
SubTotal	\$909.26	\$833.60	\$1,742.86
Engineering(5)	\$93.20	\$85.44	\$178.64
TOTAL(6)	\$1,002.46	\$919.04	\$1,92 1.50

1 - Includes Sales Tax.

- 2 Includes Meters.
- 3 5.2 % of All Material.

4 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

- 5 10.25 % of All Material and Labor.
- 6 Does not include storm or operational costs

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

High Density 176 Lot Subdivision Company Owned Service Laterals

ITEM	MATERIAL(1)	LABOR(4)	TOTAL
Service(2)	\$363.55	\$354.52	\$718.07
Primary	\$365.20	\$161.12	\$526.32
Secondary	\$50.99	\$56.95	\$107.94
Transformers	\$242.26	\$46.91	\$289.17
Prim. & Sec. Trenching		\$198.96	\$198.96
Service Trenching	8	\$208.87	\$208.87
Sub-Total	\$1,022.00	\$1,027.33	\$2,049.33
Stores Handling(3)	\$53.14		\$53.14
SubTotal	\$1,075.14	\$1,027.33	\$2,102.47
Engineering(5)	\$110.20	\$105.30	\$215.50
TOTAL(6)	\$1,185.34	\$1,132.63	\$2,3 17.97

1 - Includes Sales Tax.

- 2 Includes Meters.
- 3 5.2 % of All Material.
- 4 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 5 10.25 % of All Material and Labor.
- 6 Does not include storm or operational costs

SALT SPRAY 23KV FUTURE 23KV **X** 13KV

NULL



ASBUILT CAD NAME: TXC PLOT TIME: 9:11:28 AM 6102/+1/2 314/ 2016



2023 OH HIGH DENSITY LAYOUT

WR Number: 2982370 NUMBER OF LOTS =	2023 176
MECA STORES LDG % =	4.00%
ACTUAL STORES LDG %	5.20%
= ACTUAL EO =	10.25%
AD JUSTED CO =	0.00%

						TOTAL
CLASSIFICATION	ACCOUNT		MATERIAL	_	LABOR	LABOR &
		MATERIAL	COST/LOT	LABOR	COST/LOT	MATERIAL
		2023	2023	2023	2023	2023
Service Overhead	369.100	\$14,950.34		\$25,980.20		
Meter Equip-1st Installation Expense	586.380			\$6,414.85		
Meter Cost (Material)		\$16,772.80	\$95.30			
SERVICE SUBT W/O STORES LDG		\$31,148.13	\$176.98	\$32,395.05	\$184.06	\$361.04
Cond, Primary, AL, thru 3/O	365.002	\$3,424.40		\$11,080.10		
Reclosure, 1 Phase	365.601	\$14,102.90		\$536.70		
Maintenance of Overhead Lines	593.180	\$0.00		\$32.08		
PRIMARY SUBT W/O STORES LDG		\$16,853.17	\$95.76	\$11,648.88	\$66.19	\$161.95
Cond. Secondary Al., thru 4/Q	365.040	\$2,922,78		\$9,457,04		
Cable. Secondary, TPX, All	365.091	\$15,398.53		\$17,996.43		
SECONDARY SUBT W/O STORES LDG		\$17,616.65	\$100.09	\$27,453.47	\$155.99	\$256.08
Poles Wood 35/40/45 ft	364 135	\$33 235 29		\$54 883 02		
POLE SUBT W/O STORES LDG		\$31,957.01	\$181.57	\$54,883.02	\$311.84	\$493.41
Transformer 10-25 KV/A	368 001	\$3 084 76		\$1 874 OA		
Transformer 50-75 KVA	368 012	\$53 643 34		\$18 458 21		
TRANSFORMER SUBT W/O STORES LDG	000.012	\$54,546.25	\$309.92	\$20,332.25	\$115.52	\$425.44
SUB-TOTAL		\$152,121.21	\$864.32	\$146,712.67	\$833.60	\$1,697.92
MATCHE MTD (M)			\$760.02			
			\$709.02 5 20%			
METER STORES I DC %			5.20%			
TOTAL STORES LDG			\$44.94			\$44.94
CUDTOTAL			¢000.00		* 000 00	\$4 740 BC
SUBIUIAL			\$ 909.20		\$833.60	⊅1,/4 2.00
EO			\$93.20		\$85.44	\$178.64
TOTAL			\$1,002.46		\$919.04	\$1,921.50

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2023 UG HIGH DENSITY LAYOUT

WR Number 1328347

2023 176	NUMBER OF LOTS =
4.00%	MECA STORES LDG % =
5.20%	ACTUAL STORES LDG % =
10.25%	ACTUAL EO =
0.00%	ADJUSTED CO =

CLASSIFICATION	ACCOUNT	MATERIAL	MATERIAL COST/LOT	LABOR	LABOR COST/LOT	TOTAL LABOR & MATERIAL
Service, UG, In Duct Meter Equip-1st Installation Expense	369.600 586.380	2023 \$49,100.35	2023	2023 \$92,741.68 \$6,414.85	2023	2023
Meter Cost (Material)		\$16,772.80	\$95.30	(\$36 760 28)		
SERVICE SUBT W/O STORES LDG		\$63,984.68	\$363.55	\$62,396.25	\$354.52	\$718.07
Duct, Buried (PVC)	366.201	\$50,356.56		\$51,698.83		
Cable, Primary, 1/C, 2/C, All Primacy/Secondacy Treach (Labor)	367.201	\$16,489.27		\$11,675.98 (\$35,017,34)		
PRIMARY SUBT W/O STORES LDG		\$64,274.84	\$365.20	\$28,357.47	\$161.12	\$526.32
Cable, 600V, AL, All	367.122	\$9,333.74		\$10,022.93		
SECONDARY SUBT W/O STORES LDG		\$8,974.75	\$50.99	\$10,022.93	\$56.95	\$107.94
Pad, TX	366.801	\$3,317.06		\$3,997.50		
Transformer, Padmount All TRANSFORMER SUBT W/O STORES LDG	368.501	\$41,025.91 \$42,637.47	\$242.26	\$4,258.48 \$8,255.98	\$46.91	\$289.17
SVC TRENCH				\$35,017.34 \$36,760.28	\$198.96 \$208.87	\$198.96 \$208.87
SUB-TOTAL		\$179,871.74	\$1,022.00	\$180,810.25	\$1,027.33	\$2,049.33
MATSUB-MTR.(M)			\$926.70			
STORES LDG. %			5.20%			
METER STORES LDG %			5.20%			
TOTAL STORES LDG			\$53.14			\$53.14
SUBTOTAL			\$1,075.14		\$1,027.33	\$2,102.47
E0			\$110.20		\$105.30	\$215.50
TOTAL			\$1,185.34		\$1,132.63	\$2,317.97

OPERATIONAL COSTS DIFFERENTIAL - HIGH DENSITY

30-Year NPV (\$ per pole-line mile)

	<u>0&M</u>	<u>Capital</u>	<u>Total</u>	Cost per Lot
Operational Cost Differential (Non-Storm)	(\$11,918)	(\$176,079)	(\$187,997)	(\$1,878)
Avoided Strom Restoration Cost (Storm)	(\$138,977)		(\$138,977)	(\$1,388)
Total Operational Cost				(\$3,266)
Pre-Operational Cost Post-Operational Cost			Note 1	\$396.47 \$0.00

Note 1: Where the "Post-Operational Costs" are negative, the differntials have been set to \$0.

METER PEDESTAL

OVERHEAD VS. UNDERGROUND SUMMARY SHEET

High Density 176 Lot Subdivision Customer Owned Service Laterals from Meter Centers Cost per Dwelling Unit

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
LABOR	\$682.79	\$595.81	(\$86.98)
MATERIAL	\$850.95	\$889.66	\$38.71
TOTAL (1) (2)	\$1,533.74	\$1,485.47	(\$48.27)

(1) Does not include storm or operational costs

(2) The differential has been set to \$0 in the URD filing since the differential is a negative amount.

COST PER DWELLING UNIT OVERHEAD MATERIAL AND LABOR

High Density 176 Lot Subdivision FPL Service Drop and Customer Owned Service Laterals from Meter Centers

ITEM	MATERIAL(1)	LABOR(4)	TOTAL
Service(2)	\$132.55	\$108.70	\$241.25
Primary	\$93.19	\$63.26	\$156.45
Secondary	\$74.14	\$120.32	\$194.46
Poles	\$124.27	\$212.58	\$336.85
Transformers	\$309.54	\$114.45	\$423.99
Sub-Total	\$733.69	\$619.31	\$1,353.00
Stores Handling(3)	\$38.15		\$38.15
SubTotal	\$771.84	\$619.31	\$1,391.15
Engineering(5)	\$79.11	\$63.48	\$142.59
TOTAL(6)	\$850.95	\$682.79	\$1,533.74

1 - Includes Sales Tax.

- 2 Includes Meters.
- 3 5.2 % of All Material.

4 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

- 5 10.25 % of All Material and Labor.
- 6 Does not include storm or operational costs

COST PER DWELLING UNIT UNDERGROUND MATERIAL AND LABOR

High Density 176 Lot Subdivision Customer Owned Service Laterals from Meter Centers

ITEM	MATERIAL(1)	LABOR(4)	TOTAL
Service(2)	\$95.30	\$85.65	\$180.95
Primary	\$348.68	\$143.15	\$491.83
Secondary	\$107.94	\$107.46	\$215.40
Transformers	\$215.14	\$39.63	\$254.77
Prim. & Sec. Trenching	i	\$164.53	\$164.53
Sub-Total	\$767.06	\$540.42	\$1,307.48
Stores Handling(3)	\$39.89		\$39.89
SubTotal	\$806.95	\$540.42	\$1,347.37
Engineering(5)	\$82.71	\$55.39	\$138.10
TOTAL(6)	\$889.66	\$595.81	\$1,485.47

1 - Includes Sales Tax.

- 2 Includes Meters.
- 3 5.2 % of All Material.

4 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

- 5 10.25 % of All Material and Labor.
- 6 Does not include storm or operational costs



NULL

SALT SPRAY

23KV

FUTURE 23KV

X 13KV

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2023 OH METER PEDESTAL LAYOUT

WR Number 2983564		2023
	NUMBER OF LOTS =	176
	MECA STORES LDG % =	4.00%
	ACTUAL STORES LDG % =	5.20%
	ACTUAL EO =	10.25%
	AD JUSTED CO =	0.00%

	ACCOUNT					
	A000011	MATERIAI	COST/LOT	LABOR	COST/LOT	MATERIAI
		2023	2023	2023	2023	2023
Service Overhead	369,100	\$6.818.00		\$12,716.82		
Meter Equip-1st Installation Expense	586.380	<i>v</i> , <i>c</i>		\$6.414.85		
Meter Cost (Material)		\$16.772.80	\$95.30			
SERVICE SUBT W/O STORES LDG		\$23,328.57	\$132.55	\$19,131.67	\$108.70	\$241.25
Cond, Primary, AL, thru 3/O	365.002	\$3,332.72		\$10,503.75		
Cond, Pri, AL, 343 - 1431	365.011	\$0.00		\$10.21		
Reclosure, 1 Phase	365.601	\$13,725.33		\$518.49		
Maintenance of Overhead Lines	593.180	\$0.00		\$101.32		
PRIMARY SUBT W/O STORES LDG		\$16,401.97	\$93.19	\$11,133.77	\$63.26	\$156.45
Cond, Secondary, AL, thru 4/O	365.040	\$2,844.53		\$8,966.61		
Cable, Secondary, TPX, All	365.091	\$10,726.05		\$12,208.96		
SECONDARY SUBT W/O STORES LDG		\$13,048.64	\$74.14	\$21,175.57	\$120.32	\$194.46
Poles, Wood, 35/40/45 ft	364.135	\$22,746.83		\$37,413.61		
POLE SUBT W/O STORES LDG		\$21,871.95	\$124.27	\$37,413.61	\$212.58	\$336.85
Transformer, 10-25 KVA	368.001	\$3,080.98		\$1,856.57		
Transformer, 50-75 KVA	368.012	\$53,577.50		\$18,286.15		
TRANSFORMER SUBT W/O STORES LDG		\$54,479.31	\$309.54	\$20,142.72	\$114.45	\$423.99
SUB-TOTAL		\$129,130.44	\$733.69	\$108,997.34	\$619.31	\$1,353.00
MATSUB-MTR.(M)			\$638.39			
STORES LDG. %			5.20%			
METER STORES LDG %			5.20%			
TOTAL STORES LDG			\$38.15			\$38.15
SUBTOTAL			\$771.84		\$619.31	\$1,391.15
EO			\$79.11		\$63.48	\$142.59
TOTAL			\$850.95		\$682.79	\$1,533.74

2023 UG METER PEDESTAL LAYOUT

WR Number 1368886

NUMBER OF LOTS =	2023 176
MECA STORES LDG % =	4.00%
ACTUAL STORES LDG% =	5.20%
ACTUAL EO =	10.25%
ADJUSTED CO =	0.00%

CLASSIFICATION	ACCOUNT	MATERIAL	MATERIAL COST/LOT	LABOR	LABOR COST/LOT	TOTAL LABOR & MATERIAL
Service, UG, In Duct Meter Equip-1st Installation Expense Meter Cost (Material)	369.699 586.380	2023 \$0.00	\$95.30	2023 \$8,660.04 \$6,414.85	2023	2023
Service Trench (Labor)		φ10,772.00	φ90 . 50	\$0.00		
SERVICE SUBT W/O STORES LDG		\$16,772.80	\$95.30	\$15,074.89	\$85.65	\$180.95
Duct, Buried (PVC) Cable, Primary, 1/C, 2/C, All	366.201 367.201	\$47,587.80 \$16,234.05		\$44,601.89 \$9,549.62		
Primary/Secondary Trench (Labor) PRIMARY SUBT W/O STORES LDG		\$61,367.16	\$348.68	(\$28,957.85) \$25,193.66	\$143.15	\$491.83
		• • •		• • •		
Cable, 600V, AL, All SECONDARY SUBT W/O STORES LDG	367.122	\$19,756.71 \$18.996.84	\$107.94	\$18,913.74 \$18.913.74	\$107.46	\$215.40
			•		• • •	•
Pad, TX Transformer, Padmount All	366.801	\$3,088.90 \$36,290,86		\$3,398.39 \$3,577.06		
TRANSFORMER SUBT W/O STORES LDG	500.501	\$37,865.16	\$215.14	\$6,975.45	\$39.63	\$254.77
PRI/SEC TRENCH SVC TRENCH				\$28,957.85 \$0.00	\$164.53 \$0.00	\$164.53
SUB-TOTAL		\$135,001.96	\$767.06	\$95,115 . 59	\$540.42	\$1,307.48
MATSUB-MTR.(M) STORES LDG. % METER STORES LDG %			\$671.76 5.20% 5.20%			
TOTAL STORES LDG			\$39.89			\$39.89
SUBTOTAL			\$806.95		\$540.42	\$1,347.37
E0			\$82.71		\$55.39	\$138.10
TOTAL			\$889.66		\$595.81	\$1,485.47

OPERATIONAL COSTS DIFFERENTIAL - METER PEDESTAL

<u>30-Year NPV (\$ per pole-line mile)</u>

	<u>0&M</u>	Capital	<u>Total</u>	Cost per Lot
Operational Cost Differential (Non-Storm) <u>Avoided Storm Restoration Cost (Storm)</u> Total Operational Cost	(\$11,918) <u>(</u> \$138,977)_	(\$176,079)	(\$187,997) (\$138,977)	(\$1,878) <u>(\$1,388)</u> - (\$3,266)
Pre-Operational Cost Post-Operational Cost			Note 1 Note 2	\$0.00 \$0.00

Note 1: The "Pre-Operational Cost" differential has been set to \$0 since it is a negative amount. Note 2: Where the "Post-Operational Costs" are negative, the differntials have been set to \$0. FEEDER COST



AVERAGE UNDERGROUND FEEDER COST

Underground		Overhead		Difference	
\$/Ft	\$59.17	\$/Ft	\$26.45	\$/Ft	\$32.72

AVERAGE UNDERGROUND LATERAL COST

<u>1 Phase Underground</u>	<u>1 Phase Overhead</u>	<u>Difference</u>
\$/Ft\$12.67	\$/Ft\$8.72	\$/Ft\$3.95
<u>2 Phase Underground</u>	<u>2 Phase Overhead</u>	<u>Difference</u>
\$/Ft \$20.26	\$/Ft \$11.39	\$/Ft\$8.87
<u>3 Phase Underground</u>	<u>3 Phase Overhead</u>	<u>Difference</u>
\$/Ft \$28.01	\$/Ft \$14.54	\$/Ft\$13.47

NOTE: Feeder estimates based on three phase requirements.

2023 URD TARIFF

FEEDER/LATERAL COST¹

Feeder Length (Ft) =	25,428
UG Feeder Cost =	\$1,599,382.61
26 UG Lateral Risers not required if UG Feeder is used	
Cost of each Lateral Riser = \$3,646.01	
26 Lateral Risers X \$3,646.01 =	<u>(\$94,796.26)</u>
Net UG Feeder Cost =	\$1,504,586.35
UG Feeder per foot cost =	\$59.17
OH Feeder Cost =	\$672,621.29
OH Feeder per foot cost =	\$26.45
Feeder Differential Cost =	\$32.72
Padmounted Switch cabinet weighted cost (Each) ² =	\$43,680.63
 NOTES: (1) These per foot costs include cable-in-conduit and cable pull boxes. (2) Differential cost based on padmounted switch vs. overhead switch average installed cost weighted by quantity of each switch installed. This cost is identical to the padmounted switch cost in the UCD Tariff. 	

2023 URD TARIFF

LATERAL COST³

Lateral Len	gth = 1000 Feet	
1 Phase UG	Lateral Cost =	\$12,672.08
1 Phase UG	Lateral Cost Per Foot =	\$12.67
1 Phase Ov	erhead Lateral Cost =	\$8,724.39
1 Phase Ov	erhead Lateral Cost Per Foot =	\$8.72
1 Phase Lat	eral Differential Cost =	\$3.95
2 Phase UG	G Lateral Cost =	\$20,264.03
2 Phase UG	G Lateral Cost Per foot =	\$20.26
2 Phase OH	Lateral Cost =	\$ 11, 388.4 5
2 Phase OH	I Lateral Cost Per foot =	\$11.39
2 Phase La	teral Differential Cost =	\$8.87
3 Phase UG	G Lateral Cost =	\$28,012.57
3 Phase UG	Cateral Cost Per foot =	\$28.01
3 Phase OF	l Lateral Cost =	\$14,539.06
3 Phase OH	Lateral Cost Per foot =	\$14.54
3 Phase Lat	teral Differential Cost =	\$13.47
NOTE:	(3) These costs include cable-in-conduit only (no pull boxes).	

CONDUIT CREDITS

2023 URD TARIFF

URD BASIS ADDENDUM

10.3.3		Conduit Installation Credits					
1. Low Density							
Pri/Sec =	174.09	мн х	\$160.05	/MH =	\$	\$27,863.10 <u>210</u> 132.68	Lots /Lot
Svc =	102.9	мн х	\$160.05	/MH =	\$	\$16,469.15 <u>,210</u> 78.42	Lots /Lot
2. High Density							
Pri/Sec =	91.04	МН Х	\$160.05	/MH =	\$	\$14,570.95 <u>.176</u> 82.79	Lots /Lot
Svc =	70.4	мн х	\$160.05	/MH =	\$	\$11,267.52 . <u>176</u> 64.02	Lots /Lot
3. Meter Pedestals							
Pri/Sec =	74.24	МН Х	\$160.05	/MH =	\$	\$11,882.11 . <u>176</u> 67.51	Lots /Lot

BACK-UP CALCULATIONS FOR CHANGES TO COSTS
10.5.4	Replace Ex	isting Serv	ice					
<u>2" PVC</u>	0.005	MHX	\$160.05	/MH X.	63 Ft.=		\$50.42	/Lot
10.4.3	UG Service	from OH L	ines					
<u>2" PVC</u>	0.005	мн х	\$160.05	/MH =			\$0.80	/Ft.
LARGER THAN 2" PVC	0.007	мн х	\$160.05	/MH =			\$1.12	/Ft.
10.3.3.d.	Credit for Ir	stallation (of Condu	it				
<u>2" PVC</u>	0.005	мн х	\$160.05	/MH =			\$0.80	/Ft.
LARGER THAN 2" PVC	0.007	мн х	\$160.05	/MH =			\$1.12	/Ft.
10.2.11	Extensions	of Service	Beyond I	Point of De	livery			
CABLE MATERIAL	\$0.86	/Ft. X	1.052	Stores Loa	iding =	\$0.90 /f	Ft.	
	\$0.90	/Ft.X	1.1025	EO =			\$0.99	/Ft.
<u>ÇABLE PULL</u>	\$160.05	/MH X	0.003	MH =		\$ 0.48 <i>/</i> /	Ft.	
	\$ 0.48	/Ft. X	1.1025	EO =			\$0.53	/Ft.
CONDUIT MATERIAL	\$0.46	/Ft. X	1.052	Stores Loa	ding =	\$0.48 /	Ft.	
	\$0.48	/Ft. X	1.1025	EO =			\$0.53	/Ft.
CONDUIT LABOR	\$160.05	/MH X	0.005	MH =		\$0.80 /I	Ft.	
	\$0.80	/Ft. X	1.1025	EO =			\$0.88	/Ft.
TRENCH	\$160.05	/MH X	0.029	MH =		\$4.64 <i>/</i> 1	Ft.	
	\$4.64	/Ft. X	1.1025	EO =			<u>\$5.12</u>	/Ft.
					TOTAL		\$8.05	/Ft.
	When Cust	omer Provi	des Treno	ch and Cor	duit Installa	tion		
	\$0.99	+	\$0.53	+ \$	60.53 =		\$2.05	/Ft.

Cable Material + Pull Labor + Conduit Material

TRENCH CREDITS

2023 URD TARIFF

TRENCH CREDITS

10.3.3

1. Low Density

Pri/Sec =	432.39	МН Х	\$160.05	/MH =	\$69,204.02 <u>210</u> \$329.54	Lots /Lot
Svc =	0.029	мн х	\$160.05	/MH X 63 Ft. =	\$292.41	/Lot
2. High Density						
Pri/Sec =	218.79	МН Х	\$160.05	/MH =	\$35,017.34 <u>176</u> \$198.96	Lots /Lot
Svc =	0.029	мн х	\$160.05	/MH X 45 Ft. =	\$208.87	/Lot
3. Meter Pedestals						
Pri/Sec =	180.93	мн х	\$160.05	/MH =	\$28,957.85 <u>176</u>	Lots

\$164.53 /Lot

Credit is only applied up to the amount of any contribution that is due

Feeder/Lateral Trench Credit =		\$160.05	/MH X	0.029 MH =	\$4.64 /Ft	
Feeder Splice Box Installation Credit	=	\$160.05	/МН Х	5.54 MH =	\$886.68	/Box
Primary Splice Box Installation Credit	=	\$160.05	/МН Х	1.94 MH =	\$310.50	/Box
Secondary Handhole Installation C For 17" Handhole =	redits:	\$160.05	/мн х	0.18 MH =	\$28.8 1	/HH
For 24" or 30" Handhole =		\$160.05	/МН Х	0.51 MH =	\$81.63	/HH
Concrete Pad for Pad Mounted Trans or Capacitor Bank Credit =	former	\$160.05	/MH X	0.50 MH =	\$80.03	/Pad
Flexible HDPE Conduit Installation Cr	edit =	\$160.05	/МН Х	0.001 MH =	\$0. 16	/Ft.
Concrete Pad and Cable Chamber for Feeder Switch Pad =		\$160.05	/MH X	4.71 MH =	\$753.84	/Pad
Trench Credit for New UG Service I	_aterals					
10.4.3		\$160.05	/МН Х	0.029 MH =	\$4.64	/Ft.
Trench Credit for Replacement of C)H Service with U	IG Servic	9			
10.5.4.	0.029 MH X	\$160.05	/мн х	63 Ft. =	\$292.4 1	/Svc

RISER TO HANDHOLE COST AND SERVICE LATERAL DIFFERENTIAL

2023 URD TARIFF

RISER TO HANDHOLE COST

Overhead

Material	Labor	<u>⊺otal</u>
\$125.79	\$186.85	\$312.64
Underground		
Material	Labor	
\$585.08	\$668.27	<u>\$1,253.35</u>
DIFFERENTIAL =		. \$940.71

SERVICE LATERAL DIFFERENTIAL - LOW DENSITY

	<u>Underground</u>	<u>Overhead</u>
Material	\$333.19	\$150.63
Labor	\$541.13	\$203.75
Stores loading	\$17.33	\$7.83
EO	<u>\$91.39</u>	<u>\$37.13</u>
Total	\$983.04	\$399.34

UNDERGROUND	\$983.04
OVERHEAD	<u>(\$399.34)</u>
DIFFERENTIAL =	\$583.70

2023 URD TARIFF

SERVICE LATERAL DIFFERENTIAL - HIGH DENSITY

	<u>Underground</u>		<u>Overhead</u>
Material	\$262.64		\$126.54
Labor	\$434.54		\$184.06
Stores loading	\$13.66		\$6.58
EO	<u>\$72.86</u>		<u>\$32.51</u>
Total	\$783.70		\$349.69
	UNDERGROUND	\$783.70	

DIFFERENTIAL =	\$434.01
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Appendix 2 - Underground Commercial Differential (UCD) Tariffs Appendix 2.1 - Legislative Format of Revised UCD Tariffs (Continued from Sheet No. 6.510)

13.2.12 Contribution by Applicant

The Applicant shall pay the Company the average differential cost between installing overhead and underground distribution facilities based on the following:

a) Primary lateral, riser (if from overhead termination point), pad mounted transformer and trench with cable-inconduit not to exceed 150 feet in radials and 300 feet in loops.

	<u>Applicant's Co</u>	ontribution
From Existing	From Overhead	Underground
C C	Termination Point	Termination
1) Single phase radial	\$0.00	\$0.00
2) Two phase radial	\$0.00	\$0.00
3) Three phase radial (150 KVA)	\$0.00	\$0.00
4) Three phase radial (300 KVA)	\$0.00	\$0.00
5) Single phase loop	\$0.00	\$0.00
6) Two phase loop	\$0.00	\$0.00
7) Three phase loop (150 KVA)	\$0.00	\$0.00
8) Three phase loop (300 KVA)	\$0.00	\$0.00

Secondary riser and lateral, excluding handhole or junction box, with connection to Applicant's service cables b) no greater than 20 feet from Company riser pole.

1) Small single phase	\$ 697.57 <u>699.54</u>
2) Large single phase	\$ 1,199.31<u>1,712.34</u>
3) Small three phase	\$ 964.97<u>1,018.46</u>
4) Large three phase	\$ 1,762.81<u>2,425.76</u>

c) FPL service cable installed in customer provided and customer installed 2" PVC (for main line switch size limited to 60 amps for 120V, 2 wire service, or 125 amps for 120/240v, 3 wire service) where customer's meter can is at least 5 feet and no more than 100 feet from the FPL pole.

	120v 60 amp	120/240v 125
	2 wire service	3 wire service
1) Installed on a wood pole - accessible locations	\$ 574.35 <u>537.81</u>	\$ 522.79<u>481.67</u>
2) Installed on a wood pole - inaccessible locations	\$ 663.66 617.62	\$ 598.10 548.84
3) Installed on a concrete pole - accessible locations	\$ 645.39 605.35	\$ 593.82 549.22

d) Handholes and Padmounted Secondary Junction Box, excluding connections.

1) Handhole

a. Small - per handhole	\$ 258.37<u>333.27</u>
b. Intermediate - per handhole	\$ 325.31 428.96
c. Large - per handhole	\$ 1,025.95 1,338.15
2) Pad Mounted secondary Junction Box – per box	\$ 3,652.50<u>3,978.16</u>

3) Pad Mounted secondary Junction Cabinet, used when electrical loads exceed the capacity of the secondary junction box (above) or when the number of the service conductors exceed the capacity of the pad mounted transformer. This charge is only applicable if the majority of the customer's service conductor diameter is less than 500 MCM.

Per cabinet (includes connecting up to 12 sets of conductor) Tapping service conductors (if more than 12 sets) – per set

\$12,816.9813,219.40 \$102.9691.76

(Continued on Sheet No. 6.530)

Issued by: Tiffany Cohen, Senior Director, Regulatory Rates, Cost of Service and Systems Executive Director, Rate **Development & Strategy**

Effective: January 1, 2022

(Continued from Sheet No. 6.520)

e) Primary splice box including splices and cable pulling set-up.

1) Single Phase - per box	\$ 1,680.27<u>1,963.54</u>
2) Two Phase - per box	\$ 2,304.87 2,562.44
3) Three Phase - per box	\$ 2,487.73<u>2,790.06</u>

f) Additional installation charge for underground primary laterals including trench and cable-in-conduit which exceed the limits set in 13.2.12 a).

1) Single Phase - per foot	\$ 2.00 <u>3.95</u>
2) Two Phase - per foot	\$4 .39 8.87
3) Three Phase - per foot	\$ <u>2.87</u> 7.90

Additional installation charge for underground primary laterals including trench and cable-in-conduit extended g) beyond the Company designated point of delivery to a remote point of delivery.

1) Single Phase - per foot	\$ 10.54<u>12.67</u>
2) Two Phase - per foot	\$ 15.37<u>20.26</u>
3) Three Phase - per foot	\$ 16.57 22.48

h) The above costs are based upon arrangements that will permit serving the local underground distribution system within the general service/industrial development from overhead feeder mains. If feeder mains within the general service/industrial development are deemed necessary by the company to provide and/or maintain adequate service and are required by the Applicant or a governmental agency to be installed underground, the Applicant shall pay the company the average differential cost between such underground feeder mains within the general service/industrial development and equivalent overhead feeder mains, as follows:

	Applicant's
Contribution	
Cost per foot of feeder trench within the general	
service/industrial development (excluding switches)	\$ 13.31<u>32.72</u>
Cost per above ground padmounted switch package	\$ 29,911.04<u>43,680.63</u>

i) The Company will provide one standby/assistance appointment at no additional charge to the Applicant adding new or additional load to assist with installation of the Applicant's conductors and conduit(s) into a padmounted transformer, pedestal or vault (not to exceed four hours in duration) during normal hours of operation. Additional appointments will be provided upon request, at the Applicant's expense.

(Continued on Sheet 6.540)

Appendix 2.1, Page 2 of 3

(Continued from Sheet No. 6.530)

13.2.13 Contribution Adjustments

a) Credits will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant provides trenching and backfilling for the Company's facilities.

Credit to the Applicant's Contribution

1)	Credit per foot of primary trench	\$ <u>4.72</u> 4.64
2)	Credit per foot of secondary trench	\$ 3.75<u>3.68</u>

b) Credits will be allowed to the Applicant's contribution in section 13.2.12. where, by mutual agreement, the Applicant installs Company-provided conduit per Company instructions.

1)	Credit per foot of 2" conduit	\$ 0.81 <u>0.80</u>
2)	Credit per foot of larger than 2" conduit	\$ 1.14<u>1.12</u>

c) Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs a Company-provided handhole per Company instructions,

1)	Credit per large handhole/primary splice box	\$ 315.99 <u>310.50</u>
2)	Credit per small handhole	\$ 83.07<u>81.63</u>

d) Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs a Company-provided concrete pad for a pad-mounted transformer or pad-mounted capacitor bank per Company instructions,

Credit per pad

e) Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs Company-provided concrete pad for a pad-mounted feeder switch chamber per Company instructions,

Credit per pad

\$767.16753.84

\$81.4480.03

f) Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs Company-provided concrete pad for a feeder splice box per Company instructions,

Credit per splice box

\$902.36886.68

Issued by: Tiffany Cohen, Senior Director, Regulatory Rates, Cost of Service and SystemsExecutive Director,, Rate Development & Strategy Effective: January 1, 2022

Appendix 2.2 - Clean Format of Revised UCD Tariffs

(Continued from Sheet No. 6.510)

13.2.12 Contribution by Applicant

The Applicant shall pay the Company the average differential cost between installing overhead and underground distribution facilities based on the following:

a) Primary lateral, riser (if from overhead termination point), pad mounted transformer and trench with cable-inconduit not to exceed 150 feet in radials and 300 feet in loops.

	Applicant's Contribution	
From Existing	From Overhead	Underground
6	Termination Point	Termination
1) Single phase radial	\$0.00	\$0.00
2) Two phase radial	\$0.00	\$0.00
3) Three phase radial (150 KVA)	\$0.00	\$0.00
4) Three phase radial (300 KVA)	\$0.00	\$0.00
5) Single phase loop	\$0.00	\$0.00
6) Two phase loop	\$0.00	\$0.00
7) Three phase loop (150 KVA)	\$0.00	\$0.00
8) Three phase loop (300 KVA)	\$0.00	\$0.00

b) Secondary riser and lateral, excluding handhole or junction box, with connection to Applicant's service cables no greater than 20 feet from Company riser pole.

1) Small single phase	\$699.54
2) Large single phase	\$1,712.34
3) Small three phase	\$1,018.46
4) Large three phase	\$2,425.76

c) FPL service cable installed in customer provided and customer installed 2" PVC (for main line switch size limited to 60 amps for 120V, 2 wire service, or 125 amps for 120/240v, 3 wire service) where customer's meter can is at least 5 feet and no more than 100 feet from the FPL pole.

	120v 60 amp	120/240v 125
	2 wire service	3 wire service
1) Installed on a wood pole - accessible locations	\$537.81	\$481.67
2) Installed on a wood pole - inaccessible locations	\$617.62	\$548.84
3) Installed on a concrete pole - accessible locations	\$605.35	\$549.22

d) Handholes and Padmounted Secondary Junction Box, excluding connections.

1) Handhole

a.	Small - per handhole	\$333.27
b.	Intermediate - per handhole	\$428.96
c.	Large - per handhole	\$1,338.15
2) Pad M	ounted secondary Junction Box – per box	\$3,978.16

3) Pad Mounted secondary Junction Cabinet, used when electrical loads exceed the capacity of the secondary junction box (above) or when the number of the service conductors exceed the capacity of the pad mounted transformer. This charge is only applicable if the majority of the customer's service conductor diameter is less than 500 MCM.

Per cabinet (includes connecting up to 12 sets of conductor)\$13,219.40Tapping service conductors (if more than 12 sets) – per set\$91.76

(Continued on Sheet No. 6.530)

(Continued from Sheet No. 6.520)

e) Primary splice box including splices and cable pulling set-up.

1) Single Phase - per box	\$1,963.54
2) Two Phase - per box	\$2,562.44
3) Three Phase - per box	\$2,790.06

f) Additional installation charge for underground primary laterals including trench and cable-in-conduit which exceed the limits set in 13.2.12 a).

\$3.95
\$8.87
\$7.90

g) Additional installation charge for underground primary laterals including trench and cable-in-conduit extended beyond the Company designated point of delivery to a remote point of delivery.

1) Single Phase - per foot	\$12.67
2) Two Phase - per foot	\$20.26
3) Three Phase - per foot	\$22.48

h) The above costs are based upon arrangements that will permit serving the local underground distribution system within the general service/industrial development from overhead feeder mains. If feeder mains within the general service and are required by the Applicant or a governmental agency to be installed underground, the Applicant shall pay the company the average differential cost between such underground feeder mains within the general service/industrial development and equivalent overhead feeder mains, as follows:

	Applicant's
	Contribution
Cost non fact of fooder transh within the consul	
Cost per loot of leeder trench within the general	
service/industrial development (excluding switches)	\$32.72
Cost per above ground padmounted switch package	\$43,680.63

i) The Company will provide one standby/assistance appointment at no additional charge to the Applicant adding new or additional load to assist with installation of the Applicant's conductors and conduit(s) into a padmounted transformer, pedestal or vault (not to exceed four hours in duration) during normal hours of operation. Additional appointments will be provided upon request, at the Applicant's expense.

(Continued on Sheet 6.540)

(Continued from Sheet No. 6.530)

13.2.13 Contribution Adjustments

a) Credits will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant provides trenching and backfilling for the Company's facilities.

a 1.

		Applicant's
		Contribution
1)	Credit per foot of primary trench	\$4.64
2)	Credit per foot of secondary trench	\$3.68

b) Credits will be allowed to the Applicant's contribution in section 13.2.12. where, by mutual agreement, the Applicant installs Company-provided conduit per Company instructions.

1)	Credit per foot of 2" conduit	\$0.80
2)	Credit per foot of larger than 2" conduit	\$1.12

c) Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs a Company-provided handhole per Company instructions,

1)	Credit per large handhole/primary splice box	\$310.50
2)	Credit per small handhole	\$81.63

 Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs a Company-provided concrete pad for a pad-mounted transformer or pad-mounted capacitor bank per Company instructions,

Credit per pad \$80.03

e) Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs Company-provided concrete pad for a pad-mounted feeder switch chamber per Company instructions,

Credit per pad \$753.84

f) Credit will be allowed to the Applicant's contribution in Section 13.2.12. where, by mutual agreement, the Applicant installs Company-provided concrete pad for a feeder splice box per Company instructions,

\$886.68

Credit per splice box

Issued by: Tiffany Cohen, Executive Director, Rate Development & Strategy Effective:

Appendix 2.3 - Estimated Average Cost Differential for UCD

2023 UCD Tariff Basis Design Criteria and Assumptions

I. General

Voltage – 13.2 kV Overhead Distribution – wood poles

Underground Distribution – Cable–in-Conduit with aluminum conductor XPE-J insulated cables in direct buried conduit with above-grade appurtenances.

II. Overhead Design – Modified Vertical Framing

A. Primary lateral, transformer, and service

	1 Phase	2 Phase	3 Phase (150 KVA)	3 Phase (300 KVA)
			, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,
Primary Length ⁽¹⁾	150 feet / 300 feet	150 feet / 300 feet	150 feet / 300 feet	150 feet / 300 feet
Primary Conductors	2#1/0 AAAC	3#1/0 AAAC	4#1/0 AAAC	4#1/0 AAAC
Primary Poles	1-40/3	1-40/3	1-45/2	1 - 45 III H
Service Length	50 feet	50 feet	50 feet	50 feet
Service Conductors	#3/0A TPX	336A QPX	2-336A QPX	2-556A QPX
Transformer	50 KVA	50 & 50 KVA	3-50KVA	3-100 KVA
Voltage	120/240V	120/240V	120/208V	120/208V
Manhours ⁽¹⁾	19 / 24	29 / 36	39 / 49	42 / 48

Note ⁽¹⁾: 150 feet when comparing to UG Radial, 300 feet when comparing to UG Loop

B. Secondary/Service Laterals

	Small 1 Phase	Large 1 Phase	Small 3 Phase	Large 3 Phase
Length	50 feet	50 feet	50 feet	50 feet
Conductor	#1/0A TPX	556A QPX	#1/0A QPX	556A QPX
Manhours	1	2	1	2

C. Handholes and Pad Mounted Secondary Junction Box

No Overhead used

D. Primary Splice Box

No Overhead Used

E. Additional Charge for Underground Primary Lateral Exceeding Basic Length

Single Phase	1,000 feet 2#1/0 AAAC, 4 - 40'/3 Poles
Two Phase	1,000 feet 3#1/0 AAAC, 4 - 40'/3 Poles
Three Phase	1,000 feet 4#1/0 AAAC, 4 - 40'/2 Poles

F. Additional Charge for Underground Primary Lateral to a Remote Point of Delivery

No Overhead Used

III. Underground Design Criteria

A.1 Primary lateral, riser, padmounted transformer and trench with Cable in Conduit

	1 Phase	2 Phase	3 Phase	3 Phase
Trench length (radial)	150 feet	150 feet	150 feet	150 feet
I rench length (loop)	300 feet	300 feet	300 feet	300 feet
Trench cover	36 inches	36 inches	36 inches	36 inches
Conductor size	#1/0A 25kV XPE	2#1/0A 25kV XPE	3#1/0A 25kV XPE	3#1/0A 25kV XPE
Conduit Size	1-2 inch	2-2 inch	1-5 inch	1-5 inch
Riser Length	30 feet	30 feet	30 feet	30 feet
Riser Size	2 inch U-guard	5 inch U-guard	5 inch U-guard	5 inch U-guard
Transformer Size	50 KVA	50 & 50 KVA	150 KVA	300 KVA
Voltage	120/240 V	120/240 V	120/208 V	120/208 V
Manhours (radial)	19	26	26	26
Manhours (loop)	26	37	34	36

A.2 Primary lateral, UG source, padmounted transformer and trench with Cable in Conduit

	1 Phase	2 Phase	3 Phase	3 Phase
Trench length (radial)	150 feet	150 feet	150 feet	150 feet
Trench length (loop)	300 feet	300 feet	300 feet	300 feet
Trench cover	36 inches	36 inches	36 inches	36 inches
Conductor size	#1/0A 25kV XPE	2#1/0A 25kV XPE	3#1/0A 25kV XPE	3#1/0A 25kV XPE
Conduit Size	1-2 inch	2-2 inch	1-5 inch	1-5 inch
Transformer Size	50 KVA	50 & 50 KVA	150 KVA	300 KVA
Voltage	120/240 V	120/240 V	120/208 V	120/208 V
Manhours (radial)	15	22	17	17
Manhours (loop)	21	30	26	26

B. Secondary/Service lateral and riser with multiple connectors.

	Small 1 Phase	Large 1 Phase	Small 3 Phase	Large 3 Phase
Trench length	10 feet	10 feet	10 feet	10 feet
Trench cover	24 inch	24 inch	24 inch	24 inch
Conductor Size	#4/0A TPX	3-750A	#4/0A QPX	4-750A
Conduit size	2 inch	5 inch	5 inch	5 inch
Riser length	30 feet	30 feet	30 feet	30 feet
Riser size	2 inch U-guard	5 inch U-guard	5 inch U-guard	5 inch U-guard
Manhours	3.9	5.0	4.6	6.4

C. Handholes and Padmounted Secondary Junction Box and Cabinet

Small handhole- 24 inch handholeIntermediate Handhole- 30 inch handholeLarge Handhole- 48 inch handholeSecondary Junction box- Replacement cabinet and Connectors per I - 74.1Sec. Junction Cabinet- Three-Phase Secondary Cabinet and Connectors (22-Port) per I - 75.0.0

D. Primary Splice Box

Single Phase - 48" handhole with one molded splice and one pull set-up and basket Two Phase - 48" handhole with two molded splices and two pull set-ups and baskets Three Phase - 48" handhole with three molded splices and one pull set-up and basket

E. Additional Charge for Underground Primary Lateral Exceeding Basic Length

Single Phase – 1,000 feet 1#1/0A 25KV XPE, 1-2 inch pvc, 36 inch trench, pull labor Two Phase - 1000 feet 2#1/0A 25kv XPE, 2-2 inch PVC, 36 inch trench, pull labor Three Phase – 1,000 feet 3#1/0A 25KV XPE, 1-5 inch pvc, 36 inch trench, pull labor

F. Additional charge for Underground Primary Lateral to a Remote Point of Delivery

Single Phase - 1000 feet 1#1/0A 25kV XPE, 1-2 inch PVC, 36 inch trench, pull labor Two Phase - 1000 feet 2#1/0A 25kv XPE, 2-2 inch PVC, 36 inch trench, pull labor Three Phase -1000 feet 3#1/0A 25kv XPE, 1-5 inch PVC, 36 inch trench, pull labor

Basis for Underground Commercial Distribution Differential

<u>New Underground Commercial Development with Overhead Feeder Mains.</u> The average differential costs for Underground Commercial Distribution stated in the FPL rules and Regulations were derived from cost estimates of underground commercial facilities and their equivalent overhead designs. These estimates employed the standard Company design and estimating practices and the system-wide unit costs, which were in use at the end of 2022. Design criteria include the following:

Primary Voltage	13,200/7,620 V
Phases, Secondary Voltage	Single Phase, 120/240 V Three phase, 120/240 V Three phase, 120/208 V
Underground Design	Three phase, 277/480 V
Overhead Design	Wood Poles *, Extreme Windload (145 MPH)
	* Concrete pole used for 300 KVA OH TX Bank

Appendix 2.4 - Supporting Data and Calculations for UCD

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER TRANSFORMER BANK -

SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UNDE	RGROUND	DIFFERENTIAL
LABOR	\$3,688.82	\$2,580.41	(\$1,108.41)
MATERIAL	\$8,958.12	\$5,074.60	(\$3,883.52)
TOTAL	\$12,646.94	\$7,655.01	(\$4,991.93)

OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK

SINGLE PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$108.46	\$202.28	\$310.74
Primary	\$4,593.50	\$733.39	\$5,326.89
Secondary	\$66.30	\$361.86	\$428.16
Poles	\$594.86	\$1,293.88	\$1,888.74
Transformers	\$2,360.53	\$754.46	\$3,114.99
Sub-Total	\$7,723.65	\$3,345.87	\$11,069.52
Stores Handling(2)	\$401.63	\$0.00	\$401.63
SubTotal	\$8,125.28	\$3,345.87	\$11,471.15
Engineering(4)	\$832.84	\$342.95	\$1,175.79
TOTAL	\$8,958.12	\$3,688.82	\$12,646.94

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$0.00	\$0.00	\$0.00
Primary	\$1,340.59	\$1,183.33	\$2,523.92
Transformers	\$3,034.70	\$460.96	\$3,495.66
Trenching	\$0.00	\$696.22	\$696.22
Sub-Total	\$4,375.29	\$2,340.51	\$6,715.80
Stores Handling(2)	\$227.52	\$0.00	\$227.52
SubTotal	\$4,602.81	\$2,340.51	\$6,943.32
Engineering(4)	\$471.79	\$239.90	\$711.69
TOTAL	\$5,074.60	\$2,580.41	\$7,655.01

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER TRANSFORMER BANK -

TWO PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UND	ERGROUND DIF	FERENTIAL
LABOR	\$5,657.92	\$4,802.18	(\$855.74)
MATERIAL	\$17,379.02	\$9,988.90	(\$7,390.12)
TOTAL	\$23,036.94	\$14,791.08	(\$8,245.86)

OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK

TWO PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$223.76	\$428.27	\$652.03
Primary	\$8,985.78	\$1,460.32	\$10,446.10
Secondary	\$64.85	\$360.28	\$425.13
Poles	\$1,056.57	\$1,456.09	\$2,512.66
Transformers	\$4,653.15	\$1,426.94	\$6,080.09
Sub-Total	\$14,984.11	\$5,131.90	\$20,116.01
Stores Handling(2)	\$779.17	\$0.00	\$779.17
SubTotal	\$15,763.28	\$5,131.90	\$20,895.18
Engineering(4)	\$1,615.74	\$526.02	\$2,141.76
TOTAL	\$17,379.02	\$5,657.92	\$23,036.94

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

TWO PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$0.00	\$0.00	\$0.00
Primary	\$2,821.24	\$2,416.12	\$5,237.36
Transformers	\$5,791.15	\$1,243.38	\$7,034.53
Trenching	\$0.00	\$696.22	\$696.22
Sub-Total	\$8,612.39	\$4,355.72	\$12,968.11
Stores Handling(2)	\$447.84	\$0.00	\$447.84
SubTotal	\$9,060.23	\$4,355.72	\$13,415.95
Engineering(4)	\$928.67	\$446.46	\$1,375.13
TOTAL	\$9,988.90	\$4,802.18	\$14,791.08

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER TRANSFORMER BANK - 300 KVA

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UND	ERGROUND DI	FFERENTIAL
LABOR	\$9,801.52	\$4,624.33	(\$5,177.19)
MATERIAL	\$29,367.19	\$24,654.18	(\$4,713.01)
TOTAL	\$39,168.71	\$29,278.51	(\$9,890.20)

OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK

THREE PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE (300 KVA)

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$788.86	\$1,009.61	\$1,798.47
Primary	\$13,716.46	\$2,436.75	\$16,153.21
Secondary	\$65.99	\$400.78	\$466.77
Poles	\$2,575.94	\$2,883.60	\$5,459.54
Transformers	\$8,173.01	\$2,159.53	\$10,332.54
Sub-Total	\$25,320.26	\$8,890.27	\$34,210.53
Stores Handling(2)	\$1,316.65	\$0.00	\$1,316.65
SubTotal	\$26,636.91	\$8,890.27	\$35,527.18
Engineering(4)	\$2,730.28	\$911.25	\$3,641.53
TOTAL	\$29,367.19	\$9,801.52	\$39,168.71

1 - Includes Sales Tax.

2 - 5.2 % of All Material.

- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER 300 KVA

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$0.00	\$0.00	\$0.00
Primary	\$3,335.46	\$2,078.90	\$5,414.36
Transformers	\$17,921.26	\$1,419.28	\$19,340.54
Trenching	\$0.00	\$696.22	\$696.22
Sub-Total	\$21,256.72	\$4,194.40	\$25,451.12
Stores Handling(2)	\$1,105.35	\$0.00	\$1,105.35
SubTotal	\$22,362.07	\$4,194.40	\$26,556.47
Engineering(4)	\$2,292.11	\$429.93	\$2,722.04
TOTAL	\$24,654.18	\$4,624.33	\$29,278.51

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER TRANSFORMER BANK - 150 KVA

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UNDERGROUND DIFFERENTIAL		
LABOR	\$8,515.00	\$4,772.60	(\$3,742.40)
MATERIAL	\$23,615.35	\$17,386.09	(\$6,229.26)
TOTAL	\$32,130.35	\$22,158.69	(\$9,971.66)

OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK

THREE PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE (150 KVA)

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$852.83	\$1,151.76	\$2,004.59
Primary	\$13,821.62	\$2,461.79	\$16,283.41
Secondary	\$66.50	\$404.90	\$471.40
Poles	\$1,287.62	\$1,581.83	\$2,869.45
Transformers	\$4,332.48	\$2,123.08	\$6,455.56
Sub-Total	\$20,361.05	\$7,723.36	\$28,084.41
Stores Handling(2)	\$1,058.77	\$0.00	\$1,058.77
SubTotal	\$21,419.82	\$7,723.36	\$29,143.18
Engineering(4)	\$2,195.53	\$791.64	\$2,987.17
TOTAL	\$23,615.35	\$8,515.00	\$32,130.35

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER 150 KVA

INCLUDING RISER AND 150' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$3,362.98	\$2,213.39	\$5,576.37
Transformers	\$11,627.23	\$1,419.28	\$13,046.51
Trenching	\$0.00	\$696.22	\$696.22
Sub-Total	\$14,990.21	\$4,328.89	\$19,319.10
Stores Handling(2)	\$779.49	\$0.00	\$779.49
SubTotal	\$15,769.70	\$4,328.89	\$20,098.59
Engineering(4)	\$1,616.39	\$443.71	\$2,060.10
TOTAL	\$17,386.09	\$4,772.60	\$22,158.69

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER TRANSFORMER BANK -

SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UI	NDERGROUND	DIFFERENTIAL
LABOR	\$4,615.05	\$4,635.05	\$20.00
MATERIAL	\$9,593.28	\$5,900.05	(\$3,693.23)
TOTAL	\$14,208.33	\$10,535.10	(\$3,673.23)

OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK

SINGLE PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$108.46	\$202.28	\$310.74
Primary	\$4,752.31	\$911.28	\$5,663.59
Secondary	\$135.23	\$564.85	\$700.08
Poles	\$898.59	\$1,705.74	\$2,604.33
Transformers	\$2,376.69	\$801.84	\$3,178.53
Sub-Total	\$8,271.28	\$4,185.99	\$12,457.27
Stores Handling(2)	\$430.11	\$0.00	\$430.11
SubTotal	\$8,701.39	\$4,185.99	\$12,887.38
Engineering(4)	\$891.89	\$429.06	\$1,320.95
TOTAL	\$9,593.28	\$4,615.05	\$14,208.33

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$2,242.50	\$1,819.91	\$4,062.41
Transformers	\$2,844.50	\$991.78	\$3,836.28
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$5,087.00	\$4,204.13	\$9,291.13
Stores Handling(2)	\$264.52	\$0.00	\$264.52
SubTotal	\$5,351.52	\$4,204.13	\$9,555.65
Engineering(4)	\$548.53	\$430.92	\$979.45
TOTAL	\$5,900.05	\$4,635.05	\$10,535.10

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.
SUMMARY SHEET

COST PER TRANSFORMER BANK -

TWO PHASE LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UNDERGROUND		DIFFERENTIAL
LABOR	\$6,961.88	\$6,858.10	(\$103.78)
MATERIAL	\$18,160.74	\$12,256.07	(\$5,904.67)
TOTAL	\$25,122.62	\$19,114.17	(\$6,008.45)

TWO PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$223.76	\$428.27	\$652.03
Primary	\$9,468.40	\$1,926.88	\$11,395.28
Secondary	\$134.72	\$597.18	\$731.90
Poles	\$1,173.82	\$1,880.70	\$3,054.52
Transformers	\$4,657.41	\$1,481.60	\$6,139.01
Sub-Total	\$15,658.11	\$6,314.63	\$21,972.74
Stores Handling(2)	\$814.22	\$0.00	\$814.22
SubTotal	\$16,472.33	\$6,314.63	\$22,786.96
Engineering(4)	\$1,688.41	\$647.25	\$2,335.66
TOTAL	\$18,160.74	\$6,961.88	\$25,122.62

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

TWO PHASE LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$4,528.97	\$3,529.54	\$8,058.51
Transformers	\$6,038.16	\$1,298.52	\$7,336.68
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$10,567.13	\$6,220.50	\$16,787.63
Stores Handling(2)	\$549.49	\$0.00	\$549.49
SubTotal	\$11,116.62	\$6,220.50	\$17,337.12
Engineering(4)	\$1,139.45	\$637.60	\$1,777.05
TOTAL	\$12,256.07	\$6,858.10	\$19,114.17

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

THREE PHASE 150 KVA LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH WITH

CABLE-IN-CONDUIT

ITEM	OVERHEAD UND	ERGROUND	DIFFERENTIAL
LABOR	\$10,731.14	\$6,479.07	(\$4,252.07)
MATERIAL	\$24,820.60	\$23,133.32	(\$1,687.28)
TOTAL	\$35,551.74	\$29,612.39	(\$5,939.35)

THREE PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE (150 KVA)

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$852.83	\$1,151.76	\$2,004.59
Primary	\$14,183.61	\$3,050.95	\$17,234.56
Secondary	\$134.54	\$630.36	\$764.90
Poles	\$1,694.41	\$2,130.36	\$3,824.77
Transformers	\$4,534.82	\$2,770.03	\$7,304.85
Sub-Total	\$21,400.21	\$9,733.46	\$31,133.67
Stores Handling(2)	\$1,112.81	\$0.00	\$1,112.81
SubTotal	\$22,513.02	\$9,733.46	\$32,246.48
Engineering(4)	\$2,307.58	\$997.68	\$3,305.26
TOTAL	\$24,820.60	\$10,731.14	\$35,551.74

1 - Includes Sales Tax.

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

THREE PHASE 150 KVA LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$5,545.42	\$2,838.76	\$8,384.18
Transformers	\$14,400.02	\$1,645.51	\$16,045.53
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$19,945.44	\$5,876.71	\$25,822.15
Stores Handling(2)	\$1,037.16	\$0.00	\$1,037.16
SubTotal	\$20,982.60	\$5,876.71	\$26,859.31
Engineering(4)	\$2,150.72	\$602.36	\$2,753.08
TOTAL	\$23,133.32	\$6,479.07	\$29,612.39

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

THREE PHASE 300 KVA LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH WITH

CABLE-IN-CONDUIT

ITEM	OVERHEAD UNDERGROUND		DIFFERENTIAL
LABOR	\$11,364.68	\$6,479.07	(\$4,885.61)
MATERIAL	\$30,370.39	\$26,112.69	(\$4,257.70)
TOTAL	\$41,735.07	\$32,591.76	(\$9,143.31)

THREE PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER (300 TOTAL KVA) AND SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$788.86	\$1,009.61	\$1,798.47
Primary	\$14,200.29	\$3,050.95	\$17,251.24
Secondary	\$134.70	\$630.36	\$765.06
Poles	\$2,988.71	\$3,457.65	\$6,446.36
Transformers	\$8,072.65	\$2,159.53	\$10,232.18
Sub-Total	\$26,185.21	\$10,308.10	\$36,493.31
Stores Handling(2)	\$1,361.63	\$0.00	\$1,361.63
SubTotal	\$27,546.84	\$10,308.10	\$37,854.94
Engineering(4)	\$2,823.55	\$1,056.58	\$3,880.13
TOTAL	\$30,370.39	\$11,364.68	\$41,735.07

1 - Includes Sales Tax.

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

THREE PHASE 300 KVA LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND 300' PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$5,545.42	\$2,838.76	\$8,384.18
Transformers	\$16,968.82	\$1,645.51	\$18,614.33
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$22,514.24	\$5,876.71	\$28,390.95
Stores Handling(2)	\$1,170.74	\$0.00	\$1,170.74
SubTotal	\$23,684.98	\$5,876.71	\$29,561.69
Engineering(4)	\$2,427.71	\$602.36	\$3,030.07
TOTAL	\$26,112.69	\$6,479.07	\$32,591.76

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UNDE	DIFFERENTIAL	
LABOR	\$4,615.05	\$3,592.63	(\$1,022.42)
MATERIAL	\$9,593.28	\$5,435.15	(\$4,158.13)
TOTAL	\$14,208.33	\$9,027.78	(\$5,180.55)

SINGLE PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$108.46	\$202.28	\$310.74
Primary	\$4,752.31	\$911.28	\$5,663.59
Secondary	\$135.23	\$564.85	\$700.08
Poles	\$898.59	\$1,705.74	\$2,604.33
Transformers	\$2,376.69	\$801.84	\$3,178.53
Sub-Total	\$8,271.28	\$4,185.99	\$12,457.27
Stores Handling(2)	\$430.11	\$0.00	\$430.11
SubTotal	\$8,701.39	\$4,185.99	\$12,887.38
Engineering(4)	\$891.89	\$429.06	\$1,320.95
TOTAL	\$9,593.28	\$4,615.05	\$14,208.33

1 - Includes Sales Tax.

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL AND TRENCH WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$2,026.89	\$1,129.53	\$3,156.42
Transformers	\$2,659.27	\$736.65	\$3,395.92
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$4,686.16	\$3,258.62	\$7,944.78
Stores Handling(2)	\$243.68	\$0.00	\$243.68
SubTotal	\$4,929.84	\$3,258.62	\$8,188.46
Engineering(4)	\$505.31	\$334.01	\$839.32
TOTAL	\$5,435.15	\$3,592.63	\$9,027.78

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UND	DIFFERENTIAL	
LABOR	\$3,688.82	\$2,604.30	(\$1,084.52)
MATERIAL	\$8,958.12	\$4,537.99	(\$4,420.13)
TOTAL	\$12,646.94	\$7,142.29	(\$5,504.65)

SINGLE PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$108.46	\$202.28	\$310.74
Primary	\$4,593.50	\$733.39	\$5,326.89
Secondary	\$66.30	\$361.86	\$428.16
Poles	\$594.86	\$1,293.88	\$1,888.74
Transformers	\$2,360.53	\$754.46	\$3,114.99
Sub-Total	\$7,723.65	\$3,345.87	\$11,069.52
Stores Handling(2)	\$401.63	\$0.00	\$401.63
SubTotal	\$8,125.28	\$3,345.87	\$11,471.15
Engineering(4)	\$832.84	\$342.95	\$1,175.79
TOTAL	\$8,958.12	\$3,688.82	\$12,646.94

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL AND TRENCH WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$1,241.32	\$267.10	\$1,508.42
Transformers	\$2,671.31	\$702.64	\$3,373.95
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$3,912.63	\$2,362.18	\$6,274.81
Stores Handling(2)	\$203.46	\$0.00	\$203.46
SubTotal	\$4,116.09	\$2,362.18	\$6,478.27
Engineering(4)	\$421.90	\$242.12	\$664.02
TOTAL	\$4,537.99	\$2,604.30	\$7,142.29

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

TWO PHASE LOOP PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEADUNDERGROUND		DIFFERENTIAL
LABOR	\$6,214.78	\$5,497.18	(\$717.60)
MATERIAL	\$19,411.32	\$11,480.52	(\$7,930.80)
TOTAL	\$25,626.10	\$16,977.70	(\$8,648.40)

TWO PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$223.76	\$428.27	\$652.03
Primary	\$9,468.40	\$1,926.88	\$11,395.28
Secondary	\$134.72	\$597.18	\$731.90
Poles	\$2,424.40	\$1,133.60	\$3,558.00
Transformers	\$4,657.41	\$1,481.60	\$6,139.01
Sub-Total	\$16,908.69	\$5,567.53	\$22,476.22
Stores Handling(2)	\$814.22	\$0.00	\$814.22
SubTotal	\$17,722.91	\$5,567.53	\$23,290.44
Engineering(4)	\$1,688.41	\$647.25	\$2,335.66
TOTAL	\$19,411.32	\$6,214.78	\$25,626.10

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

TWO PHASE LOOP PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$4,270.28	\$2,798.47	\$7,068.75
Transformers	\$5,628.17	\$795.19	\$6,423.36
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$9,898.45	\$4,986.10	\$14,884.55
Stores Handling(2)	\$514.72	\$0.00	\$514.72
SubTotal	\$10,413.17	\$4,986.10	\$15,399.27
Engineering(4)	\$1,067.35	\$511.08	\$1,578.43
TOTAL	\$11,480.52	\$5,497.18	\$16,977.70

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

TWO PHASE RADIAL PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEADUND	ERGROUND	DIFFERENTIAL
LABOR	\$5,657.92	\$4,084.18	(\$1,573.74)
MATERIAL	\$17,379.02	\$9,202.77	(\$8,176.25)
TOTAL	\$23,036.94	\$13,286.95	(\$9,749.99)

TWO PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$223.76	\$428.27	\$652.03
Primary	\$8,985.78	\$1,460.32	\$10,446.10
Secondary	\$64.85	\$360.28	\$425.13
Poles	\$1,056.57	\$1,456.09	\$2,512.66
Transformers	\$4,653.15	\$1,426.94	\$6,080.09
Sub-Total	\$14,984.11	\$5,131.90	\$20,116.01
Stores Handling(2)	\$779.17	\$0.00	\$779.17
SubTotal	\$15,763.28	\$5,131.90	\$20,895.18
Engineering(4)	\$1,615.74	\$526.02	\$2,141.76
TOTAL	\$17,379.02	\$5,657.92	\$23,036.94

1 - Includes Sales Tax.

2 - 5.2 % of All Material.

- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

TWO PHASE RADIAL PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$2,534.55	\$1,470.06	\$4,004.61
Transformers	\$5,400.03	\$841.97	\$6,242.00
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$7,934.58	\$3,704.47	\$11,639.05
Stores Handling(2)	\$412.60	\$0.00	\$412.60
SubTotal	\$8,347.18	\$3,704.47	\$12,051.65
Engineering(4)	\$855.59	\$379.71	\$1,235.30
TOTAL	\$9,202.77	\$4,084.18	\$13,286.95

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

THREE PHASE 150 KVA LOOP PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEADUNDERGROUND		DIFFERENTIAL
LABOR	\$10,731.14	\$4,538.47	(\$6,192.67)
MATERIAL	\$24,820.60	\$22,194.52	(\$2,626.08)
TOTAL	\$35,551.74	\$26,732.99	(\$8,818.75)

THREE PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER AND SERVICE (150 KVA)

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$852.83	\$1,151.76	\$2,004.59
Primary	\$14,183.61	\$3,050.95	\$17,234.56
Secondary	\$134.54	\$630.36	\$764.90
Poles	\$1,694.41	\$2,130.36	\$3,824.77
Transformers	\$4,534.82	\$2,770.03	\$7,304.85
Sub-Total	\$21,400.21	\$9,733.46	\$31,133.67
Stores Handling(2)	\$1,112.81	\$0.00	\$1,112.81
SubTotal	\$22,513.02	\$9,733.46	\$32,246.48
Engineering(4)	\$2,307.58	\$997.68	\$3,305.26
TOTAL	\$24,820.60	\$10,731.14	\$35,551.74

1 - Includes Sales Tax.

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

THREE PHASE LOOP PAD MOUNTED TRANSFORMER (150 KVA)

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$5,369.77	\$1,913.84	\$7,283.61
Transformers	\$13,766.24	\$810.25	\$14,576.49
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$19,136.01	\$4,116.53	\$23,252.54
Stores Handling(2)	\$995.07	\$0.00	\$995.07
SubTotal	\$20,131.08	\$4,116.53	\$24,247.61
Engineering(4)	\$2,063.44	\$421.94	\$2,485.38
TOTAL	\$22,194.52	\$4,538.47	\$26,732.99

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

THREE PHASE 300 KVA LOOP PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UND	DIFFERENTIAL	
LABOR	\$11,364.68	\$4,538.47	(\$6,826.21)
MATERIAL	\$30,370.39	\$25,173.88	(\$5,196.51)
TOTAL	\$41,735.07	\$29,712.35	(\$12,022.72)

THREE PHASE 300' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER (300 TOTAL KVA) AND SERVICE

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$788.86	\$1,009.61	\$1,798.47
Primary	\$14,200.29	\$3,050.95	\$17,251.24
Secondary	\$134.70	\$630.36	\$765.06
Poles	\$2,988.71	\$3,457.65	\$6,446.36
Transformers	\$8,072.65	\$2,159.53	\$10,232.18
Sub-Total	\$26,185.21	\$10,308.10	\$36,493.31
Stores Handling(2)	\$1,361.63	\$0.00	\$1,361.63
SubTotal	\$27,546.84	\$10,308.10	\$37,854.94
Engineering(4)	\$2,823.55	\$1,056.58	\$3,880.13
TOTAL	\$30,370.39	\$11,364.68	\$41,735.07

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

THREE PHASE LOOP PAD MOUNTED TRANSFORMER (300 KVA)

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 300' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$5,369.77	\$1,913.84	\$7,283.61
Transformers	\$16,335.03	\$810.25	\$17,145.28
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$21,704.80	\$4,116.53	\$25,821.33
Stores Handling(2)	\$1,128.65	\$0.00	\$1,128.65
SubTotal	\$22,833.45	\$4,116.53	\$26,949.98
Engineering(4)	\$2,340.43	\$421.94	\$2,762.37
TOTAL	\$25,173.88	\$4,538.47	\$29,712.35

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

THREE PHASE 150 KVA RADIAL PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UND	DIFFERENTIAL	
LABOR	\$8,515.00	\$3,126.63	(\$5,388.37)
MATERIAL	\$23,615.35	\$16,549.97	(\$7,065.38)
TOTAL	\$32,130.35	\$19,676.60	(\$12,453.75)

THREE PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER (150 TOTAL KVA) AND SERVICE

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$852.83	\$1,151.76	\$2,004.59
Primary	\$13,821.62	\$2,461.79	\$16,283.41
Secondary	\$66.50	\$404.90	\$471.40
Poles	\$1,287.62	\$1,581.83	\$2,869.45
Transformers	\$4,332.48	\$2,123.08	\$6,455.56
Sub-Total	\$20,361.05	\$7,723.36	\$28,084.41
Stores Handling(2)	\$1,058.77	\$0.00	\$1,058.77
SubTotal	\$21,419.82	\$7,723.36	\$29,143.18
Engineering(4)	\$2,195.53	\$791.64	\$2,987.17
TOTAL	\$23,615.35	\$8,515.00	\$32,130.35

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER (150 KVA)

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$3,161.45	\$693.04	\$3,854.49
Transformers	\$11,107.86	\$750.47	\$11,858.33
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$14,269.31	\$2,835.95	\$17,105.26
Stores Handling(2)	\$742.00	\$0.00	\$742.00
SubTotal	\$15,011.31	\$2,835.95	\$17,847.26
Engineering(4)	\$1,538.66	\$290.68	\$1,829.34
TOTAL	\$16,549.97	\$3,126.63	\$19,676.60

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER TRANSFORMER BANK -

THREE PHASE 300 KVA RADIAL PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

ITEM	OVERHEADUN	OVERHEADUNDERGROUND		
LABOR	\$9,801.52	\$3,506.19	(\$6,295.33)	
MATERIAL	\$29,367.19	\$22,861.23	(\$6,505.96)	
TOTAL	\$39,168.71	\$26,367.42	(\$12,801.29)	

THREE PHASE 150' PRIMARY LATERAL POLE LINE

INCLUDING TRANSFORMER (300 TOTAL KVA) AND SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$788.86	\$1,009.61	\$1,798.47
Primary	\$13,716.46	\$2,436.75	\$16,153.21
Secondary	\$65.99	\$400.78	\$466.77
Poles	\$2,575.94	\$2,883.60	\$5,459.54
Transformers	\$8,173.01	\$2,159.53	\$10,332.54
Sub-Total	\$25,320.26	\$8,890.27	\$34,210.53
Stores Handling(2)	\$1,316.65	\$0.00	\$1,316.65
SubTotal	\$26,636.91	\$8,890.27	\$35,527.18
Engineering(4)	\$2,730.28	\$911.25	\$3,641.53
TOTAL	\$29,367.19	\$9,801.52	\$39,168.71

1 - Includes Sales Tax.

2 - 5.2 % of All Material.

- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER (300 KVA)

FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING 150' PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT 2023

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$3,356.42	\$984.65	\$4,341.07
Transformers	\$16,354.43	\$803.13	\$17,157.56
Trenching	\$0.00	\$1,392.44	\$1,392.44
Sub-Total	\$19,710.85	\$3,180.22	\$22,891.07
Stores Handling(2)	\$1,024.96	\$0.00	\$1,024.96
SubTotal	\$20,735.81	\$3,180.22	\$23,916.03
Engineering(4)	\$2,125.42	\$325.97	\$2,451.39
TOTAL	\$22,861.23	\$3,506.19	\$26,367.42

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SUMMARY SHEET

COST PER RISER -

SMALL SINGLE PHASE RISER

ITEM	OVERHEAD UNDERGROUND		DIFFERENTIAL
LABOR	\$223.01	\$663.34	\$440.33
MATERIAL	\$108.86	\$368.07	\$259.21
TOTAL	\$331.87	\$1,031.41	\$699.54

OVERHEAD MATERIAL AND LABOR COST PER SERVICE

SINGLE PHASE SMALL SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$93.86	\$202.28	\$296.14
Sub-Total	\$93.86	\$202.28	\$296.14
Stores Handling(2)	\$4.88	\$0.00	\$4.88
SubTotal	\$98.74	\$202.28	\$301.02
Engineering(4)	\$10.12	\$20.73	\$30.85
TOTAL	\$108.86	\$223.01	\$331.87

1 - Includes Sales Tax.

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER RISER

SMALL SINGLE PHASE RISER

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$317.35	\$601.67	\$919.02
Sub-Total	\$317.35	\$601.67	\$919.02
Stores Handling(2)	\$16.50	\$0.00	\$16.50
SubTotal	\$333.85	\$601.67	\$935.52
Engineering(4)	\$34.22	\$61.67	\$95.89
TOTAL	\$368.07	\$663.34	\$1,031.41

1 - Includes Sales Tax.

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.
OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER RISER -

LARGE SINGLE PHASE RISER

ITEM	OVERHEAD UN	DIFFERENTIAL	
LABOR	\$472.17	\$927.17	\$455.00
MATERIAL	\$433.16	\$1,690.50	\$1,257.34
TOTAL	\$905.33	\$2,617.67	\$1,712.34

OVERHEAD MATERIAL AND LABOR COST PER SERVICE

SINGLE PHASE LARGE SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$373.47	\$428.27	\$801.74
Sub-Total	\$373.47	\$428.27	\$801.74
Stores Handling(2)	\$19.42	\$0.00	\$19.42
SubTotal	\$392.89	\$428.27	\$821.16
Engineering(4)	\$40.27	\$43.90	\$84.17
TOTAL	\$433.16	\$472.17	\$905.33

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

LARGE SINGLE PHASE RISER

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$1,457.54	\$840.97	\$2,298.51
Sub-Total	\$1,457.54	\$840.97	\$2,298.51
Stores Handling(2)	\$75.79	\$0.00	\$75.79
SubTotal	\$1,533.33	\$840.97	\$2,374.30
Engineering(4)	\$157.17	\$86.20	\$243.37
TOTAL	\$1,690.50	\$927.17	\$2,617.67

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER RISER -

SMALL THREE PHASE RISER

ITEM	OVERHEAD UNDERGROUND		DIFFERENTIAL	
LABOR	\$277.27	\$758.76	\$481.49	
MATERIAL	\$125.29	\$662.26	\$536.97	
TOTAL	\$402.56	\$1,421.02	\$1,018.46	

OVERHEAD MATERIAL AND LABOR COST PER SERVICE

THREE PHASE SMALL SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$108.02	\$251.49	\$359.51
Sub-Total	\$108.02	\$251.49	\$359.51
Stores Handling(2)	\$5.62	\$0.00	\$5.62
SubTotal	\$113.64	\$251.49	\$365.13
Engineering(4)	\$11.65	\$25.78	\$37.43
TOTAL	\$125.29	\$277.27	\$402.56

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SMALL THREE PHASE RISER

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$571.00	\$688.22	\$1,259.22
Sub-Total	\$571.00	\$688.22	\$1,259.22
Stores Handling(2)	\$29.69	\$0.00	\$29.69
SubTotal	\$600.69	\$688.22	\$1,288.91
Engineering(4)	\$61.57	\$70.54	\$132.11
TOTAL	\$662.26	\$758.76	\$1,421.02

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER RISER -

LARGE THREE PHASE RISER

ITEM	OVERHEAD UN	DIFFERENTIAL	
LABOR	\$472.17	\$1,189.70	\$717.53
MATERIAL	\$433.16	\$2,141.39	\$1,708.23
TOTAL	\$905.33	\$3,331.09	\$2,425.76

OVERHEAD MATERIAL AND LABOR COST PER SERVICE

THREE PHASE LARGE SERVICE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Service	\$373.47	\$428.27	\$801.74
Sub-Total	\$373.47	\$428.27	\$801.74
Stores Handling(2)	\$19.42	\$0.00	\$19.42
SubTotal	\$392.89	\$428.27	\$821.16
Engineering(4)	\$40.27	\$43.90	\$84.17
TOTAL	\$433.16	\$472.17	\$905.33

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

LARGE THREE PHASE RISER

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$1,846.29	\$1,079.09	\$2,925.38
Sub-Total	\$1,846.29	\$1,079.09	\$2,925.38
Stores Handling(2)	\$96.01	\$0.00	\$96.01
SubTotal	\$1,942.30	\$1,079.09	\$3,021.39
Engineering(4)	\$199.09	\$110.61	\$309.70
TOTAL	\$2,141.39	\$1,189.70	\$3,331.09

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

SMALL HANDHOLE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$209.74	\$81.63	\$291.37
Sub-Total	\$209.74	\$81.63	\$291.37
Stores Handling(2)	\$10.91	\$0.00	\$10.91
SubTotal	\$220.65	\$81.63	\$302.28
Engineering(4)	\$22.62	\$8.37	\$30.99
TOTAL	\$243.27	\$90.00	\$333.27

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

INTERMEDIATE HANDHOLE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$292.25	\$81.63	\$373.88
Sub-Total	\$292.25	\$81.63	\$373.88
Stores Handling(2)	\$15.20	\$0.00	\$15.20
SubTotal	\$307.45	\$81.63	\$389.08
Engineering(4)	\$31.51	\$8.37	\$39.88
TOTAL	\$338.96	\$90.00	\$428.96

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

LARGE HANDHOLE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$858.59	\$310.50	\$1,169.09
Sub-Total	\$858.59	\$310.50	\$1,169.09
Stores Handling(2)	\$44.65	\$0.00	\$44.65
SubTotal	\$903.24	\$310.50	\$1,213.74
Engineering(4)	\$92.58	\$31.83	\$124.41
TOTAL	\$995.82	\$342.33	\$1,338.15

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

PADMOUNTED SECONDARY JUNCTION BOX

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$2,923.99	\$532.27	\$3,456.26
Sub-Total	\$2,923.99	\$532.27	\$3,456.26
Stores Handling(2)	\$152.05	\$0.00	\$152.05
SubTotal	\$3,076.04	\$532.27	\$3,608.31
Engineering(4)	\$315.29	\$54.56	\$369.85
TOTAL	\$3,391.33	\$586.83	\$3,978.16

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

PADMOUNTED SECONDARY JUNCTION CABINET

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Secondary	\$5,892.69	\$488.97	\$6,381.66
Sub-Total	\$5,892.69	\$488.97	\$6,381.66
Stores Handling(2)	\$306.42	\$0.00	\$306.42
SubTotal	\$6,199.11	\$488.97	\$6,688.08
Engineering(4)	\$635.41	\$50.12	\$685.53
TOTAL	\$6,834.52	\$539.09	\$7,373.61

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER CABINET PADMOUNTED SECONDARY JUNCTION CABINET SECONDARY CONDUCTORS AND SERVICE TAPS

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(2)	TOTAL
350 MCM Al Wire (per set)	5 1,177.20	\$0.00	\$1,177.20
500 MCM Cu Wire (per set	2,011.40	\$0.00	\$2,011.40
750 MCM Al Wire (per set)	5 1,276.60	\$0.00	\$1,276.60
750 MCM Cu Wire (per set §	2,691.60	\$0.00	\$2,691.60
Pull Setup (one per cab)	\$0.00	\$ 188.80	\$188.80
Pulling Cable (per set) Tap Wires in Transformer	\$0.00	\$ 81.18	\$81.18
and Cabinet (per set)	\$0.00	\$ 183.52	\$183.52
Usage Statistics			
350 MCM AI Wire	0.06%		
500 MCM Cu Wire	0.35%		
750 MCM AI Wire	87.14%		
750 MCM Cu Wire	12.44%		
Weighted Cost of Wire	\$1,455.01		
Number of Sets			
1 Set	18.42%		
2 Sets	2.63%		
3 Sets	10.53%		
4 Sets	68.42%		
Weighted Pulling Cost	\$0.00	\$455.84	
Weighted Wire Subtotal	\$4,786.26	\$603.69	
Total Cost of Secondary	\$5,845.79		

The first 12 sets of service conductors will be tapped, since they are included in a standard transformer installation (750 KVA or greater). Any sets greater than 12 will incur a differential cost per set: **\$91.76**

- 1 Includes Sales Tax, 5.2 % Stores Loading of All Material, and 10.25% Engineering Overhead of all Material.
- 2 Includes Payroll, Taxes, Insurance, P&W, & Transportation, and 10.25% Engineering Overhead of all Labor.
- 3 8 foot spacing between cabinet and transformer needs 20' of conductor per set.
- 4 Usage statistics based on all new installations during 2018.

UNDERGROUND MATERIAL AND LABOR COST PER HANDHOLE

SINGLE PHASE PRIMARY 48" SPLICE BOX

WITH SPLICES AND PULL LABOR

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$960.31	\$770.74	\$1,731.05
Sub-Total	\$960.31	\$770.74	\$1,731.05
Stores Handling(2)	\$49.94	\$0.00	\$49.94
SubTotal	\$1,010.25	\$770.74	\$1,780.99
Engineering(4)	\$103.55	\$79.00	\$182.55
TOTAL	\$1,113.80	\$849.74	\$1,963.54

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER HANDHOLE

TWO PHASE PRIMARY 48" SPLICE BOX

WITH SPLICES AND PULL LABOR

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$1,062.00	\$1,206.98	\$2,268.98
Sub-Total	\$1,062.00	\$1,206.98	\$2,268.98
Stores Handling(2)	\$55.22	\$0.00	\$55.22
SubTotal	\$1,117.22	\$1,206.98	\$2,324.20
Engineering(4)	\$114.52	\$123.72	\$238.24
TOTAL	\$1,231.74	\$1,330.70	\$2,562.44

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER HANDHOLE

THREE PHASE PRIMARY 48" SPLICE BOX

WITH SPLICES AND PULL LABOR

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$1,336.52	\$1,124.64	\$2,461.16
Sub-Total	\$1,336.52	\$1,124.64	\$2,461.16
Stores Handling(2)	\$69.50	\$0.00	\$69.50
SubTotal	\$1,406.02	\$1,124.64	\$2,530.66
Engineering(4)	\$144.12	\$115.28	\$259.40
TOTAL	\$1,550.14	\$1,239.92	\$2,790.06

- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER FOOT -

SINGLE PHASE PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UI	DIFFERENTIAL	
LABOR	\$5,324.35	\$6,634.71	\$1,310.36
MATERIAL	\$3,400.04	\$6,037.37	\$2,637.33
TOTAL	\$8,724.39	\$12,672.08	\$3,947.69
PER FOOT TOTAL	\$8.72	\$12.67	\$3.95

OVERHEAD MATERIAL AND LABOR COST PER FOOT

SINGLE PHASE PRIMARY LATERAL POLE LINE

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$854.46	\$1,470.68	\$2,325.14
Secondary	\$854.46	\$1,470.68	\$2,325.14
Poles	\$1,222.58	\$1,887.98	\$3,110.56
Sub-Total	\$2,931.50	\$4,829.34	\$7,760.84
Stores Handling(2)	\$152.44	\$0.00	\$152.44
SubTotal	\$3,083.94	\$4,829.34	\$7,913.28
Engineering(4)	\$316.10	\$495.01	\$811.11
TOTAL	\$3,400.04	\$5,324.35	\$8,724.39

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER FOOT

SINGLE PHASE PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$5,205.39	\$1,376.43	\$6,581.82
Trenching	\$0.00	\$4,641.45	\$4,641.45
Sub-Total	\$5,205.39	\$6,017.88	\$11,223.27
Stores Handling(2)	\$270.68	\$0.00	\$270.68
SubTotal	\$5,476.07	\$6,017.88	\$11,493.95
Engineering(4)	\$561.30	\$616.83	\$1,178.13
TOTAL	\$6,037.37	\$6,634.71	\$12,672.08
PER FOOT TOTAL	\$6.04	\$6.63	\$12.67

1 - Includes Sales Tax.

2 - 5.2 % of All Material.

3 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

4 - 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER FOOT -

TWO PHASE PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UI	DIFFERENTIAL	
LABOR	\$6,791.07	\$8,189.28	\$1,398.21
MATERIAL	\$4,597.38	\$12,074.75	\$7,477.37
TOTAL	\$11,388.45	\$20,264.03	\$8,875.58
PER FOOT TOTAL	\$11.39	\$20.26	\$8.87

OVERHEAD MATERIAL AND LABOR COST PER FOOT

TWO PHASE PRIMARY LATERAL POLE LINE

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$1,827.51	\$2,847.81	\$4,675.32
Secondary	\$913.75	\$1,423.91	\$2,337.66
Poles	\$1,222.58	\$1,887.98	\$3,110.56
Sub-Total	\$3,963.84	\$6,159.70	\$10,123.54
Stores Handling(2)	\$206.12	\$0.00	\$206.12
SubTotal	\$4,169.96	\$6,159.70	\$10,329.66
Engineering(4)	\$427.42	\$631.37	\$1,058.79
TOTAL	\$4,597.38	\$6,791.07	\$11,388.45

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

UNDERGROUND MATERIAL AND LABOR COST PER FOOT

TWO PHASE PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$10,410.79	\$2,786.47	\$13,197.26
Trenching	\$0.00	\$4,641.45	\$4,641.45
Sub-Total	\$10,410.79	\$7,427.92	\$17,838.71
Stores Handling(2)	\$541.36	\$0.00	\$541.36
SubTotal	\$10,952.15	\$7,427.92	\$18,380.07
Engineering(4)	\$1,122.60	\$761.36	\$1,883.96
TOTAL	\$12,074.75	\$8,189.28	\$20,264.03
PER FOOT TOTAL	\$12.07	\$8.19	\$20.26

1 - Includes Sales Tax.

2 - 5.2 % of All Material.

3 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

4 - 10.25% of All Material and Labor.

OVERHEAD VS. UNDERGROUND

SUMMARY SHEET

COST PER FOOT -

THREE PHASE PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

ITEM	OVERHEAD UN	DIFFERENTIAL	
LABOR	\$8,257.79	\$7,061.73	(\$1,196.06)
MATERIAL	\$6,328.20	\$15,424.45	\$9,096.25
TOTAL	\$14,585.99	\$22,486.18	\$7,900.19
PER FOOT TOTAL	\$14.59	\$22.49	\$7.90

OVERHEAD MATERIAL AND LABOR COST PER FOOT

THREE PHASE PRIMARY LATERAL POLE LINE

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$2,834.05	\$4,201.56	\$7,035.61
Secondary	\$944.67	\$1,400.52	\$2,345.19
Poles	\$1,677.42	\$1,887.98	\$3,565.40
Sub-Total	\$5,456.14	\$7,490.06	\$12,946.20
Stores Handling(2)	\$283.72	\$0.00	\$283.72
SubTotal	\$5,739.86	\$7,490.06	\$13,229.92
Engineering(4)	\$588.34	\$767.73	\$1,356.07
TOTAL	\$6,328.20	\$8,257.79	\$14,585.99

- 1 Includes Sales Tax.
- 2 5.2 % of All Material.
- 3 Includes Payroll, Taxes, Insurance, P&W, & Transportation.
- 4 10.25% of All Material and Labor.

Note: See Appendix 3, page 2, IIE, three phase for design criteria and assumptions

UNDERGROUND MATERIAL AND LABOR COST PER FOOT

THREE PHASE PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT

<u>2023</u>

ITEM	MATERIAL(1)	LABOR(3)	TOTAL
Primary	\$13,298.89	\$1,763.75	\$15,062.64
Trenching	\$0.00	\$4,641.45	\$4,641.45
Sub-Total	\$13,298.89	\$6,405.20	\$19,704.09
Stores Handling(2)	\$691.54	\$0.00	\$691.54
SubTotal	\$13,990.43	\$6,405.20	\$20,395.63
Engineering(4)	\$1,434.02	\$656.53	\$2,090.55
TOTAL	\$15,424.45	\$7,061.73	\$22,486.18
PER FOOT TOTAL	\$15.42	\$7.06	\$22.48

1 - Includes Sales Tax.

2 - 5.2 % of All Material.

3 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

4 - 10.25% of All Material and Labor.

AVERAGE UCD UNDERGROUND FEEDER COST

<u>Underground</u> \$/Ft.....\$59.17 <u>Overhead</u> \$/Ft.....\$26.45 <u>Difference</u> \$/Ft.....\$37.72

13 kV UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$36,950.23
13 kV Salt Spray UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$36,563.97
23 kV UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$47,123.29
23 kV Salt Spray UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$47,074.53
13 kV UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) =	\$35,904.05
13 kV Salt Spray UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) =	\$35,380.03
23 kV UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) =	\$45,598.89
23 kV Salt Spray UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) = …	\$45,508.46

Based on data from Inventory Services on switch cabinet utilization (new construction only):

6	13 kV 9/3 cabinets (270679009)	21	8% 8% vs 2%, Prev vs Current	
6	13 kV SS 9/3 cabinets (270679017)	1	0% 0% vs 2%, Prev vs Current	
60	23 kV 9/3 cabinets (270681003)	53	20% 20% vs 23%, Prev vs Current	
10	23 kV SS 9/3 cabinets (270681011)	6	2% 2% vs 4%, Prev vs Current	
46	13 kV 6/6 cabinets (270674007)	47	18% 18% vs 18%, Prev vs Current	
5	13 kV SS 6/6 cabinets (270674015)	8	3% 3% vs 2%, Prev vs Current	
107	23 kV 6/6 cabinets (270672004)	111	42% 42% vs 41%, Prev vs Current	
20	23 kV SS 6/6 cabinets (270672012)	17	6% 6% vs 8%, Prev vs Current	
260	· · · ·	Wei	ighted Average:	\$43,680.63

\$/Switch Cabinet \$43,680.63

FEEDER COST

Feeder Length =	25,428
UG Feeder Cost* (excluding UG switches) =	\$1,599,382.59
26 UG Lateral Risers not required if UG Feeder is used	
Cost of each Lateral Riser =	\$3,273.30
26 Lateral Risers X \$0.00 =	\$0.00
Net UG Feeder Cost =	\$1,599,382.59
UG Feeder per foot cost =	\$62.90
OH Feeder Cost (excluding OH switches & hardware) =	\$672,621.29
OH Feeder per foot cost =	\$26.45
Feeder Differential Cost (per foot) =	\$36.45
13 kV UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$43,459.13
13 kV Salt Spray UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$43,585.31
23 kV UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$54,012.42
23 kV Salt Spray UG Switch Cabinet (9/3 cabinet w/ all hardware & cable) =	\$54,137.37
13 kV UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) =	\$42,412.95
13 kV Salt Spray UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) =	\$42,401.37
23 kV UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) =	\$52,488.02
23 kV Salt Spray UG Switch Cabinet (6/6 cabinet w/ all hardware & cable) =	\$52,571.30
13 kV OH Switch (including switch, pole, and all Hardware) =	\$6.508.90
13 kV OH Salt Spray Switch (including switch, pole, and all Hardware) =	\$7,021.34
23 kV OH Switch (including switch, pole, and all Hardware) =	\$6,889.13
23 kV OH Salt Spray Switch (including switch, pole, and all Hardware) =	\$7,062.84
13 kV UG Switch Cabinet - 9/3 Cabinet Differential =	\$36,950.23
13 kV Salt Spray UG Switch Cabinet - 9/3 Cabinet Differential =	\$36,563.97
23 kV UG Switch Cabinet - 9/3 Cabinet Differential =	\$47,123.29
23 kV Salt Spray UG Switch Cabinet - 9/3 Cabinet Differential =	\$47,074.53
13 kV UG Switch Cabinet - 6/6 Cabinet Differential =	\$35,904.05
13 kV Salt Spray UG Switch Cabinet - 6/6 Cabinet Differential =	\$35,380.03
23 kV UG Switch Cabinet - 6/6 Cabinet Differential =	\$45,598.89
23 kV Salt Spray UG Switch Cabinet - 6/6 Cabinet Differential =	\$45,508.46
Switch Cabinet Differential (Weighted Average) =	\$43,680.63
* These costs include cable-in-conduit and cable pull boxes.	

Note: See Appendix 3, page 4, for design criteria and assumptions

SMALL COMMERCIAL SERVICES (1)

WOOD POLE, ACCESSIBLE

	120 VOLT, 2-\ OVERHEAD	WIRE SERVICE UNDERGROUND	DIFFERENTIAL	120/240 VOLT OVERHEAD I	r, 3-WIRE SERVI JNDERGROUND	ICE) DIFFERENTIAL
MATERIAL (2)	\$25.46	\$106.74	\$81.28	\$138.23	\$231.58	\$93.35
LABOR(4)	\$145.78	\$548.07	\$402.29	\$225.78	\$564.47	\$338.69
STORES HANDLING (3)	\$1.32	\$5.55	\$4.23	\$7.19	\$12.04	\$4.85
ENGINEERING (5)	\$17.68	\$67.69	\$50.01	\$38.05	\$82.83	\$44.78
TOTAL	\$190.24	\$728.05	\$537.81	\$409.25	\$890.92	\$481.67

WOOD POLE, INACCESSIBLE

	120 VOLT, 2-WIRE SERVICE			120/240 VOLT, 3-WIRE SERVICE				
	OVERHEAD	UNDERGROUND	DIFFERENTIAL	OVERHEAD	UNDERGROUND	DIFFERENTIAL		
MATERIAL (2)	\$25.46	\$106.74	\$81.28	\$138.23	\$231.58	\$93.35		
LABOR(4)	\$172.04	\$646.72	\$474.68	\$266.45	\$666.07	\$399.62		
STORES HANDLING (3	\$1.32	\$5.55	\$4.23	\$7.19	\$12.04	\$4.85		
ENGINEERING (5)	\$20.37	\$77.80	\$57.43	\$42.22	\$93.24	\$51.02		
TOTAL	\$219.19	\$836.81	\$617.62	\$454.09	\$1,002.93	\$548.84		

CONCRETE POLE, ACCESSIBLE

	120 VOLT, 2-	WIRE SERVICE		120/240 VOL1	, 3-WIRE SERV	CE
	OVERHEAD	UNDERGROUND	DIFFERENTIAL	OVERHEAD U	JNDERGROUNE	DIFFERENTIAL
MATERIAL (2)	\$25.46	\$113.27	\$87.81	\$138.23	\$238.11	\$99.88
LABOR(4)	\$145.78	\$602.47	\$456.69	\$225.78	\$618.87	\$393.09
STORES HANDLING (3)	\$1.32	\$5.89	\$4.57	\$7.19	\$12.38	\$5.19
ENGINEERING (5)	\$17.68	\$73.96	\$56.28	\$38.05	\$89.11	\$51.06
TOTAL	\$190.24	\$795.59	\$605.35	\$409.25	\$958.47	\$549.22

1 - Conditions for FPL providing the UG service wire to a non-residential customer's meter can include:

A) Customer's Main Line Switch is to be less than or equal to 125 amps (120/240 Volt 3-wire service) or 60 amps (120 Volt 2-wire service) AND

or ou amps (120 voit 2-wire service) AND

B) The meter can is at least 5 feet, but not more than 100 feet, from the pole.

2 - Includes Sales Tax.

4 - Includes Payroll, Taxes, Insurance, P&W, & Transportation.

5 - 10.25% of All Material and Labor.

* These costs include cable-in-conduit and cable pull boxes.

^{3 - 5.2 %} of All Material.

CREDITS

Lateral Trench Credit =	\$160.05	/MH X	0.029	MH	=	\$4.64	/Ft.
Secondary/Service Trench Credit =	\$160.05	/MH X	0.023	ΜН	=	\$3.68	/Ft.
2" Conduit Installation Credit =	\$160.05	/MH X	0.005	ΜН	=	\$0.80	/Ft.
Larger than 2" Conduit Installation Credit =	\$160.05	/MH X	0.007	MH	=	\$1.12	/Ft.
Large (48") Handhole/ Primary Splice Box Installation Credit =	\$160.05	/MH X	1.94	ΜН	=	\$310.50	/HH
Small (30" or smaller) Handhole Installation Credit =	\$160.05	/MH X	0.51	ΜН	=	\$81.63	/HH
Concrete Pad for Pad Mounted Transformer Credit =	\$160.05	/MH X	0.5	MH	=	\$80.03	/Pad
Feeder Splice Box Installation Credit =	\$160.05	/MH X	5.54	MH	=	\$886.68	/Box
Padmount Switch Chamber Installation Credit =	\$160.05	/MH X	4.71	мн	=	\$753.84	/Chamber

Appendix 3 - Underground Conversion (OH/UG Conversion) Tariffs Appendix 3.1 - Legislative Format of Revised Tariff Sheet No. 6.300

INSTALLATION OF UNDERGROUND ELECTRIC DISTRIBUTION FACILITIES FOR THE CONVERSION OF OVERHEAD ELECTRIC DISTRIBUTION FACILITIES

SECTION 12.1 DEFINITIONS

<u>APPLICANT</u> - Any person, corporation, or entity capable of complying with the requirements of this tariff that has made a written request for underground electric distribution facilities in accordance with this tariff.

<u>CONVERSION</u> - Any installation of underground electric distribution facilities where the underground facilities will be substituted for existing overhead electric distribution facilities, including relocations.

<u>CONTRIBUTION-IN-AID-OF-CONSTRUCTION (CIAC)</u> – The CIAC to be paid by an Applicant under this tariff section shall be the result of the following formula:

$\underline{CIAC} =$

- 1) The estimated cost to install the requested underground facilities;
- 2) The estimated cost to remove the existing overhead facilities;^a
- + 3) The net book value of the existing overhead facilities; ^a
- 4) The estimated cost that would be incurred to install new overhead facilities, in lieu of underground, to replace the existing overhead facilities (the "Hypothetical Overhead Facilities");
- 5) The estimated salvage value of the existing overhead facilities to be removed; ^a
- + 6) The 30-year net present value of the estimated non-storm underground v. overhead operational costs differential,
- 7) The 30-year net present value of the estimated average Avoided Storm Restoration Costs ("ASRC")^b.

^a In calculating the Applicant's CIAC, elements 2, 3, and 5 of the CIAC formula above are to be excluded from CIAC due from an applicant who submits an application providing a binding notification that said applicant intends to convert existing non-hardened overhead distribution feeder facilities to underground distribution feeder facilities.

^b Lines 6 & 7 will be combined to calculate a per mile credit.

<u>DISTRIBUTION SYSTEM</u> - Electric service facilities consisting of primary and secondary conductors, service drops, service laterals, conduits, transformers and necessary accessories and appurtenances for the furnishing of electric power at utilization voltage.

<u>SERVICE FACILITIES</u> - The entire length of conductors between the distribution source, including any conduit and or risers at a pole or other structure or from transformers, from which only one point of service will result, and the first point of connection to the service entrance conductors at a weather head, in a terminal, or meter box outside the building wall; the terminal or meter box; and the meter.

(Continued on Sheet No. 6.301)

Appendix 3.2 - Clean Format of Revised Tariff Sheet No. 6.300

INSTALLATION OF UNDERGROUND ELECTRIC DISTRIBUTION FACILITIES FOR THE CONVERSION OF OVERHEAD ELECTRIC DISTRIBUTION FACILITIES

SECTION 12.1 DEFINITIONS

<u>APPLICANT</u> - Any person, corporation, or entity capable of complying with the requirements of this tariff that has made a written request for underground electric distribution facilities in accordance with this tariff.

<u>CONVERSION</u> - Any installation of underground electric distribution facilities where the underground facilities will be substituted for existing overhead electric distribution facilities, including relocations.

<u>CONTRIBUTION-IN-AID-OF-CONSTRUCTION (CIAC)</u> – The CIAC to be paid by an Applicant under this tariff section shall be the result of the following formula:

<u>CIAC =</u>

- 1) The estimated cost to install the requested underground facilities;
- 2) The estimated cost to remove the existing overhead facilities;^a
- + 3) The net book value of the existing overhead facilities; ^a
- 4) The estimated cost that would be incurred to install new overhead facilities, in lieu of underground, to replace the existing overhead facilities (the "Hypothetical Overhead Facilities");
- 5) The estimated salvage value of the existing overhead facilities to be removed; ^a
- + 6) The 30-year net present value of the estimated non-storm underground v. overhead operational costs differential,
- 7) The 30-year net present value of the estimated average Avoided Storm Restoration Costs ("ASRC")^b.

^a In calculating the Applicant's CIAC, elements 2, 3, and 5 of the CIAC formula above are to be excluded from CIAC due from an applicant who submits an application providing a binding notification that said applicant intends to convert existing non-hardened overhead distribution facilities to underground distribution facilities.

^b Lines 6 & 7 will be combined to calculate a per mile credit.

<u>DISTRIBUTION SYSTEM</u> - Electric service facilities consisting of primary and secondary conductors, service drops, service laterals, conduits, transformers and necessary accessories and appurtenances for the furnishing of electric power at utilization voltage.

<u>SERVICE FACILITIES</u> - The entire length of conductors between the distribution source, including any conduit and or risers at a pole or other structure or from transformers, from which only one point of service will result, and the first point of connection to the service entrance conductors at a weather head, in a terminal, or meter box outside the building wall; the terminal or meter box; and the meter.

(Continued on Sheet No. 6.301)
Appendix 3.3 - Legislative Format of Revised Tariff Sheet No. 9.722

FLORIDA POWER & LIGHT COMPANY

 13. Applicability. This subpart applies to requestion overhead facilities. In order for the Company a. the conversion area must be at least b. all electric services to the real prost of the conversion associated with the b.c. all overhead distribution facilities within the scope of the project muter.d. all other existing overhead utility funderground facilities. 	uests for underground facilities addressing the conversion of existing y to take action pursuant to a request for conversion: st two contiguous city blocks or 1,000 feet in length; perty on both sides of the existing overhead primarily lines must be part he existing overhead primary lines must be part of the conversion; (hardened & non-hardened) associated with the fused overhead lines ist be part of the conversion; facilities (e.g. telephone, CATV, etc.) must also be converted to
IN WITNESS WHEREOF, FPL and the Applicant	have executed this Agreement on the date first set forth above.
Signed	Signed
Name	Name
Title	
Signed	
Name	
Title	
Approved as to Terms and Conditions (if requ	uired by Applicant)
Signed	
Name	
A	Approved as to Form
and Legal Sufficiency (if required by Applicant	t)
Signed	
Name	
Title	

Appendix 3.4 - Clean Format of Revised Tariff Sheet No. 9.722

FLORIDA POWER & LIGHT COMPANY

Trees where of, The and the Applicant ha	ive executed this Agreement on the date first set forth above.
APPLICANT	FPL
Signed	Signed
Name	Name
Title	Title
Signed	
Name	
Title	
Approved as to Terms and Conditions (if requ	ired by Applicant)
Signed	
Name	_
Title	_
Approved as to Form and Legal Sufficiency (if	requiredby Applicant)
Signed	
Name	