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-VIA HAND DELIVERY -
Ms. Ann Cole
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850


In Re: Petition for Approval of 2011 Revisions to Florida Power \& Light
Company's Underground Residential and Commercial Differential Tariffs
Dear Ms. Cole:
Enclosed for filing on behalf of Florida Power \& Light Company ("FPL") are an original and fifteen (15) copies of FPL's Petition for Approval of 2011 Revisions to FPL's Underground Residential and Commercial Distribution Tariff. Also enclosed is a diskette containing FPL's Petition in Word.

If there are any questions regarding this transmittal, please contact me at 561-6912512. Thank you for your consideration in this matter.


Enclosures
COM _ cc: Marshall Willis, Director, Division of Economic Regulation.


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## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Approval of Underground Residential and Commercial Differential Tariff Revisions
) Docket No. )
) Filed: April 1, 2011

# PETITION FOR APPROVAL OF 2011 REVISIONS TO FLORIDA POWER \& LIGHT COMPANY'S UNDERGROUND RESIDENTIAL AND COMMERCIAL DIFFERENTIAL TARIFFS 

Florida Power \& Light Company ("FPL"), by and through its undersigned counsel, and pursuant to Rules 25-6.078(3) and 25-6.033, Florida Administrative Code ("F.A.C."), hereby requests approval of FPL's revisions to its Underground Residential Differential ("URD") tariff sheets, as set forth below. In addition, FPL requests approval of FPL's revisions to its Underground Commercial/Industrial Differential ("UCD") tariff sheets as set forth below. In support of this Petition, FPL states as follows:
(1) All pleadings, correspondence, staff recommendations, orders, or other documents filed, served or issued in this docket should be served on the following individuals on behalf of FPL:

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KENNETH M. RUBIN
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(2) Rule 25-6.078(3), F.A.C., requires each utility to file with the Commission, on or before October 15 of each year, 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 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 on or before April 1 of the following year.
(3) By way of background, FPL filed revised URD tariff sheets on April 1, 2010 with its Petition for Approval of Underground Residential and Commercial Differential Tariff Revisions, Docket No. 100166-EI, together with supporting data, analyses and cost justification, consistent with the " $10 \%$ or more" filing requirement. Although not required by the Commission, FPL also followed its customary practice of filing revised UCD tariffs and supporting data, analyses and cost justification to accompany revisions to its URD tariffs. Pursuant to Order No. PSC-10-0578-TRF-EI, the Commission approved FPL's 2010 revisions to its URD and UCD tariffs.
(4) On October 15, 2010, FPL filed Form PSC/ECR 13-E, Schedule 1 with the Division of Economic Regulation. This filing shows that the cost differential under the tariffs approved in Order No. PSC-10-0578-TRF-EI for underground service as calculated in Schedule 1 varies from the Commission-approved differential by plus or minus $10 \%$ or more. As a result, FPL is required to now file a written policy and supporting data and analyses as prescribed in Sections (1), (4) and (5) of Rule 6.078 on or before April 1 of the following year, in this case on or before April 1, 2011. Rule 25-6.078 was amended in February 2007 to require, inter alia, that the cost estimates used to develop the URD tariff reflect the requirements of Rule 256.0342, F.A.C., Electric Infrastructure Storm Hardening, and that the difference in the net present value of operational costs, including non-storm and average historical storm restoration costs over the life of the facilities, between underground and overhead systems, if any, be taken into consideration in determining the overall Average Cost Differential to be incorporated into the URD tariffs. The cost estimates used in developing the April 2011 URD tariff meet these requirements as more fully outlined in the attached exhibits to this Petition. The 2011 tariff sheets reflect the non-storm overhead versus underground operational cost differential previously approved by the Commission ${ }^{1}$.

## FPL's URD Tariffs

(6) FPL's revised URD tariffs are contained in Appendix URD 1 to this petition. Appendix URD 1 includes the following revised Tariff sheets amending the charges found in Section 6 of FPL's Tariff Book, General Rules and Regulations for Electric Service, and in Section 9, Standard Forms, in final and legislative formats:

| 6.090 | 6.120 |
| :--- | :--- |
| 6.095 | 6.125 |
| 6.100 | 6.130 |
| 6.110 | 9.715 |

6.115

[^0](7) The revisions to the charges found in the above-specified URD tariff sheets are shown in Appendix URD 1, in final and legislative formats. Appendix URD 2 sets forth FPL's narrative support for the changes to its rules and regulations and standard forms in FPL's Tariff Book as described above. Appendices URD 3 and 4 detail and support FPL's changes in its Estimated Average Cost Differential, which support the changes in FPL's tariffs identified above.
(8) The information set forth in Appendices URD 1, 2, 3 and 4, filed herewith and incorporated herein by reference, provide the information required under Rule 25$6.078(1)$, (3), and (5), F.A.C., and the necessary support for the relief requested in this Petition.

## FPL's UCD Tariffs

(9) FPL's revised UCD tariffs are contained in A ppendix UCD 1 to this petition. Appendix UCD 1 includes the following revised UCD tariff sheets, in final and legislative formats, amending the charges found in Section 6 of FPL's Tariff Book, General Rules and Regulations for Electric Service:

Appendix UCD 2 sets forth FPL's revisions (additions/deletions) and the reasons for the changes to FPL's UCD tariff sheets. The data and analyses supporting the changes in the UCD tariffs are set forth in Appendices UCD 3 and 4.
(10) Unlike the URD tariffs, FPL's UCD tariffs are not governed by Rule 256.078 , F.A.C., or any other rule which specifies that the UCD tariffs must reflect the impact of the Storm Hardening rule 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 charges. FPL has concluded, however, that it is not only not required but is not feasible to apply to the UCD tariffs the operational cost differential that FPL developed for the URD tariffs. 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 buildings in distinct and widely varying circumstances, unlike the URD tariff which is designed to apply to an entire residential subdivision. FPL's cost accounting systems and processes are not specific enough to discern operational cost differential for these granular, "one off" types of construction activities. Because of these implementation obstacles and because there is no Commission requirement to do so, FPL has not reflected adjustments for the effects of operational costs in the calculation of its UCD tariffs.
(11) The information set forth in Appendices UCD 1. 2.3 and 4, filed herewith and incorporated by reference, provides the information necessary to support the revisions to FPL's UCD as requested in this Petition.
(12) FPL requests the effective date for implementation of the revised URD and UCD tariffs presented with this Petition be thirty (30) days after the date of the Commission's vote approving the appended revised tariff sheets.

WHEREFORE, FPL requests the Commission to approve the revised tariff sheets filed in Appendices URD 1 and UCD 1, effective thirty (30) days after the date of the Commission vote approving said revised tariff sheets.

Respectfully submitted,
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Managing Attorney
Kenneth M. Rubin, Esq.
Senior Attorney
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Fla. Bar No. 283479
Kenneth M. Rubin
Fla. Bar No. 349038

## APPENDIX 1

 URD
## LEGISLATIVE TARIFF

 URD(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 $\$ 54.7457 .80$ 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 and will normally be at or near the part of the building nearest the point at which the secondary electric supply is available to the property. 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 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 $\$ 6.537 .26$. Where an existing trench is utilized, the additional cost per trench foot is $\$ 2.502 .89$. Where the Applicant provides the trenching, installs Company provided conduit according to Company specifications and backfilling, the cost per additional trench foot is $\$ 1.802 .13$. Any re-designation 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)

## 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. Where density is 6.0 or more dwelling units per acre:
Applicant's
Contribution

Where Applicant installs backbone trench and conduit
1.1 Buildings that do not exceed four units, townhouses, and mobile homes - per service lateral.

1. Subdivisions with 300 or more total service laterals

| $\$$ | 0.00 | $\$ 0.00$ |
| :--- | :--- | :--- |
| $\$$ | 0.00 | $\$ 0.00$ |
| $\$$ | 5.6377 .50 | $\$ 0.00$ |

1.2 Mobile homes having Customer-owned services from meter center installed adjacent to the FPL primary trench route - per dwelling unit.

1. Subdivisions with 300 or more total service laterals

| $\$$ | 0.00 | $\$ 0.00$ |
| :--- | :--- | :--- |
| $\$$ | 0.00 | $\$ 0.00$ |
| $\$$ | 0.00 | $\$ 0.00$ |

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 - per service lateral

1. Subdivisions with 200 or more total service laterals
$\$ \quad 12.3993 .81 \quad \$ 0.00$
2. Subdivisions from 85 to 199 total service laterals
\$ 242.39323.81
$\$ 0.00$
3. Subdivisions less than 85 total service laterals
$\$ 319.39400 .81$
$\$ 3 \div 2466.96$
4. 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:

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                                    Applicant's
                                    Contribution
    $ 12.1916.07
    $25,697.9926.157.99
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Cost per foot of feeder trench within the subdivision
(excluding switches)
Cost per switch package
(Continued on Sheet No. 6.110)
(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 | $\$ 0.82 \underline{1.44}$ |
| :--- | :--- |
| 2) Two Phase - per foot | $\$ 2.89 \underline{3.74}$ |
| 3) Three Phase - per foot | $\$ 4.50 \underline{5.65}$ |

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:
$\$ 378.34421 .65$
Density 6.0 or greater dwelling units per acre:
$\$ 283.75313 .72$

### 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 a portion of trenching and backfilling for the Company's facilities, per foot of trench - $\$ 3.173 .35$.
b) 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): $2^{\prime \prime}$ PVC - $\$ 0.550 .58$; larger than $2^{\prime \prime}$ PVC - $\$ 0.770 .81$.
c) 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 - $\$ 606.46 \underline{40.42}$.
d) 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 - $\$ 212.37224 .26$.
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 secondary handhole, per FPL instructions, per handhole: $17^{\prime \prime}$ handhole $-\$ 19.7020 .81 ; 24^{\prime \prime}$ or 30 " handhole - $\$ 55.8358 .96$.
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 concrete pad for a pad-mounted transformer or capacitor bank, per FPL instructions, per pad $\$ 54.7457 .80$.
g) 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): $\$ 0.1+0.12$.
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 and cable chamber for a pad-mounted feeder switch, per pad and cable chamber - $\$ 515.60544 .48$.

## SECTION 10.4 UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS

10.4.1. New Underground Service Laterals

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

> Applicant's
> Contribution

1. For any density:

Buildings that do not exceed four units, townhouses, and mobile homes
$\begin{array}{ll}\text { a) per service lateral (includes service riser installation) } & \$ 699.77768 .20 \\ \text { b) per service lateral (from existing handhole or PM TX) } & \$ 378.34421 .65\end{array}$
2. For any density, the Company will provide a riser to a handhole at the base of a pole
$\$ 741.00763 .19$
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 four units, townhouses, and mobile homes - per foot \$3.173.35
(Continued on Sheet No. 6.125)
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: $\quad 2^{\prime \prime}$ PVC $\$ 0.550 .58$

Larger than 2" PVC $\$ 0.77 \underline{0.81}$
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 four units, townhouses, and mobile homes -per service lateral:

## 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. Rearrangement of Service Entrance

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
Contribution

1. Where the Company provides an underground service lateral: $\$ 622.26695 .21$
2. Where the Company provides a riser to a handhole at the base of the pole:
$\$ 867.98937 .81$
b) The charge per service lateral replacing an existing Company-owned underground service at Applicant's request for any density shall be:
3. Where the service is from an overhead system:
$\$ 711.91718 .08$
4. Where the service is from an underground system:
$\$ 620.97620 .57$
c) The charge per service lateral replacing an existing Customer-owned underground service from an overhead system for any density shall be:
$\$ 465.29520 .59$
d) The charge per service lateral replacing an existing Customer-owned underground service from an underground system for any density shall be:
$\$ 143.85174 .04$
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, downguys, spans of secondary, etc. will be charged based on specific cost estimates for the requested additional work.

FINAL TARIFF URD
(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 $\$ 57.80$ 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 instaliation of underground facilities.
10.2.11. Point of Delivery

The point of delivery shall be determined by the Company and will normally be at or near the part of the building nearest the point at which the secondary electric supply is available to the property. 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 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 $\$ 7.26$. Where an existing trench is utilized, the additional cost per trench foot is $\$ 2.89$. Where the Applicant provides the trenching, installs Company provided conduit according to Company specifications and backfilling, the cost per additional trench foot is $\$ 2.13$. Any re-designation 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.

## 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:

|  | Where Applicant <br> Applicant's <br> installs backbone |
| :---: | :--- |
| Contribution | trench and conduit |

1. Where density is 6.0 or more dwelling units per acre:
1.1 Buildings that do not exceed four units, townhouses, and mobile homes - per service lateral.

| 1. Subdivisions with 300 or more total service laterals | $\$$ | 0.00 | $\$ 0.00$ |
| :--- | :--- | :--- | :--- |
| 2. Subdivisions from 100 to 299 total service laterals | $\$$ | 0.00 | $\$ 0.00$ |
| 3. Subdivisions less than 100 total service laterals | $\$$ | 77.50 | $\$ 0.00$ |

1.2 Mobile homes having Customer-owned services from meter center installed adjacent to the FPL primary trench route - per dwelling unit.

1. Subdivisions with 300 or more total service laterals

| $\$$ | 0.00 | $\$ 0.00$ |
| :--- | :--- | :--- |
| $\$$ | 0.00 | $\$ 0.00$ |
| $\$$ | 0.00 | $\$ 0.00$ |

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 - per service lateral
$\begin{array}{llrl}\text { 1. Subdivisions with } 200 \text { or more total service laterals } & \$ & 93.81 & \$ 0.00 \\ \text { 2. Subdivisions from } 85 \text { to } 199 \text { total service laterals } & \$ & 323.81 & \$ 0.00 \\ \text { 3. Subdivisions less than } 85 \text { total service laterals } & \$ & 400.81 & \$ 66.96\end{array}$
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:
$\begin{gathered}\text { Applicant's } \\ \text { Contribution }\end{gathered}$
$\$ \quad 16.07$
$\$ 26,157.99$

Cost per foot of feeder trench within the subdivision
(excluding switches) \$ 16.07
Cost per switch package
(Continued on Sheet No. 6.110)
Issued by: S. E. Romig, Director, Rates and Tariffs
Effective:
(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
$\$ 1.44$
2) Two Phase - per foot
$\$ 3.74$
3) Three Phase - per foot
\$5.65
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:

$$
\begin{array}{ll}
\text { Density less than } 6.0 \text { dwelling units per acre: } & \$ 421.65 \\
\text { Density } 6.0 \text { or greater dwelling units per acre: } & \$ 313.72
\end{array}
$$

### 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 a portion of trenching and backfilling for the Company's facilities, per foot of trench - \$3.35.
b) 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 - \$0.58; larger than $2^{\prime \prime}$ PVC - $\$ 0.81$.
c) 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 - $\$ 640.42$.
d) 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 - $\$ 224.26$.
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 secondary handhole, per FPL instructions, per handhole: $17^{\prime \prime}$ handhole $-\$ 20.81 ; 24^{\prime \prime}$ or $30^{\prime \prime}$ handhole - \$58.96.
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 concrete pad for a pad-mounted transformer or capacitor bank, per FPL instructions, per pad $\$ 57.80$.
g) 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): \$0.12.
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 and cable chamber for a pad-mounted feeder switch, per pad and cable chamber- $\$ 544.48$.

## SECTION 10.4 UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS

### 10.4.1. New Underground Service Laterals

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. Contribution by Applicant

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

Applicant's
Contribution

1. For any density:

Buildings that do not exceed four units, townhouses, and mobile homes
a) per service lateral (includes service riser installation) $\$ 768.20$
b) per service lateral (from existing handhole or PM TX)
\$421.65
2. For any density, the Company will provide a riser to a handhole at the base of a pole
$\$ 763.19$
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 four units, townhouses, and mobile homes

- per foot
$\$ 3.35$
(Continued on Sheet No. 6.125)

Issued by: S. E. Romig, Director, Rates and Tariffs
Effective:
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: $\quad 2{ }^{\prime \prime}$ PVC $\$ 0.58$

Larger than 2" PVC $\$ 0.81$
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 four units, townhouses, and mobile homes -per service lateral:

## 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. Rearrangement of Service Entrance

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 Contribution

1. Where the Company provides an underground service lateral:
\$695.21
2. Where the Company provides a riser to a handhole at the base of the pole:
$\$ 937.81$
b) The charge per service lateral replacing an existing Company-owned underground service at Applicant's request for any density shall be:
3. Where the service is from an overhead system:
4. Where the service is from an underground system:
c) The charge per service lateral replacing an existing Customer-owned underground service from an overhead system for any density shall be:
d) The charge per service lateral replacing an existing Customer-owned underground service from an underground system for any density shall be:
$\$ 174.04$
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, downguys, spans of secondary, etc. will be charged based on specific cost estimates for the requested additional work.

APPENDIX 2
URD

## APPENDIX NO. 2

## FPL. 2011

Explanation of Proposed Revisions

This Appendix summarizes proposed revisions to the Rules and Regulations included in Section 10 (and applicable forms) of FPL's General Rules and Regulations for Electric Service. An explanation of FPL's proposed tariff charges for underground installations can be found in Appendix No. 3.

APPENDIX 3
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 Exhibits IV and XI. 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 2010. Design criteria included the following:| Design Customer Demand | - | 7.25 KVA, including $21 / 2$ tons of air conditioning for high density model and 9.35 KVA including $31 / 2$ 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.

For the per-service lateral charges, the tariff differentials 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. For non-storm costs, FPL's proposed tariff charges reflect the terms of the "Stipulation and Settlement Agreement" in Docket Nos. 080244-EI, 070231-El and 080522-El. For storm costs, FPL's starting point was the same data on storm restoration costs that it presented to the Commission in justifying the $25 \%$ GAF Waiver for eligible governmental underground conversion projects. One of the principal assumptions in calculating the storm restoration cost savings for GAF projects was that, because they covered large, contiguous areas, there would be no need for overhead restoration crews to go into the project neighborhoods and, hence, the savings would be maximized. However, because not all URD projects will involve a large, contiguous area like that of a GAF project, FPL has developed three tiers of storm cost differentials for the URD tariff. Tier 1 is for large "GAF-equivalent" projects, which would meet the GAF size and uniformity requirements. The storm cost differential for Tier 1 projects reflects the same savings as were used to justify the GAF Waiver, expressed on a per lot basis. Tier 2 is for smaller projects (1-3 pole line miles) but otherwise meet the GAF eligibility criteria. Tier 2 projects receive $40 \%$ of the full GAF savings. Finally, Tier 3 is for small projects that do not necessarily meet any of the GAF eligibility criteria; for them the storm cost differential is $20 \%$ of the

GAF savings. FPL does not believe that there is a significant difference in the storm cost differentials for low-density versus high-density projects, so the Tier 1, 2 and 3 reductions apply regardless of the project density.

Estimates are broken down into a uniform format adopted as a standard by the participating companies (Exhibit I-X).

Case 1. Low Density
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. High Density
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. Meter Pedestal
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.

|  | Operational Cost/Lot |  |  | Cost <br> Low Density | Differential |
| :--- | ---: | ---: | ---: | ---: | ---: |


|  | Operational Cost/Lot |  |  |  | Cost Differential |
| :---: | :---: | :---: | :---: | :---: | :---: |
| High Density | Non-Storm | Storm | Total |  |  |
| Pre-Operational Cost |  |  |  |  | \$154.50 |
| Post-Operational Cost |  |  |  |  |  |
| Tier 1 (Full GAF) - 300 or more lots | \$0 | (\$384) | (\$384) |  | \$0.00 |
| Tier 2 ( $40 \%$ GAF) - 100 to 299 lots | \$0 | (\$154) | (\$154) | Note 2 | \$0.00 |
| Tier 3 ( $20 \% \mathrm{GAF}$ ) - less than 100 lots | \$0 | (\$77) | (\$77) |  | \$77.50 |


|  | Operational Cost/Lot |  |  |  | Cost <br> Meter Pedestal |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Non-Storm |  | Storm |  |  |
| Total |  |  | Differential |  |  |

Note 1: The 'Pre-Operational Cost' differential has been reduced to $\$ 0$ since it is a negative amount $-(\$ 153.25)$.
However, the negative amount has been applied to determine the "Post-Operational Cost" differentials. Since the
"Post-Operational" Costs are also negative, the differentials have been set to $\$ 0$.

Note 2: Reduced to $\$ 0$ since it is not cost effective to collect such a small amount ( $\$ 0.50$ ).
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 wereestimated separately to determine the differential cost between a standard overhead serviceand a similar length underground service from an overhead line. This differential cost wascalculated by adding the differential service lateral cost to the pole-conduit terminal cost. Theaverage pole-conduit terminal cost was found to be $\$ 346.55$ per service lateral.
Service lateral cost ..... $\$ 421.65$
Pole-conduit cost ..... $\$ 346.55$
Total cost ..... $\$ 768.20$
Round To ..... $\$ 768.20$
A URD riser to a handhole at the base of the pole had a differential cost of $\$ 763.19$
10.5.4 Replacement of an Existing Service with an Underground Service.
Costs were also estimated for replacing existing services with underground service lateralsThese costs were based on the applicant providing the trench because of the wide variationsin the cost of excavating established, landscaped areas. Additional costs are associated withremoval and premature retirement of existing services. Accordingly, adjustments were madeto the cost of a new service lateral by adding the costs involved with the retirement of anexisting 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 ..... Riser to
Service Handhole
UG service lateral cost ..... $\$ 768.20$ ..... $\$ 0.00$
Riser to handhole cost ..... $\$ 0.00$$\$ 763.19$
Less trenching credit. ..... (\$211.20) ..... $\$ 0.00$
Less conduit installation credit. ..... (\$36.41) ..... $\$ 0.00$
Remaining value of existing service. ..... \$127.77 ..... \$127.77
Removal cost of existing service ..... $\$ 46.85$ ..... $\$ 46.85$
Salvage ..... $\$ 0.00$ ..... $\$ 0.00$
Total cost ..... $\$ 695.21$ ..... \$937.81
Round To ..... $\$ 695.21$$\$ 937.81$
B. Cost per service lateral to replace Company-owned Underground Service.
OH Source UG Source
UG service lateral cost. ..... $\$ 421.65$ ..... \$421.65
Handhole for connection to existing riser X .25 $\$ 97.51$ ..... $\$ 0.00$
Less trenching credit. ..... (\$211.20)(\$211.20)
Less conduit credit ..... (\$36.41)(\$36.41)
Remaining value of existing service. $\$ 417.19$ ..... \$417.19
Removal cost of existing service $\$ 29.34$ ..... \$29.34
Salvage ..... $\$ 0.00$ ..... $\$ 0.00$
Total Cost \$718.08 ..... $\$ 620.57$
Round To \$718.08 ..... \$620.57
C. Cost to replace Customer-owned Underground Service from an Overhead System.$\$ 421.65$
Pole-conduit cost ..... \$346.55
Less trenching credit. ..... (\$211.20)
Less conduit installation credit. ..... (\$36.41)
TOTAL ..... \$520.59
Round To. ..... \$520.59
D. Cost to replace Customer-owned Underground Service from an Underground System.
UG service lateral cost ..... $\$ 421.65$
Less trenching credit. ..... (\$211.20)
Less conduit installation credit. ..... (\$36.41)
TOTAL ..... \$174.04
Round To ..... $\$ 174.04$
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 in Exhibit XII.
Underground feeders/laterals were assumed to be installed in conduit with above grade switch cabinets. Overhead feeder costs included wood pole costs.

> Cumulative Overhead and Underground Customers. The cumulative total of overhead and underground customers as of December 31, 2010 served by FPL are as follows:
Underground ..... 3,183,570
Overhead ..... 1,753,138
Total* ..... 4,936,708
NOTES: 1. Many of the underground systems are supplied by overhead feeders and laterals.
*2. This figure includes inactive meters and outdoor lighting.

## APPENDIX 4

 URD
## LOW DENSITY

## OVERHEAD VS. UNDERGROUND SUMMARY SHEET

Low Density 210 Lot Subdivision Cost per Service Lateral

| ITEM | OVERHEAD | UNDERGROUND | DIFFERENTIAL |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 1,078.68$ | $\$ 1,513.67$ | $\$ 434.99$ |
| MATERIAL | $\$ 1,017.42$ | $\$ 1,060.24$ | $\$ 42.82$ |
| TOTAL | $\$ 2,096.10$ | $\$ 2,573.91$ | $\$ 477.81$ |

## COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

## Low Density 210 Lot Subdivision

| ITEM | MATERIAL(1) | LABOR(4) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service(2) | \$124.38 | \$154.30 | \$278.68 |
| Primary | \$31.73 | \$116.25 | \$147.98 |
| Secondary | \$131.03 | \$191.20 | \$322.23 |
| Initial Tree Trim | -------- | ----------- | ------------ |
| Poles | \$209.36 | \$324.84 | \$534.20 |
| Transformers | \$224.78 | \$40.21 | \$264.99 |
| Sub-Total | \$721.28 | \$826.80 | \$1,548.08 |
| Stores Handling(3) | \$58.57 | -------- | \$58.57 |
| SubTotal | \$779.85 | \$826.80 | \$1,606.65 |
| Engineering(5) | \$237.57 | \$251.88 | \$489.45 |
| TOTAL(6) | \$1,017.42 | \$1,078.68 | \$2,096.10 |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - Includes Meters. |  |  |  |
| 3-8.12\% of All Material. |  |  |  |
| 4 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 5-30.464 \% 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) | \$167.71 | \$314.09 | \$481.80 |
| Primary | \$246.01 | \$244.14 | \$490.15 |
| Secondary | \$108.93 | \$85.86 | \$194.79 |
| Transformers | \$232.99 | \$21.95 | \$254.94 |
| Prim. \& Sec. Trenching | ------------ | \$261.84 | \$261.84 |
| Service Trenching | ------------- | \$232.34 | \$232.34 |
| Sub-Total | \$755.64 | \$1,160.22 | \$1,915.86 |
| Stores Handling(3) | \$57.03 | -------- | \$57.03 |
| SubTotal | \$812.67 | \$1,160.22 | \$1,972.89 |
| Engineering(5) | \$247.57 | \$353.45 | \$601.02 |
| TOTAL(6) | \$1,060.24 | \$1,513.67 | \$2,573.91 |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - Includes Meters. |  |  |  |
| 3-8.12\% of All Material. |  |  |  |
| 4 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 5-30.464 \% of All Material and Labor. |  |  |  |
| 6 - Does not include storm or operational costs. |  |  |  |




## 2011 OH LOW DENSITY LAYOUT WITH 3.5 TON AVC



|  | NUMBER OF LOTS = |  | $\begin{array}{r} 2010 \\ 210 \end{array}$ | $\begin{array}{r} 2011 \\ 210 \end{array}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MECA STORES LDG \% = |  | 6.24\% | 6.24\% |  |  |  |  |  |  |
|  | ACTUAL STORES LDG \% = |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  | ACTUAL EO = |  | 27.26\% | $30.46 \%$ |  |  |  |  |  |  |
| ADJUSTED CO = |  |  | 9.18\% | 10.01\% |  |  |  |  |  |  |
| ACCOUNT | MATERIAL | MATERIAL | MATERIAL | MATERIAL | LABOR | LABOR | LABOR | LABOR |  | TOTAL |
|  | W/O CO | $\begin{aligned} & \text { MATERIAL } \\ & \text { WIO CO } \end{aligned}$ | WITH CO | WITH CO | W/O CO | W/O CO | WITH CO | WITH CO | MATERIAL | MATERIAL |
|  | 2010 | 2011 | 2010 | $2011$ | 2010 | $2011$ | $2010$ |  |  |  |
| 369.100 | \$13,072.63 | \$13,345.51 |  |  | \$23,105.47 | \$24,221.49 |  |  |  |  |
| 586.380 |  |  |  |  | \$4,992.54 | \$5,233.62 |  |  |  |  |
|  | \$5,957.70 | \$11,182.50 | \$28.37 | \$53.25 |  |  |  |  |  |  |
|  | \$18,262.51 | \$23,744.16 | \$94.95 | \$124.38 | \$28,098.01 | \$29,455.11 | \$146.08 | \$154.30 | \$241.03 | \$278.68 |
| 365.002 | \$5,931.51 | \$6,435.59 | \$29.03 | \$31.73 | $\$ 20,461.07$ | $\$ 22,191.83$ | \$106.38 | \$116.25 | \$135.41 | \$147.98 |
|  | \$5,583.12 | \$6,057.59 |  |  | $\$ 20,461.07$ | $\$ 22,191.83$ |  |  |  |  |
| 365.040 | \$4,054.31 | \$4,400.20 |  |  | \$14,002.96 | \$15,187.45 |  |  |  |  |
| 365.091 | \$22,464.08 | \$22,173.24 |  |  | \$20,590.64 | \$21,198.87 |  |  |  |  |
| 594.680 | \$0.98 | \$1.00 |  |  | \$21.40 | \$22.42 |  |  |  |  |
| 593.180 | \$0.00 | \$0.00 |  |  | \$0.00 | \$90.75 |  |  |  |  |
|  | \$24,961.76 | \$25,013.59 | \$129.78 | \$131.03 | \$34,614.99 | \$36,499.49 | \$179.96 | \$191.20 | \$309.74 | \$322.23 |
| 364.135 | $\begin{aligned} & \$ 47,200.86 \\ & \$ 44,428.52 \end{aligned}$ | $\begin{aligned} & \$ 42,459.14 \\ & \$ 39,965.30 \end{aligned}$ | \$230.99 | \$209.36 | $\$ 58,682.82$ | $\$ 62,010.51$ | \$305.09 | \$324.84 | \$536.08 | \$534.20 |
|  |  |  |  |  | $\$ 58,682.82$ | $\$ 62,010.51$ |  |  |  |  |
| $\begin{array}{r} 583.280 \\ 368 \end{array}$ | $\$ 0.00$ | \$0.00 |  |  | \$7,322.35 | \$7,675.85 |  |  |  |  |
|  | $\$ 38,906.61$ | \$ 42,909.87 |  |  |  |  |  |  |  |  |
|  | \$38,906.61 | \$42,909.87 | \$202.28 | \$224.78 | \$7,322.35 | \$7,675.85 | \$38.07 | \$40.21 | \$240.35 | \$264.99 |
|  | \$132,142.52 | \$137,690.51 | \$687.03 | \$721.28 | \$149,179.24 | \$157,832.79 | \$775.58 | \$826.80 | \$1,462.61 | \$1,548.08 |
|  |  |  | \$658.66 | \$668.03 |  |  |  |  |  |  |
|  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  |  | \$48.85 | \$58.57 |  |  |  |  | \$48.85 | \$58.57 |
|  |  |  | \$735.88 | \$779.85 |  |  | \$775.58 | \$826.80 | \$1,511.46 | \$1,606.65 |
|  |  |  | \$200.59 | \$237.57 |  |  | \$211.41 | \$251.88 | \$412.00 | \$489.45 |
|  |  |  | \$936.47 | \$1,017.42 |  |  | \$986.99 | \$1,078.68 | \$1,923,46 | \$2,096.10 |


| WR Number1459058 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
| NUMBER OF LOTS = |  |  |  | 2010 | 2011 |  |  |  |  |  |  |
|  |  |  |  | $210 \quad 210$ |  |  |  |  |  |  |  |
|  |  | MECA STORES LDG \% = |  | 6.24\% 6.24\% |  |  |  |  |  |  |  |
|  |  | ACTUAL STORES LDGe |  | 7.11\% 8.12\% |  |  |  |  |  |  |  |
|  |  | ACTUAL EO = |  | 27.26\% 30.46\% |  |  |  |  |  |  |  |
|  |  | ADJUSTED CO = |  | 9.18\% 10.01\% |  |  |  |  |  |  |  |
| CLASSIFICATION ACCO |  | MATERIAL W/O CO |  | MATERIAL COST/LOT WITH CO 2010 | MATERIAL COST/LOT WITH CO 2011 |  |  |  |  |  |  |
|  |  |  | MATERIAL W/O CO |  |  | LABOR WIOCO | LABOR WIO CO | COST/LOT WITH CO | COST/LOT WITH CO | LABOR \& MATERIAL | LABOR \& MATERIAL |
|  |  | 2010 | 2011 |  |  | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 |
| Service, UG, In Duct | 369.699 | \$19,575.76 | \$22,131.74 |  |  | \$94,001.99 | \$99,076.31 |  |  |  |  |
| Meter Equip-1st Installation Expense | 586.380 |  |  |  |  | \$4,992.54 | \$5,233.62 |  |  |  |  |
| Meter Cost (Material) |  | \$5,957.70 | \$11,182.50 | \$28.37 | \$53.25 |  |  |  |  |  |  |
| Service Trench (Labor) |  |  |  |  |  | (\$42,000.35) | (\$44,352.25) |  |  |  |  |
| SERVICE SUBT W/O STORES LDG |  | \$24,383.68 | \$32,014.33 | \$126.77 | \$167.71 | \$56,994.18 | \$59,957.68 | \$296.31 | \$314.09 | \$423.08 | \$481.80 |
| Cond, Primary, AL, 343-1431 | 365.999 | \$579.05 | \$581.02 |  |  | \$934.34 | \$976.96 |  |  |  |  |
| Duct, Buried (PVC) | 366.201 | \$18,430.26 | \$22,560.27 |  |  | \$77,185.13 | \$81,131.80 |  |  |  |  |
| Maintenance of Overhead Lines | 593.180 | \$197.30 | \$193.35 |  |  | \$538.96 | \$607.34 |  |  |  |  |
| Cable, Primary, 1/C, $2 / \mathrm{C}, \mathrm{All}$ | 367.201 | \$26,729.00 | \$26,557.87 |  |  | \$13,378.64 | \$13,873.10 |  |  |  |  |
| PRI/SEC TRENCH |  |  |  |  |  | (\$47,333.73) | (\$49,984.28) |  |  |  |  |
| PRIMARY SUBT W/O STORES LDG |  | \$43,237.59 | \$46,962.08 | \$224.79 | \$246.01 | \$44,703.33 | \$46,604.92 | \$232.41 | \$244.14 | \$457.20 | \$490.15 |
| Cable, $600 \mathrm{~V}, \mathrm{AL}, \mathrm{Al}$ | 367.122 | \$21,005.66 | \$22,092.55 |  |  | \$15,805.27 | \$16,389.45 |  |  |  |  |
| SEC SUBT W/O STORES LDG |  | \$19,771.89 | \$20,794.94 | \$102.79 | \$108.93 | \$15,805.27 | \$16,389.45 | \$82.17 | \$85.86 | \$184.96 | \$194.79 |
| Line Transformers-1st Installation Expense | 583.280 | \$0.00 | \$158.71 |  |  | \$1,655.18 | \$2,219.50 |  |  |  |  |
| Pad, TX | 366.801 | \$2,337.40 | \$2,386.71 |  |  | \$1,865.37 | \$1,969.82 |  |  |  |  |
| Transformer (Material) | 368 | \$ 41,736.78 | \$ 42,080.50 |  |  |  |  |  |  |  |  |
| TRANSFORMER SUBTOTAL |  | \$43,936.89 | \$44,476.41 | \$228.43 | \$232.99 | \$3,520.55 | \$4,189.32 | \$18.30 | \$21.95 | \$246.73 | \$254.94 |
| PRI/SEC TRENCH |  |  |  |  |  | \$47,333.73 | \$49,984.28 | \$246.09 | \$261.84 | \$246.09 | \$261.84 |
| SVC TRENCH |  |  |  |  |  | \$42,000.35 | \$44,352.25 | \$218.36 | \$232.34 | \$218.36 | \$232.34 |
| SUB-TOTAL |  | \$131,330.05 | \$144,247.76 | \$682.78 | \$755.64 | \$210,357.42 | \$221,477.90 | \$1,093.64 | \$1,160.22 | \$1,776.42 | \$1,915.86 |
| MATERIAL SUBTOTAL MINUS METER MATERIAL |  |  |  | \$654.41 | \$702.39 |  |  |  |  |  |  |
| STORES LDG. \% |  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
| METER STORES LDG \% |  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
| TOTAL STORES LDG |  |  |  | \$46.53 | \$57.03 |  |  |  |  | \$46.53 | \$57.03 |
| SUBTOTAL |  |  |  | \$729.31 | \$812.67 |  |  | \$1,093.64 | \$1,160.22 | \$1,822.95 | \$1,972.89 |
| EO |  |  |  | \$198.80 | \$247.57 |  |  | \$298.10 | \$353.45 | \$496.90 | \$601.02 |
| TOTAL |  |  |  | \$928.11 | \$1,060.24 |  |  | \$1,391.74 | \$1,513.67 | \$2,319.85 | \$2,573.91 |

## OPERATIONAL COSTS DIFFERENTIAL - LOW DENSITY

|  | 30-Year NPV (\$ per pole-line mile) |  | Cost <br> Low Density <br> Differential (Non-Storm) Note 1 | $\underline{O \& M}$ |
| :--- | :---: | :---: | :---: | :---: |
| per Lot |  |  |  |  |

Note 1: The 30-year net present value of the estimated non-storm underground v . overhead operational costs differential - set at $\$ 0$ (zero) per pole-line mile of the existing overhead facilities as reflected in the terms of the "Stipulation and Settlement Agreement" in Docket Nos. 080244-EI, 070231-EI and 080522-El.

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 | $\$ 793.69$ | $\$ 1,047.72$ | $\$ 254.03$ |
| MATERIAL | $\$ 796.51$ | $\$ 696.98$ | $(\$ 99.53)$ |
| TOTAL | $\$ 1,590.20$ | $\$ 1,744.70$ | $\$ 154.50$ |

## COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

## High Density 176 Lot Subdivision <br> Company Owned Service Laterals

| ITEM | MATERIAL(1) | LABOR(4) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service(2) | \$109.08 | \$139.28 | \$248.36 |
| Primary | \$14.13 | \$59.77 | \$73.90 |
| Secondary | \$95.22 | \$145.19 | \$240.41 |
| Initial Tree Trim | -- | -- | ------------ |
| Poles | \$150.75 | \$234.38 | \$385.13 |
| Transformers | \$195.49 | \$29.74 | \$225.23 |
| Sub-Total | \$564.67 | \$608.36 | \$1,173.03 |
| Stores Handling(3) | \$45.85 | --------- | \$45.85 |
| SubTotal | \$610.52 | \$608.36 | \$1,218.88 |
| Engineering(5) | \$185.99 | \$185.33 | \$371.32 |
| TOTAL(6) | \$796.51 | \$793.69 | \$1,590.20 |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - Includes Meters. |  |  |  |
| 3-8.12\% of All Material. |  |  |  |
| 4 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 5-30.464 \% of All Material and Labor. |  |  |  |
| 6 - Does not include storm or operational costs |  |  |  |
| EXHIBIT VI |  |  |  |

## 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) | \$178.11 | \$269.20 | \$447.31 |
| Primary | \$131.46 | \$149.75 | \$281.21 |
| Secondary | \$38.19 | \$46.99 | \$85.18 |
| Transformers | \$146.35 | \$13.09 | \$159.44 |
| Prim. \& Sec. Trenching | ------------ | \$158.09 | \$158.09 |
| Service Trenching | ------------- | \$165.95 | \$165.95 |
| Sub-Total | \$494.11 | \$803.07 | \$1,297.18 |
| Stores Handling(3) | \$40.12 | ----------- | \$40.12 |
| SubTotal | \$534.23 | \$803.07 | \$1,337.30 |
| Engineering(5) | \$162.75 | \$244.65 | \$407.40 |
| TOTAL(6) | \$696.98 | \$1,047.72 | \$1,744.70 |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - Includes Meters. |  |  |  |
| 3-8.12\% of All Material. |  |  |  |
| 4 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 5-30.464 \% of All Material and Labor. |  |  |  |
| 6 - Does not include storm or operational costs |  |  |  |




NOTES

1. ALL SERVCES ARE \#1/O TTX. $45^{\prime}$ LONG 2. ALL GUYS ARE $5 / 16^{\prime \prime}, 8^{8 \prime}$ SCR, $20^{\circ}$ LD 3. OTHERWSE NOTED. $5^{\prime} / 4^{\prime \prime}$
2. ALL SVC POLE ARE 35'/4"
3. ALL SEC COND IS $3 / 0$ TPX
4. FRAME LOC. 1 PER E-27.0.0, FIG 6. FRAME LOC. 1 PER E-27.0.0, FIG. 2.
5. FRAME LOCS $4,8,10,8 \& 14$ SIMLAR

B. FRAME LOCS 2 \& 12 SIMILAR TO
6. FRAME LOC 6 SIMILAR TO 1-41.0.1,
7. FRAME LOC 16 WTH $2-\phi$ 'S D.E. VERT
8. FRAME TYP TANG TX POLES ( $(\phi)$ ) PER 12. FRAME TYP D.E. TX POLES (19) PER
9. FRAME LOCS 86 \& 91 SIMILAR TO

14 FRAME LOC 88 SIMILAR TO
15. 1- 4 . 1.0 .1 F FACIUTIES HAVE BEEN DESIGNED TO

145 MPH EXTREME WINDLOADING CRITERIA


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| 2011 OH HIGH DENSITY LAYOUT |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WR Number: |  |  |  |  |  |  |  |  |  |  |  |
| 2982370 | NUMBER OF LOTS = |  |  | 20102011 |  |  |  |  |  |  |  |
|  |  |  |  | 176 | 176 |  |  |  |  |  |  |
|  | MECA STORES LDG \% = |  |  | 6.24\% | 6.24\% |  |  |  |  |  |  |
|  |  | ACTUAL STORES LDG \% = |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  | ACTUAL EO = |  | 27.26\% 30.46\% |  |  |  |  |  |  |  |
|  | ADJUSTED CO = |  |  | 9.18\% $\quad 10.01 \%$ |  |  |  |  |  |  |  |
| CLASSIFICATION | ACCOUNT | MATERIAL | MATERIAL |  | MATERIAL | LABOR | LABOR |  | LABOR | TOTAL | TOTAL |
|  |  | W/O CO $2010$ | WIO CO 2011 | WITH CO | WITH CO 2011 | WIO CO | WIOCO | WITH CO <br> 2010 | WITH CO <br> 2011 | MATERIAL <br> 2010 | MATERIAL |
| Service Overhead | 369.100 | \$8,359.98 | \$8,584.42 |  |  | \$17,071.92 | \$17,896.51 |  |  |  | 2011 |
| Meter Equip-1st Installation Expense | 586.380 |  |  |  |  | \$4,184.22 | \$4,386.27 |  |  |  |  |
| Meter Cost (Material) |  | \$4,993.12 | \$9,372.00 | \$28.37 | \$53.25 |  |  |  |  |  |  |
| SERVICE SUBT W/O STORES LDG |  | \$12,862.08 | \$17,452.21 | \$79.79 | \$109.08 | \$21,256.14 | \$22,282.78 | \$131.86 | \$139.28 | \$211.65 | \$248.36 |
| Cond, Primary, AL, thru $3 / \mathrm{O}$ | $365.002$ | \$2,268.56 | \$2,401.76 |  |  | \$8,990.51 | \$9,375.35 |  |  |  |  |
| Maintenance of Overhead Lines | $593.180$ | \$0.00 | \$0.00 |  |  | \$110.08 | \$186.63 |  |  |  |  |
| PRIMARY SUBT W/O STORES LDG |  | \$2,135.31 | \$2,260.70 | \$13.25 | \$14.13 | \$9,100.59 | \$9,561.98 | \$56.45 | \$59.77 | \$69.70 | \$73.90 |
| Cond, Secondary, AL, thru 4/O | 365.040 | \$1,936.22 | \$2,049.94 |  |  | \$7,673.53 | \$8,002.01 |  |  |  |  |
| Cable, Secondary, TPX, All | 365.091 | \$13,937.77 | \$14,134.65 |  |  | \$14,602.48 | $\$ 15,227.30$ |  |  |  |  |
| SECONDARY SUBT WIO STORES LDG |  | \$14,941.64 | \$15,233.99 | \$92.69 | \$95.22 | \$22,276.01 | \$23,229.31 | \$138.19 | \$145.19 | \$230.88 | \$240.41 |
| Poles, Wood, 35/40/45 ft | 364.135 | \$29,093.18 | \$25,623.58 |  |  | \$35,716.04 | \$37,498.00 |  |  |  |  |
| POLE SUBT WIO STORES LDG |  | \$27,384.39 | \$24,118.58 | \$169.88 | \$150.75 | \$35,716.04 | \$37,498.00 | \$221.56 | \$234.38 | \$391.44 | \$385.13 |
| Line Transformers-1st Installation Expense | 583.280 | \$0.00 | \$0.00 |  |  | \$4,539.63 | \$4,758.78 |  |  |  |  |
| Transformer (Material) | 368 | \$ 29,716.47 | \$ 31,277.03 |  |  |  |  |  |  |  |  |
| TRANSFORMER SUBTOTAL |  | \$29,716.47 | \$31,277.03 | \$184.34 | \$195.49 | \$4,539.63 | \$4,758.78 | \$28.16 | \$29.74 | \$212.50 | \$225.23 |
| SUB-TOTAL |  | \$87,039.89 | \$90,342.51 | \$539.95 | \$564.67 | \$92,888.41 | \$97,330.85 | \$576.22 | \$608.36 | \$1,116.17 | \$1,173.03 |
| MATSUB-MTR.(M) |  |  |  | \$511.58 | \$511.42 |  |  |  |  |  |  |
| STORES LDG. \% |  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
| METER STORES LDG \% |  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
| TOTAL STORES LDG |  |  |  | \$38.39 | \$45.85 |  |  |  |  | \$38.39 | \$45.85 |
| SUBTOTAL |  |  |  | \$578.34 | \$610.52 |  |  | \$576.22 | \$608.36 | \$1,154.56 | \$1,218.88 |
| E0 |  |  |  | \$157.64 | \$185.99 |  |  | \$157.07 | \$185.33 | \$314.71 | \$371.32 |
| TOTAL |  |  |  | \$735.98 | \$796.51 |  |  | \$733.29 | \$793.69 | \$1,469.27 | \$1,590.20 |



## OPERATIONAL COSTS DIFFERENTIAL - HIGH DENSITY

30-Year NPV (\$ per pole-line mile) ..... Cost
O\&M Capital Total per Lot

-     -         - ..... \$0
High Density
Differential (Non-Storm) Note 1
Avoided Storm Restoration
Tier 1 (Full GAF) - 300 or more lots ..... $(\$ 38,453)$$(\$ 38,453)$(\$384)
Tier 2 ( $40 \%$ GAF) - 100 to 299 lots ..... $(\$ 15,381)$( $\$ 15,381$ )(\$154)
Tier 3 ( $20 \%$ GAF) - less than 100 lots$(\$ 7,691)$$(\$ 7,691)$(\$77)CostCost
High Density ..... Differential
Pre-Operational Cost ..... $\$ 154.50$
Post-Operational Cost
Tier 1 (Full GAF) - 300 or more lots ..... $\$ 0.00$
Tier 2 ( $40 \%$ GAF) - 100 to 299 lots ..... $\$ 0.00$
Tier 3 ( $20 \%$ GAF) - less than 100 lots ..... $\$ 77.50$

Note 1: The 30-year net present value of the estimated non-storm underground $v$. overhead operational costs differential - set at $\$ 0$ (zero) per pole-line mile of the existing overhead facilities as reflected in the terms of the "Stipulation and Settlement Agreement" in Docket Nos. 080244-EI, 070231-El and 080522-El.

Note 2: The Tier 2 ( $40 \%$ GAF) - 100 to 299 lots differential has been reduced to zero since it is not cost effective to collect such a small amount (\$0.50).

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 | $\$ 595.36$ | $\$ 554.15$ | $(\$ 41.21)$ |
| MATERIAL | $\$ 671.12$ | $\$ 559.08$ | $(\$ 112.04)$ |
| TOTAL * |  |  |  |
|  | $\$ 1,266.48$ | $\$ 1,113.23$ | $(\$ 153.25)$ |
| * The differential has been reduced 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) | \$81.88 | \$82.19 | \$164.07 |
| Primary | \$14.46 | \$61.74 | \$76.20 |
| Secondary | \$73.26 | \$123.32 | \$196.58 |
| Initial Tree Trim | ----------- | ---- | ----------- |
| Poles | \$110.69 | \$159.35 | \$270.04 |
| Transformers | \$195.49 | \$29.74 | \$225.23 |
| Sub-Total | \$475.78 | \$456.34 | \$932.12 |
| Stores Handling(3) | \$38.63 | -- | \$38.63 |
| SubTotal | \$514.41 | \$456.34 | \$970.75 |
| Engineering(5) | \$156.71 | \$139.02 | \$295.73 |
| TOTAL(6) | \$671.12 | \$595.36 | \$1,266.48 |

1 - Includes Sales Tax.
2 - Includes Meters.
3-8.12 \% of All Material.
4 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
$5-30.464 \%$ 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) | \$58.58 | \$64.65 | \$123.23 |
| Primary | \$131.58 | \$131.49 | \$263.07 |
| Secondary | \$77.69 | \$86.97 | \$164.66 |
| Transformers | \$128.50 | \$10.91 | \$139.41 |
| Prim. \& Sec. Trenching | ------------ | \$130.73 | \$130.73 |
| Service Trenching | ----- | ------------ | ------------ |
| Sub-Total | \$396.35 | \$424.75 | \$821.10 |
| Stores Handling(3) | \$32.18 | - | \$32.18 |
| SubTotal | \$428.53 | \$424.75 | \$853.28 |
| Engineering(5) | \$130.55 | \$129.40 | \$259.95 |
| TOTAL(6) | \$559.08 | \$554.15 | \$1,113.23 |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - Includes Meters. |  |  |  |
| 3-8.12\% of All Material. |  |  |  |
| 4 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 5-30.464 \% of All Material and Labor. |  |  |  |
| 6 - Does not include storm or operational costs |  |  |  |
| EXHIBIT X |  |  |  |



WR Number
2983564

|  | NUMBE | R OF LOTS = | $\begin{array}{r} 2010 \\ 176 \end{array}$ | $\begin{array}{r} 2011 \\ 176 \end{array}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MECA STO | RES LDG \% = | 6.24\% | 6.24\% |  |  |  |  |  |  |
|  | ACTUAL STO | RES LDG \% = | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  | ACTUAL EO = | 27.26\% | 30.46\% |  |  |  |  |  |  |
|  |  | JUSTED CO = | 9.18\% | 10.01\% |  |  |  |  | . |  |
| ACCOUNT | MATERIAL | MATERIAL | MATERIAL COST/LOT | MATERIAL COST/LOT |  |  | LABOR <br> COST/LOT | LABOR COST/LOT | TOTAL LABOR \& |  |
| ACCOUNT | W/OCO | W/O CO | WITH CO | WITH CO | W/O CO | LABOR W/O CO | COST/LOT <br> WITH CO | $\begin{aligned} & \text { COST/LOT } \\ & \text { WITH CO } \end{aligned}$ | LABOR \& MATERIAL | LABOR \& MATERIAL |
|  | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 |
| $369.100$ | \$3,859.14 | \$3,961.35 |  |  | \$8,359.62 | \$8,763.58 |  |  |  |  |
| $586.380$ |  |  |  |  | \$4,184.22 | \$4,386.27 |  |  |  |  |
|  | \$4,993.12 | \$9,372.00 | \$28.37 | \$53.25 |  |  |  |  |  |  |
|  | \$8,625.59 | \$13,100.68 | \$53.51 | \$81.88 | \$12,543.84 | \$13,149.85 | \$77.81 | \$82.19 | \$131.32 | \$164.07 |
| 365.002 | \$2,383.89 | \$2,458.27 |  |  | \$9,573.76 | \$9,786.74 |  |  |  |  |
| 593.180 | \$0.00 | $\$ 0.00$ |  |  | $\$ 70.85$ | \$90.76 |  |  |  |  |
|  | \$2,243.87 | $\$ 2,313.89$ | \$13.92 | \$14.46 | $\$ 9,644.61$ | \$9,877.50 | \$59.83 | \$61.74 | \$73.75 | \$76.20 |
| 365.040 | \$2,034.66 | \$2,098.17 |  |  | \$8,171.33 | \$8,353.13 |  |  |  |  |
| 365.091 | \$10,483.08 | \$10,354.64 |  |  | $\$ 11,129.46$ | $\$ 11,377.06$ |  |  |  |  |
|  | \$11,782.52 | \$11,721.40 | \$73.09 | \$73.26 | $\$ 19,300.79$ | $\$ 19,730.18$ | \$119.73 | \$123.32 | \$192.82 | \$196.58 |
| 364.135 | \$21,416.59 | \$18,813.84 |  |  | \$24,395.06 |  |  |  |  |  |
|  | \$20,158.69 | \$17,708.81 | \$125.05 | \$110.69 | \$24,395.06 | $\$ 25,494.69$ | \$151.33 | \$159.35 | \$276.38 | \$270.04 |
| 583.280 | \$0.00 | \$0.00 |  |  | \$4,539.63 | \$4,758.78 |  |  |  |  |
| 368 | \$ 29,716.47 | \$ 31,277.03 |  |  |  | \$4,758.78 |  |  |  |  |
|  | \$29,716.47 | \$31,277.03 | \$184.34 | \$195.49 | \$4,539.63 | \$4,758.78 | \$28.16 | \$29.74 | \$212.50 | \$225.23 |
|  | \$72,527.14 | \$76,121.81 | \$449.91 | \$475.78 | \$70,423.93 | \$73,011.00 | \$436.86 | \$456.34 | \$886.77 | \$932.12 |
|  |  |  | \$421.54 | \$422.53 |  |  |  |  |  |  |
|  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  |  | \$31.99 | \$38.63 |  |  |  |  | \$31.99 | \$38.63 |
|  |  |  | \$481.90 | \$514.41 |  |  | \$436.86 | \$456.34 | \$918.76 | \$970.75 |
|  |  |  | \$131.36 | \$156.71 |  |  | \$119.08 | \$139.02 | \$250.44 | \$295.73 |
|  |  |  | \$613.26 | \$671.12 |  |  | \$555.94 | \$595.36 | \$1,169.20 | \$1,266.48 |

WR Number
1368886

CLASSIFICATION

Service, UG, In Duct
Meter Equip-1st Installation Expense
Meter Cost (Material)
Service Trench (Labor)
SERVICE SUBT W/O STORES LDG
Duct, Buried (PVC)
Cond, Primary, AL, 343-1431
Cable, Primary, 1/C, 2/C, All
Maintenance of Overhead Lines
Primary/Secondary Trench (Labor)
PRIMARY SUBT W/O STORES LDG
Cable, 600V, AL, All
SECONDARY SUBT W/O STORES LDG
Line Transformers-1st Installation Expense
Pad, TX
Transformer (Material)
TRANSFORMER SUBTOTAL
PRI/SEC TRENCH
SVC TRENCH
SUB-TOTAL
MATSUB-MTR.(M)
STORES LDG. \%
METER STORES LDG \%
TOTAL STORES LDG
SUBTOTAL
E0
TOTAL

# 2011 UG METER PEDESTAL LAYOUT 

| NUMBER OF LOTS = |  |  | $2010$ | $2011$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MECA STORES LDG \% = |  |  | 6.24\% | 6.24\% |  |  |  |  |  |  |
| ACTUAL STORES LDG\% = |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
| ACTUAL EO = |  |  | 27.26\% | 30.46\% |  |  |  |  |  |  |
| ADJUSTED CO = |  |  | 9.18\% | 10.01\% |  |  |  |  |  |  |
| ACCOUNT | MATERIAL | MATERIAL | MATERIAL COST/LOT WITH CO 2010 | MATERIAL COST/LOT | LABOR | LABOR | LABOR COST/LOT | LABOR COST/LOT | TOTAL LABOR \& |  |
|  | WIO CO | W/O CO |  | WITH CO | W/O CO | W/O CO | WITH CO | WITH CO | MATERIAL | MATERIAL |
|  | 2010 | 2011 |  | 2011 | 2010 | 2011 | 2010 | 2011 | 2010 | 2011 |
| 369.600 | \$0.00 | \$0.00 |  |  | \$5,683.17 | \$5,957.60 |  |  |  |  |
| 586.380 | \$4,993.12 |  |  |  | \$4,184.22 | \$4,386.27 |  |  |  |  |
|  |  | \$9,372.00 | \$28.37 | \$53.25 |  |  |  |  |  |  |
|  |  |  |  |  | \$0.00 | \$0.00 |  |  |  |  |
|  | \$4,993.12 | \$9,372.00 | \$30.97 | \$58.58 | \$9,867.39 | \$10,343.87 | \$61.21 | \$64.65 | \$92.18 | \$123.23 |
| 366.201 | \$10,642.97 | \$12,387.85 |  |  | \$31,976.92 | \$33,848.26 |  |  |  |  |
| 365.999 | \$599.24 | \$610.98 |  |  | \$936.70 | \$981.94 |  |  |  |  |
| 367.201 | \$9,273.46 | \$9,206.96 |  |  | \$6,686.84 | \$7,025.62 |  |  |  |  |
| 593.180 | \$171.00 | \$158.81 |  |  | $\begin{array}{r} \$ 92.00 \\ (\$ 19,806.41) \end{array}$ | $\begin{array}{r} \$ 96.46 \\ (\$ 20,915.51) \end{array}$ |  |  |  |  |
|  | \$19,471.64 | \$21,051.01 | \$120.79 | \$131.58 | \$19,886.05 | \$21,036.78 | \$123.36 | \$131.49 | \$244.15 | \$263.07 |
| 367.122 | \$12,598.87 | \$13,205.00 |  |  | \$13,243.48 | \$13,913.74 |  |  |  |  |
|  | \$11,858.87 | \$12,429.41 | \$73.57 | \$77.69 | \$13,243.48 | \$13,913.74 | \$82.15 | \$86.97 | \$155.72 | \$164.66 |
| 583.280 | \$56.60 | \$66.10 |  |  | \$875.80 | \$924.80 | \$49.00 | \$4.90 |  |  |
| 366.801 | \$973.90 | \$994.50 |  |  | \$777.30 | \$820.80 | \$43.50 | \$4.35 |  |  |
| 368 | \$ 18,351.40 | \$ 19,559.89 |  |  |  |  |  |  |  |  |
|  | \$19,321.37 | \$20,558.20 | \$119.86 | \$128.50 | \$1,653.10 | \$1,745.60 | \$10.25 | \$10.91 | \$130.11 | \$139.41 |
|  |  |  |  |  | $\begin{array}{r} \$ 19,806.41 \\ \$ 0.00 \end{array}$ | $\begin{array}{r} \$ 20,915.51 \\ \$ 0.00 \end{array}$ | $\begin{array}{r} \$ 122.87 \\ \$ 0.00 \end{array}$ | $\begin{array}{r} \$ 130.73 \\ \$ 0.00 \end{array}$ | \$122.87 | \$130.73 |
|  | \$55,645.00 | \$63,410.62 | \$345.19 | \$396.35 | \$64,456.43 | \$67,955.50 | \$399.84 | \$424.75 | \$745.03 | \$821.10 |
|  |  |  | \$316.82 | \$343.10 |  |  |  |  |  |  |
|  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  |  | 7.11\% | 8.12\% |  |  |  |  |  |  |
|  |  |  | \$24.54 | \$32.18 |  |  |  |  | \$24.54 | \$32.18 |
|  |  |  | \$369.73 | \$428.53 |  |  | \$399.84 | \$424.75 | \$769.57 | \$853.28 |
|  |  |  | \$100.78 | \$130.55 |  |  | \$108.99 | \$129.40 | \$209.77 | \$259.95 |
|  |  |  | \$470.51 | \$559.08 |  |  | \$508.83 | \$554.15 | \$979.34 | \$1,113.23 |

## OPERATIONAL COSTS DIFFERENTIAL ~ METER PEDESTAL

30-Year NPV (\$ per pole-line mile) Cost O\&M Capital Total ..... per Lot ..... \$0
Meter Pedestal
Differential (Non-Storm) Note 1
Avoided Storm Restoration
Tier 1 (Full GAF) - 300 or more lots ..... $(\$ 38,453)$$(\$ 38,453)$(\$15,381)( $\$ 15,381$ )(\$384)
Tier 2 (40\% GAF) - 100 to 299 lots$(\$ 7,691)$
$(\$ 7,691)$ ..... $(\$ 7,691)$(\$154)
Tier 3 (20\% GAF) - less than 100 lots(\$77)Cost
Meter Pedestal Differential
Pre-Operational Cost ..... $\$ 0.00$
Post-Operational Cost
Tier 1 (Full GAF) - 300 or more lots ..... $\$ 0.00$
Tier 2 ( $40 \%$ GAF) - 100 to 299 lots ..... $\$ 0.00$
Tier 3 (20\% GAF) - less than 100 lots ..... $\$ 0.00$

Note 1: The 30-year net present value of the estimated non-storm underground v . overhead operational costs differential - set at $\$ 0$ (zero) per pole-line mile of the existing overhead facilities as reflected in the terms of the "Stipulation and Settlement Agreement" in Docket Nos. 080244-EI, 070231-EI and 080522-EI.

Note 2: The "Pre-Operational Cost" differential has been reduced to $\$ 0$ since it is a negative amount (-153.25). However, the negative amount has been applied to determine the "Post-Operational Cost" differentials.

FEEDER COST

## AVERAGE UNDERGROUND FEEDER COST

| Underground | Overhead | Difference |
| :---: | :---: | :---: |
| \$/Ft................ \$37.74 | \$/Ft............. \$21.67 | \$/Ft........... \$16.07 |

## AVERAGE UNDERGROUND LATERAL COST

$\frac{1 \text { Phase Underground }}{\$ / F t . . . . . . . . . . . . . . . . ~} \$ 9.17$

2 Phase Underground \$/Ft.
... $\qquad$ \$13.49

3 Phase Underground \$/Ft................. \$17.65

1 Phase Overhead \$/Ft.............. \$7.73

Difference \$/Ft............ \$1.44

2 Phase Overhead \$/Ft............. \$9.75

## 3 Phase Overhead

 \$/Ft............. \$12.00Difference
\$/Ft............ \$5.65

NOTE: Feeder estimates based on three phase requirements. See Exhibit XIIA for details.

## 2011 URD TARIFF

## FEEDER/LATERAL COST ${ }^{1}$

Feeder Length $(\mathrm{Ft})=$ ..... 25,428
UG Feeder Cost $=$ ..... \$1,038,703.92
26 UG Lateral Risers not required if UG Feeder is used
Cost of each Lateral Riser $=$ ..... \$3,041.26
26 Lateral Risers X $\$ 3,041.26=$ ..... (\$79,072.76)
Net UG Feeder Cost = ..... \$959,631.16
UG Feeder per foot cost $=$ ..... $\$ 37.74$
OH Feeder Cost = ..... $\$ 551,012.47$
OH Feeder per foot cost $=$ ..... $\$ 21.67$
Feeder Differential Cost = ..... $\$ 16.07$
Padmounted Switch cabinet weighted cost $(\text { Each })^{2}=$ ..... $\$ 26,157.99$
NOTES: (1) These per foot costs include cable-in-conduit and cable pull boxes.(2) Differential cost based on padmounted switch vs. overheadswitch average installed cost weighted by quantity of each switchinstalled. This cost is identical to the padmounted switch cost in theUCD Tariff.

## 2011 URD TARIFF

## LATERAL COST $^{3}$

Lateral Length $=1000$ Feet
1 Phase UG Lateral Cost = ..... \$9,169.51
1 Phase UG Lateral Cost Per Foot = ..... $\$ 9.17$
1 Phase Overhead Lateral Cost $=$ ..... \$7,734.06
1 Phase Overhead Lateral Cost Per Foot = ..... $\$ 7.73$
1 Phase Lateral Differential Cost $=$ ..... \$1.44
2 Phase UG Lateral Cost $=$ ..... \$13,492.71
2 Phase UG Lateral Cost Per foot = ..... $\$ 13.49$
2 Phase OH Lateral Cost $=$ ..... \$9,747.42
2 Phase OH Lateral Cost Per foot $=$ ..... $\$ 9.75$
2 Phase Lateral Differential Cost $=$ ..... $\$ 3.74$
3 Phase UG Lateral Cost $=$ ..... \$17,651.92
3 Phase UG Lateral Cost Per foot $=$ ..... \$17.65
3 Phase OH Lateral Cost $=$ ..... \$12,001.69
3 Phase OH Lateral Cost Per foot $=$ ..... $\$ 12.00$
3 Phase Lateral Differential Cost $=$ ..... $\$ 5.65$NOTE: (3) These costs include cable-in-conduit only (no pull boxes).

## 2011 URD TARIFF

## URD BASIS ADDENDUM TO APPENDIX NO. 3

10.3.3 Conduit Installation Credits

1. Low Density
Pri/Sec = $174.09 \mathrm{MH} \times \$ 115.60 / \mathrm{MH}=$ ..... \$20,124.80
210 LotsSvc =
$\qquad$102.9 $\mathrm{MH} \times \$ 115.60 / \mathrm{MH}=$\$11,895.24
$\underline{210}$ Lots
\$ 56.64 /Lot
2. High Density
Pri/Sec =

$\qquad$
91.04 $\mathrm{MH} \times \$ 115.60 / \mathrm{MH}=$ ..... \$10,524.22
176 Lots \$ 59.80 /Lot
Svc =.

$\qquad$
70.4 MH X $\$ 115.60 / \mathrm{MH}=$ ..... \$8,138.24
176 Lots ..... \$ 46.24 /Lot
3. Meter Pedestals
Pri/Sec =
$\qquad$74.24 MH X $\$ 115.60 / \mathrm{MH}=$.\$8,582.14

BACK-UP CALCULATIONS FOR CHANGES TO COSTS IN SEC. 10.2.11 OF TWENTY-FIRST REVISED SHEET NO. 6.095

| 10.5.4 | Replace Existing Service |  |  |  |  | \$36.41 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2" PVC | 0.005 MH X | \$115.60 | /MH X | $63 \mathrm{Ft}=.$. | ........... |  | /Lot |
| 10.4 .3 | UG Service from OH Lines |  |  |  |  |  |  |
| $\underline{\underline{\prime \prime} \text { PVC }}$ | 0.005 MH X | \$115.60 | $/ \mathrm{MH}=.$. |  | ...... | \$0.58 | /Ft. |
| LARGER THAN 2" PVC | 0.007 MH X | \$115.60 | $/ \mathrm{MH}=$ |  | ..... | \$0.81 | $/ \mathrm{Ft}$. |
| 10.3.3.d. | Credit for Installation of Conduit |  |  |  |  |  |  |
| 2" PVC | 0.005 MH X | \$115.60 | $/ \mathrm{MH}=$ | ............ | ...... | \$0.58 | /Ft. |
| LARGER THAN 2" PVC | 0.007 MH X | \$115.60 | $/ \mathrm{MH}=$. | , | ...... | \$0.81 | /Ft. |
| 10.2.11 | Extensions of Service Beyond Point of Delivery |  |  |  |  |  |  |
| CABLE MATERIAL | \$0.79 /Ft. X | 1.0812 | Stores Loading = ...... $\$ 0.85 \mathrm{FFt}$. |  |  |  |  |
|  | \$0.85 /Ft. X | 1.30464 | EO = | ........ | ........... | \$1.11 | $/ \mathrm{Ft}$. |
| CABLE PULL | \$115.60 / MH X | 0.003 | MH = ........................ \$ 0.35 /Ft. |  |  |  |  |
|  | \$ 0.35 /Ft. X | 1.30464 | $E O=$ | ........... | ........... | \$0.45 | /Ft. |
| CONDUIT MATERIAL | \$0.40 /Ft. X | 1.0812 | Stores Loading $=\ldots . . . . \$ 0.44 \mathrm{Ft}$. |  |  |  |  |
|  | \$0.44 /Ft. X | 1.30464 | EO = | ........ | ......... | \$0.57 | /Ft. |
| CONDUIT LABOR | \$115.60 /MH X | 0.005 | $\mathrm{MH}=. . . . . . . . . . . . . . . . . . . . . . . ~ \$ 0.58 / \mathrm{Ft}$. |  |  |  |  |
|  | \$0.58 /Ft. X | 1.30464 | $E O=$ | ......... | .......... | \$0.76 | /Ft. |
| TRENCH | \$115.60 /MH X | 0.029 | $\mathrm{MH}=$ | ............... | \$3.35 | t. |  |
|  | \$3.35 /Ft. X | 1.30464 | $E O=$ | ............... | .......... | \$4.37 | /Ft. |
|  |  |  |  | TOTA | ........... | \$7.26 | /Ft. |
|  | When Customer Provides Trench and Conduit Installation |  |  |  |  |  |  |
|  | $\begin{gathered} \$ 1.11 \\ \text { Cable Material + } \end{gathered}$ | $\begin{aligned} & \$ 0.45 \\ & \text { ull Labor } \end{aligned}$ | $\begin{aligned} & + \\ & + \end{aligned}$ | $.57=$ $\qquad$ duit Materia |  | \$2.13 | Ft . |

## TRENCH CREDITS

## 2011 URD TARIFF

## TRENCH CREDITS



1. Low Density

2. High Density

3. Meter Pedestals

Feeder/Lateral Trench Credit = $\$ 115.60 / \mathrm{MHX} \quad 0.029 \mathrm{MH}=$ ..... $\$ 3.35 / F t$.
Feeder Splice Box Installation Credit $=$ $\$ 115.60 / \mathrm{MH} X$ 5.54 MH = \$640.42 $/ \mathrm{Box}$
Primary Splice Box Installation Credit = \$115.60 /MH X 1.94 $\mathrm{MH}=\$ 224.26 / \mathrm{Box}$
Secondary Handhole Installation Credit
For 17" Handhole =

$\qquad$
\$115.60 /MHX $0.18 \mathrm{MH}=\$ 20.81 / \mathrm{HH}$
For 24 " or $30^{\prime \prime}$ Handhole = $\$ 115.60 / \mathrm{MHX}$ ..... $0.51 \mathrm{MH}=\$ 58.96 / \mathrm{HH}$
Concrete Pad for Pad
Mounted Transformeror Capacitor Bank Credit =.
$\qquad$$\$ 115.60 \mathrm{MHX} \quad 0.5 \mathrm{MH}=\$ 57.80 / \mathrm{Pad}$
Flexible HDPE Conduit Installation Credit =

$\qquad$
\$115.60 / MHX $0.001 \mathrm{MH}=$ ..... \$0.12 /Ft.
Concrete Pad and Cable Chamberfor Feeder Switch Pad =\$115.60 $/ \mathrm{MHX}$ 4.71 $\mathrm{MH}=\$ 544.48 / \mathrm{Pad}$
Trench Credit for New UG Service Laterals
10.4.3
\$115.60 / MHX 0.029 MH= ..... $\$ 3.35 / F t$.
Trench Credit for Replacement of OH Service with UG Service
10.5.4.

## RISER TO HANDHOLE COST

## AND SERVICE LATERAL DIFFERENTIAL

## 2011 URD TARIFF RISER TO HANDHOLE COST

Overhead

| Material | Labor | Total |
| :---: | :---: | :---: |
| \$92.02 | \$167.92 | \$259.94 |
| Underground |  |  |
| Material | Labor |  |
| \$403.12 | \$620.01 | \$1,023.13 |
| DIFFERENTIAL = ............................................................................................ ${ }^{\text {a }}$. 763.19 |  |  |

## SERVICE LATERAL DIFFERENTIAL - LOW DENSITY

|  | Underground | Overhead |
| :--- | ---: | ---: |
| Material | $\$ 132.54$ | $\$ 85.94$ |
| Labor | $\$ 426.83$ | $\$ 154.01$ |
| Stores loading | $\$ 10.76$ | $\$ 6.98$ |
| EO | $\$ 173.68$ | $\$ 75.23$ |
| Total | $\$ 743.81$ | $\$ 322.16$ |


| UNDERGROUND | $\$ 743.81$ |
| :--- | :---: |
| OVERHEAD | $\underline{(\$ 322.16)}$ |
| DIFFERENTIAL $=$ | $\$ 421.65$ |

## 2011 URD TARIFF <br> SERVICE LATERAL DIFFERENTIAL - HIGH DENSITY

|  | Underground | Overhead |
| :--- | :---: | ---: |
| Material | $\$ 107.69$ | $\$ 72.48$ |
| Labor | $\$ 342.12$ | $\$ 139.71$ |
| Stores loading | $\$ 8.74$ | $\$ 5.89$ |
| EO | $\$ 139.69$ | $\$ 66.44$ |
| Total | $\$ 598.24$ | $\$ 284.52$ |
|  |  |  |
|  |  |  |
|  |  |  |
|  | UNDERGROUND |  |
|  | OVERHEAD | $(\$ 284.52)$ |

## Low Density Major Changes

| Item | Approved | Current | Difference | Total \$ | Change per Lot (differential) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CIAC/Lot | \$396.39 | \$477.81 | \$ 81.42 |  | \$ 81.42 |
| OH Labor Rate | \$ 118.87 | \$ 124.61 | \$ 5.74 | \$ 7,275.62 | \$ (34.65) |
| UG Labor Rate | \$ 109.47 | \$ 115.60 | \$ 6.13 | \$ 11,586.42 | \$ 55.17 |
| Labor Impact |  |  |  |  | \$ 20.53 |
| Stores Loading cost/Lot - OH | \$48.85 | \$58.57 | \$ 9.72 | \$ 2,041.20 | \$ (9.72) |
| Stores Loading cost/Lot - UG | \$46.53 | \$57.03 | \$ 10.50 | \$ 2,205.00 | \$ 10.50 |
| Store Loading Impact |  |  |  |  | \$ 0.78 |
| EO/Lot - OH | \$412.00 | \$489.45 | \$ 77.45 |  | \$ (77.45) |
| EO/Lot - UG | \$496.90 | \$601.02 | \$ 104.12 |  | \$ 104.12 |
| EO Impact |  |  |  |  | \$ 26.67 |
| Major material |  |  |  |  |  |
| Transformer cost - OH | \$38,906.61 | \$42,909.87 | \$ 4,003.26 |  | \$ (19.06) |
| Poles cost | \$44,428.52 | \$39,965.30 | \$ $(4,463.22)$ |  | \$ 21.25 |
| Primary Conductor cost | \$5,583.12 | \$6,057.59 | \$ 474.47 |  | \$ (2.26) |
| Secondary Conductor cost | \$24,961.76 | \$25,013.59 | \$ 51.83 |  | \$ (0.25) |
| Service Conductor \& Meter cost | \$18,262.51 | \$23,744.16 | \$ 5,481.65 |  | \$ (26.10) |
| Transformer cost - UG | \$43,936.89 | \$44,476.41 | \$ 539.52 |  | \$ 2.57 |
| Primary Cable cost | \$43,237.59 | \$46,962.08 | \$ 3,724.49 |  | \$ 17.74 |
| Conduit cost (164-33100-6) | \$ 13,285.18 | \$18,536.92 | \$ 5,251.75 |  | \$ 25.01 |
| Secondary Cable cost | \$19,771.89 | \$20,794.94 | \$ 1,023.05 |  | \$ 4.87 |
| Service Cable \& Meter cost | \$24,383.68 | \$32,014.33 | \$ 7,630.65 |  | \$ 36.34 |
| Other Material |  |  |  |  | \$ (26.66) |
| Material Impact |  |  |  |  | \$ 33.44 |
|  |  |  | 2011 |  |  |
| Overhead Transformers | Size | Cost per | Cost per | \$ Change per | \% Change per |
| 441-12500-5 | 25 | \$768.77 | \$830.58 | \$61.81 | 8\% |
| 441-15000-0 | 50 | \$1,118.62 | \$1,244.97 | \$126.34 | 11\% |
| 441-17500-2 | 75 | \$1,695.71 | \$1,741.76 | \$46.04 | 3\% |
|  |  | 2010 | 2011 |  |  |
| Underground Transformers | Size | Cost per | Cost per | \$ Change per | \% Change per |
| 459-42000-9 | 50 | \$1,724.50 | \$1,720.67 | (\$3.83) | 0\% |
| 459-42100-5 | 75 | \$1,909.55 | \$2,112.87 | \$203.32 | 11\% |
|  |  | 2010 | 2011 |  |  |
| Poles | Size | Cost per | Cost per | \$ Change per | \% Change per |
| 151-18000-0 | 35/4 | \$199.27 | \$172.08 | (\$27.19) | -14\% |
| 151-18900-1 | 40/3 | \$290.61 | \$243.02 | (\$47.59) | -16\% |
| 151-19400-5 | 45/2 | \$396.91 | \$332.07 | (\$64.84) | -16\% |
|  |  | 2010 | 2011 |  |  |
| Conduit and Cable | Size | Cost/Ft | Cost/Ft | \$ Change per | \% Change per |
| 164-33100-6 | 2" | \$0.29 | \$0.40 | \$0.11 | 40\% |
| 100-25000-5 | 1/0 TPX (UG) | \$0.73 | \$0.79 | \$0.06 | 8\% |
| 100-25300-4 | 4/0 TPX (UG) | \$1.03 | \$1.08 | \$0.05 | 5\% |

## 2011 URD TARIFF LABOR CHANGES

## LOW DENSITY

| \$477.81 |  | \$396.39 | = | \$81.42 | = | 20.54\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LABOR |  | $\underline{2010}$ | $\underline{2011}$ | \%INC | \$ Diff. <br> Impact | \% Diff. Impact |
| 1. Labor Rate (Per MH) | OH | \$118.87 | \$124.61 | 4.83\% | (\$34.33) | -42.17\% |
|  | UG | \$109.47 | \$115.60 | 5.60\% | \$54.90 | 67.43\% |
| 2. Manhours | OH | 1256.10 | 1267.53 | 0.91\% | (\$6.47) | -7.95\% |
|  | UG | 1898.10 | 1893.80 | -0.23\% | (\$11.84) | -14.54\% |
| 3. EO/CO Rate Base |  | 38.94\% | 43.52\% | 11.76\% | \$13.34 | 16.39\% |
|  |  | \$291.32 | \$303.09 | 4.04\% | \$4.58 | 5.63\% |
| Labor Impact on Differential. |  |  |  |  | \$20.18 | 24.79\% |

## High Density Major Changes

| Item | Approved | Current | Difference | Total \$ | Change per Lot (differential) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CIAC/Lot | \$82.63 | \$154.50 | \$ 71.87 |  | \$ 71.87 |
| OH Labor Rate | \$ 118.87 | \$ 124.61 | \$ 5.74 | \$ 4,485.12 | \$ (21.36) |
| UG Labor Rate | \$ 109.47 | \$ 115.60 | \$ 6.13 | \$ 6,684.10 | \$ 31.83 |
| Labor Impact |  |  |  |  | \$ 10.47 |
| Stores Loading cost/Lot - OH | \$38.39 | \$45.85 | \$ 7.46 | \$ 1,566.60 | \$ (7.46) |
| Stores Loading cost/Lot - UG | \$30.73 | \$40.12 | \$ 9.39 | \$ 1,971.90 | \$ 9.39 |
| Store Loading Impact |  |  |  |  | \$ 1.93 |
| EO/Lot - OH | \$314.71 | \$371.32 | \$ 56.61 |  | \$ (56.61) |
| EO/Lot - UG | \$332.41 | \$407.40 | \$ 74.99 |  | \$ 74.99 |
| EO Impact |  |  |  |  | \$ 18.38 |
| Major material |  |  |  |  |  |
| Transformer cost - OH | \$29,716.47 | \$31,277.03 | \$ 1,560.56 |  | \$ (7.43) |
| Poles cost | \$27,384.39 | \$24,118.58 | \$ (3,265.81) |  | \$ 15.55 |
| Primary Conductor cost | \$2,135.31 | \$2,260.70 | \$ 125.39 |  | \$ (0.60) |
| Secondary Conductor cost | \$14,941.64 | \$15,233.99 | \$ 292.35 |  | \$ (1.39) |
| Service Conductor \& Meter cost | \$12,862.08 | \$17,452.21 | \$ 4,590.13 |  | \$ (21.86) |
| Transformer cost - UG | \$22,590.41 | \$23,414.81 | \$ 824.40 |  | \$ 3.93 |
| Primary Cable cost | \$19,114.03 | \$21,031.91 | \$ 1,917.88 |  | \$ 9.13 |
| Conduit cost (164-33100-6) | \$ 6,999.11 | \$9,765.92 | \$ 2,766.81 |  | \$ 13.18 |
| Secondary Cable cost | \$5,854.96 | \$6,109.98 | \$ 255.02 |  | \$ 1.21 |
| Service Cable \& Meter cost | \$22,107.90 | \$28,495.33 | \$ 6,387.43 |  | \$ 30.42 |
| Other Material |  |  |  |  | \$ (1.05) |
| Material Impact |  |  |  |  | \$ 41.09 |
|  |  | 2010 | 2011 |  |  |
| Overhead Transformers | Size | Cost per | Cost per | \$ Change per | \% Change per |
| 441-12500-5 | 25 | \$768.77 | \$830.58 | \$61.81 | 8\% |
| 441-15000-0 | 50 | \$1,118.62 | \$1,244.97 | \$126.34 | 11\% |
| 441-17500-2 | 75 | \$1,695.71 | \$1,741.76 | \$46.04 | 3\% |
|  |  | 2010 | 2011 |  |  |
| Underground Transformers | Size | Cost per | Cost per | \$ Change per | \% Change per |
| 459-42000-9 | 50 | \$1,724.50 | \$1,720.67 | (\$3.83) | 0\% |
| 459-42100-5 | 75 | \$1,909.55 | \$2,112.87 | \$203.32 | 11\% |
|  |  | 2010 | 2011 |  |  |
| Poles | Size | Cost per | Cost per | \$ Change per | \% Change per |
| 151-18000-0 | 35/4 | \$199.27 | \$172.08 | (\$27.19) | -14\% |
| 151-18900-1 | 40/3 | \$290.61 | \$243.02 | (\$47.59) | -16\% |
| 151-19400-5 | 45/2 | \$396.91 | \$332.07 | (\$64.84) | -16\% |
|  |  | 2010 | 2011 |  |  |
| Conduit and Cable | Size | Cost/Ft | Cost/Ft | \$ Change per | \% Change per |
| 164-33100-6 | $2{ }^{\prime \prime}$ | \$0.29 | \$0.40 | \$0.11 | 40\% |
| 100-25000-5 | 1/0 TPX (UG) | \$0.73 | \$0.79 | \$0.06 | 8\% |
| 100-25300-4 | 4/0 TPX (UG) | \$1.03 | \$1.08 | \$0.05 | 5\% |

## 2011 URD TARIFF LABOR CHANGES

## HIGH DENSITY



## Meter Pedestal Major Changes



## METER PEDESTAL

| (\$153.25) | - | (\$189.86) | $=$ | \$36.61 | $=$ | -19.28\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LABOR |  | $\underline{2010}$ | $\underline{2011}$ | \%INC | $\begin{array}{r} \text { \$ Diff. } \\ \text { Impact } \end{array}$ | \% Diff. <br> Impact |
| 1. Labor Rate | OH | \$118.87 | \$124.61 | 4.83\% | (\$19.33) | -52.79\% |
| (Per MH) | UG | \$109.47 | \$115.60 | 5.60\% | \$19.96 | 54.51\% |
| 2. Manhours | OH | 592.64 | 586.09 | -1.11\% | \$4.42 | 12.08\% |
|  | UG | 579.85 | 579.72 | -0.02\% | (\$3.50) | -9.56\% |
| 3. EO/CO Rate Base |  | 38.94\% | 43.52\% | 11.76\% | (\$1.55) | -4.24\% |
|  |  | (\$33.91) | (\$28.72) | -15.31\% | \$2.02 | 5.52\% |
|  | mpac | ential. |  |  | \$2.02 | 5.52\% |

2011 OVERHEAD LABOR COSTS


1. INCREASED LABOR RATE (\$124.61 VS. $\$ 118.87$ )
2. INCREASED LABOR RATE
3. INCREASED LABOR RATE
4. INCREASED LABOR RATE
5. INCREASED LABOR RATE
6. HIGHER BASE $\$ 576.22$ VS. $\$ 608.36$

METER PEDESTAL

1. INCREASED LABOR RATE (\$124.61 VS. \$118.87)
2. INCREASED LABOR RATE
3. INCREASED LABOR RATE
4. INCREASED LABOR RATE
5. INCREASED LABOR RATE
6. HIGHER BASE $\$ 436.86$ VS. $\$ 456.34$

| 2011 OVERHEAD MATERIAL COSTS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LOW DENSITY |  |  | HIGH DENSITY |  |  | METER PEDESTAL |  |  |  |
|  | $\underline{2010}$ | $\underline{2011}$ | \%INC. | $\underline{2010}$ | $\underline{2011}$ | \%INC. | $\underline{2010}$ | $\underline{2011}$ | \%INC. |  |
| 1. SERVICE | \$94.95 | \$124.38 | 31.00\% | \$79.79 | \$109.08 | 36.71\% | \$53.51 | \$81.88 | 53.02\% | 1. SERVICE |
| 2. PRIMARY | \$29.03 | \$31.73 | 9.30\% | \$13.25 | \$14.13 | 6.64\% | \$13.92 | \$14.46 | 3.88\% | 2. PRIMARY |
| 3. SECONDARY | \$129.78 | \$131.03 | 0.96\% | \$92.69 | \$95.22 | 2.73\% | \$73.09 | \$73.26 | 0.23\% | 3. SECONDARY |
| 4. POLES | \$230.99 | \$209.36 | -9.36\% | \$169.88 | \$150.75 | -11.26\% | \$125.05 | \$110.69 | -11.48\% | 4. POLES |
| 5. TRANSFORMER | \$202.28 | \$224.78 | 11.12\% | \$184.34 | \$195.49 | 6.05\% | \$184.34 | \$195.49 | 6.05\% | 5. TRANSFORMER |
| 6. STORES LD | \$48.85 | \$58.57 | 19.90\% | \$38.39 | \$45.85 | 19.43\% | \$31.99 | \$38.63 | 20.76\% | 6. STORES LD |
| 7. EO | \$200.59 | \$237.57 | 18.44\% | \$157.64 | \$185.99 | 17.98\% | \$131.36 | \$156.71 | 19.30\% | 7. EO |
| 8. TOTAL | \$936.47 | \$1,017.42 | 8.64\% | \$735.98 | \$796.51 | 8.22\% | \$613.26 | \$671.12 | 9.43\% | 8. TOTAL |
| LOW DENSITY |  |  |  | DENSITY |  |  |  | MET | R PEDESI |  |

1. INCREASED COST OF METERS (\$28.37 AVG VS. \$53.25 AVG)
2. HIGHER COST OF 1/O ALUMINUM CONDUCTOR ( $\$ 0.19 \mathrm{VS} . \$ 0.20$ )
3. CHANGE NOT SIGNIFICANT
4. DECREASED COST OF POLES (\$258.78 AVG VS. \$219.34 AVG)
5. INCREASED COST OF TRANSFORMERS (\$1111.62 AVG VS. \$1226.00 AVG)
6. HIGHER TOTAL MATERIAL COST.
7. HIGHER BASE ( $\$ 735.88$ VS. $\$ 779.85$ )

HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

## HIGH DENSITY

1. INCREASED COST OF METERS (\$28.37 AVG VS. \$53.25 AVG)
2. HIGHER COST OF 1/O ALUMINUM CONDUCTOR ( $\$ 0.19 \mathrm{VS} . \$ 0.20$ )
3. CHANGE NOT SIGNIFICANT
4. DECREASED COST OF POLES (\$253.96 AVG VS. \$214.78 AVG)
5. INCREASED COST OF TRANSFORMERS (\$1415.07 AVG VS. $\$ 1489.38$ AVG)
6. HIGHER TOTAL MATERIAL COST.
7. HIGHER BASE $(\$ 578.34 \mathrm{VS} . \$ 610.52)$

HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

1. INCREASED COST OF METERS (\$28.37 AVG VS. $\$ 53.25 \mathrm{~A}$ 2. HIGHER COST OF 1/O ALUMINUM CONDUCTOR $\$ 0.19 \mathrm{VS}$ . CHANGE NOT SIGNIFICANT
2. DECREASED COST OF POLES (\$293.33 AVG VS. \$245.52 5. INCREASED COST OF TRANSFORMERS (\$1415.07 AVG V 6. HIGHER TOTAL MATERIAL COST
3. HIGHER BASE ( $\$ 481.90$ VS. $\$ 514.41$ HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

2011 UNDERGROUND LABOR COSTS

|  | LOW DENSITY |  |  | HIGH DENSITY |  |  | METER PEDESTAL |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{2010}$ | 2011 | \%INC. | $\underline{2010}$ | 2011 | \%INC. | 2010 | $\underline{2011}$ | \%INC. |  |
| 1. SERVICE | \$296.31 | \$314.09 | 6.00\% | \$254.19 | \$269.20 | 5.91\% | \$61.21 | \$64.65 | 5.62\% | 1. SERVICE |
| 2. PRIMARY | \$232.41 | \$244.14 | 5.05\% | \$141.11 | \$149.75 | 6.12\% | \$123.36 | \$131.49 | 6.59\% | 2. PRIMARY |
| 3. SECONDARY | \$82.17 | \$85.86 | 4.49\% | \$44.43 | \$46.99 | 5.76\% | \$82.15 | \$86.97 | 5.87\% | 3. SECONDARY |
| 4. TRANSFORMER | \$18.30 | \$21.95 | 19.95\% | \$12.31 | \$13.09 | 6.34\% | \$10.25 | \$10.91 | 6.44\% | 4. TRANSFORMER |
| 5. PIS TRENCH | \$246.09 | \$261.84 | 6.40\% | \$148.58 | \$158.09 | 6.40\% | \$122.87 | \$130.73 | 6.40\% | 5. PIS TRENCH |
| 6. SVC TRENCH | \$218.36 | \$232.34 | 6.40\% | \$155.97 | \$165.95 | 6.40\% |  |  | N/A | 6. SVC TRENCH |
| 7.EO | \$298.10 | \$353.45 | 18.57\% | \$206.23 | \$244.65 | 18.63\% | \$108.99 | \$129.40 | 18.73\% | 7. EO |
| 8. TOTAL | \$1,391.74 | \$1,513.67 | 8.76\% | \$962.82 | \$1,047.72 | 8.82\% | \$508.83 | \$554.15 | 8.91\% | 8. TOTAL |

LOW DENSITY

1. INCREASED LABOR RATE (\$115.60 VS. \$109.47)
2. INCREASED LABOR RATE
3. INCREASED LABOR RATE
4. INCREASED LABOR RATE, 2010 VALUE ABNORMALLY LOW
5. INCREASED LABOR RATE
6. INCREASED LABOR RATE
7. HIGHER BASE ( $\$ 1,093.64$ VS. $\$ 1,160.22$ ) HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

HIGH DENSITY

1. INCREASED LABOR RATE (\$115.60 TO \$109.47)
2. INCREASED LABOR RATE
3. INCREASED LABOR RATE
4. INCREASED LABOR RATE
5. INCREASED LABOR RATE
6. INCREASED LABOR RATE
7. HIGHER BASE (\$756.59 VS. \$803.07) HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

## METER PEDESTAL

1. INCREASED LABOR RATE (\$115.60 TO \$109.47)
2. INCREASED LABOR RATE
3. INCREASED LABOR RATE
4. INCREASED LABOR RATE
5. INCREASED LABOR RATE
6. N/A
7. HIGHER BASE (\$399.84 VS. \$424.75) HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

## 2011 UNDERGROUND MATERIAL COSTS

|  | LOW DENSITY |  |  | HIGH DENSITY |  |  | METER PEDESTAL |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{2010}$ | 2011 | \%INC. | $\underline{2010}$ | 2011 | \%INC. | $\underline{2010}$ | 2011 | \%INC. |  |
| 1. SERVICE | \$126.77 | \$167.71 | 32.29\% | \$137.14 | \$178.11 | 29.87\% | \$30.97 | \$58.58 | 89.15\% | 1. SERVICE |
| 2. PRIMARY | \$224.79 | \$246.01 | 9.44\% | \$118.57 | \$131.46 | 10.87\% | \$120.79 | \$131.58 | 8.93\% | 2. PRIMARY |
| 3. SECONDARY | \$102.79 | \$108.93 | 5.97\% | \$36.32 | \$38.19 | 5.15\% | \$73.57 | \$77.69 | 5.60\% | 3. SECONDARY |
| 4. TRANSFORMER | \$228.43 | \$232.99 | 2.00\% | \$140.14 | \$146.35 | 4.43\% | \$119.86 | \$128.50 | 7.21\% | 4. TRANSFORMER |
| 5. STORES LDG | \$46.53 | \$57.03 | 22.57\% | \$30.73 | \$40.12 | 30.56\% | \$24.54 | \$32.18 | 31.13\% | 5. STORES LDG |
| 6. EO | \$198.80 | \$247.57 | 24.53\% | \$126.18 | \$162.75 | 28.98\% | \$100.78 | \$130.55 | 29.54\% | 6. EO |
| 7. TOTAL | \$928.11 | \$1,060.24 | 14.24\% | \$589.08 | \$696.98 | 18.32\% | \$470.51 | \$559.08 | 18.82\% | 7. TOTAL |

## LOW DENSITY

1. HIGHER COST OF $1 / 0$ TPXB ( $\$ 0.73 / \mathrm{FT}$ VS. $\$ 0.79 / \mathrm{FT}$ ) HIGHER COST OF CONDUIT (\$0.29/FT VS. \$0.40/FT) INCREASED COST OF METERS (\$28.37 AVG VS. \$53.25 AVG)
2. HIGHER COST OF PRIMARY CABLE (\$1.36/FT VS. \$1.39/FT)

HIGHER COST OF CONDUIT ( $\$ 0.29 / \mathrm{FT}$ VS. $\$ 0.40 / \mathrm{FT}$ )
3.HIGHER COST OF 4/0 TPXB (\$1.03/FT VS. \$1.08/FT)

HIGHER COST OF CONDUIT ( $\$ 0.29 / \mathrm{FT}$ VS. $\$ 0.40 / \mathrm{FT}$ )
4. HIGHER COST OF TXS ( $\$ 1739.92$ AVG VS. $\$ 1753.35$ AVG)
5. HIGHER TOTAL MATERIAL COST
6. HIGHER BASE ( $\$ 729.31 \mathrm{VS} . \$ 812.67$ )

HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

## HIGH DENSITY

1. HIGHER COST OF $1 / 0$ TPXB ( $\$ 0.73 / \mathrm{FT}$ VS. $\$ 0.79 / \mathrm{FT}$ ) HIGHER COST OF CONDUIT ( $\$ 0.29 / \mathrm{FT}$ VS. $\$ 0.40 / \mathrm{FT}$ ) INCREASED COST OF METERS (\$28.37 AVG VS. \$53.25 AVG)
2. HIGHER COST OF PRIMARY CABLE (\$1.36/FT VS. $\$ 1.39 / \mathrm{FT}$ )

HIGHER COST OF CONDUIT (\$0.29/FT VS. \$0.40/FT)
3.HIGHER COST OF 4/0 TPXB (\$1.03/FT VS. \$1.08/FT)

HIGHER COST OF CONDUIT ( $\$ 0.29 / F T$ VS. $\$ 0.40 / \mathrm{FT}$ )
4. HIGHER COST OF TXS ( $\$ 1786.10$ AVG VS. $\$ 1851.40$ AVG)
5. HIGHER TOTAL MATERIAL COST
6. HIGHER BASE ( $\$ 462.90 \mathrm{VS} . \$ 534.23$ )

HIGHER EO RATE ( $27.258 \%$ VS. $30.464 \%$ )

## METER PEDESTAL

1. INCREASED COST OF METERS (\$28.37 AVG VS. \$53.:
2. HIGHER COST OF PRIMARY CABLE (\$1.36/FT VS. \$1.3

HIGHER COST OF CONDUIT (\$0.29/FT VS. \$0.40/FT)
3. HIGHER COST OF 4/0 TPXB (\$1.03/FT VS. \$1.08/FT)

HIGHER COST OF CONDUIT ( $\$ 0.29 / \mathrm{FT}$ VS. $\$ 0.40 / \mathrm{FT}$ )
4. HIGHER COST OF TRANSFORMERS (\$1835.53 AVG V
5. HIGHER TOTAL MATERIAL COST
6. HIGHER BASE ( $\$ 369.73$ VS. $\$ 428.53$ )

HIGHER EO RATE (27.258\% VS. 30.464\%)

LOW DENSITY SUMMARY 1993 to 2011

|  | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 2001 | 2002 | 2005 | 2007 | 2008 | 2010 | 2011 | $\begin{array}{r} \% \text { CHANGE } \\ 10 \text { to } 11 \end{array}$ | $\begin{array}{r} \% \text { CHANGE } \\ 93 \text { TO } 10 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| UG EFFECTIVE MECA RATE | \$52.12 | \$51.46 | \$53.49 | \$53.49 | \$59.90 | \$55.92 | \$66.17 | \$63.29 | \$78.20 | \$89.82 | \$97.48 | \$109.47 | \$115.60 | 5.60\% | 121.80\% |
| OH EFFECTIVE MECA RATE | \$60.28 | \$65.93 | \$53.99 | \$53.99 | \$60.51 | \$62.91 | \$68.81 | \$67.29 | \$80.21 | \$100.25 | \$109.13 | \$118.87 | \$124.61 | 4.83\% | 106.72\% |
| MANHOURS LD-OH | 1080 | 1052 | 1052 | 1144 | 1144 | 1144 | 1227 | 1297 | 1288.27 | 1287.72 | 1284.08 | 1256.1 | 1267.53 | 0.91\% | 19.58\% |
| MANHOURS LD-UG | 1799 | 1863 | 1861 | 1775 | 1776 | 1801 | 1811 | 1955 | 1943.54 | 2006.63 | 1953.36 | 1898.1 | 1893.8 | -0.23\% | 5.27\% |
| OH-LABOR \$ PER LOT | \$310 | \$340 | \$278 | \$327 | \$358 | \$370 | \$429 | \$446 | \$526 | \$653 | \$713 | \$776 | \$827 | 6.60\% | 166.71\% |
| UG-LABOR \$ PER LOT | \$457 | \$473 | \$487 | \$502 | \$551 | \$519 | \$615 | \$632 | \$774 | \$919 | \$987 | \$1,094 | \$1,160 | 6.09\% | 153.88\% |
| OH-MATERIAL \$/LOT | \$306 | \$316 | \$342 | \$412 | \$383 | \$390 | \$406 | \$390 | \$425 | \$501 | \$541 | \$687 | \$721 | 4.99\% | 135.71\% |
| UG-MATERIAL \$/LOT | \$372 | \$378 | \$398 | \$457 | \$447 | \$465 | \$489 | \$501 | \$543 | \$704 | \$730 | \$683 | \$756 | 10.67\% | 103.13\% |
| DIFFERENTIAL \$/LOT | \$261 | \$246 | \$329 | \$277 | \$309 | \$268 | \$325 | \$367 | \$444 | \$563 | \$563 | \$396 | \$478 | 20.54\% | 83.07\% |
| STORES LDG.\$/LOT | \$21.25 | \$28.20 | \$36.09 | \$46.17 | \$34.35 | \$32.65 | \$27.61 | \$26.59 | \$25.88 | \$29.16 | \$31.14 | \$48.85 | \$58.57 | 19.90\% | 175.62\% |
| ENGINEERING \& OH | \$125.99 | \$153.23 | \$143.14 | \$181.46 | \$136.92 | \$124.29 | \$161.57 | \$174.53 | \$184.33 | \$197.70 | \$245.18 | \$412.00 | \$489.45 | 18.80\% | 288.48\% |
| HANDY-WHITMAN INDEX* | 267 | 270 | 280 | 288 | 288 | 290 | 304 | 313 | 354 | 375 | 461 | 523 | 547 | 4.59\% | 104.87\% |
| HANDY-WHITMAN \% | N/A | 1.12\% | 3.70\% | 2.86\% | 0.00\% | 0.69\% | 4.83\% | 2.96\% | 13.10\% | 5.93\% | 22.93\% | 13.45\% | 4.59\% |  |  |
| CPI INDEX ** | 141.9 | 145.8 | 149.7 | 153.5 | 158.6 | 161.3 | 174.0 | 176.7 | 190.3 | 201.8 | 210.0 | 215.9 | 219.2 | 1.50\% | 54.46\% |
| CPI \% | N/A | 2.75\% | 2.67\% | 2.54\% | 3.32\% | 1.70\% | 7.87\% | 1.55\% | 7.70\% | 6.04\% | 4.08\% | 2.82\% | 1.50\% |  |  |

* HANDY-WHITMAN TABLE E-2 TOTAL DISTRIBUTION PLANT FOR JULY 1 OF PREVIOUS YEAR
** CPI FOR ALL URBAN CONSUMERS (CPI-U) FOR DECEMBER OF PREVIOUS YEAR


## 2011 URD TARIFF HISTORICAL \$

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \% Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LOW DENSITY | 1990 | 1921 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 2001 | 2002 | 2005 | 2007 | $\underline{2008}$ | 2010 | 2011 | 90 to 11 |
| Overhead | \$743 | \$737 | \$763 | \$764 | \$837 | \$799 | \$967 | \$913 | \$916 | $\$ 989$ | \$1,037 | \$1,161 | \$1,380 | \$1,530 | \$1,923 | \$2,096 | 182.11\% |
| \% Change OH | -1.46\% | -0.81\% | 3.53\% | 0.13\% | 9.55\% | 4.54\% | 21.03\% | -5.58\% | 0.33\% | 7.97\% | 4.85\% | 11.93\% | 18.93\% | 10.84\% | 25.71\% | 8.98\% |  |
| Underground | \$1,078 | \$1,100 | \$1,092 | \$1,025 | \$1,083 | \$1,129 | \$1,244 | \$1,222 | \$1,184 | \$1,365 | \$1,403 | \$1,605 | \$1,943 | \$2,093 | \$2,320 | \$2,574 | 138.77\% |
| \% Change UG | -0.19\% | 2.04\% | -0.73\% | -6.14\% | 5.66\% | 4.25\% | 10.19\% | -1.77\% | -3.11\% | 15.29\% | 2.78\% | 14.38\% | 21.09\% | 7.72\% | 10.82\% | 40.95\% |  |
| Differential | \$335 | \$363 | \$329 | \$261 | \$246 | \$329 | \$277 | \$309 | \$268 | \$376 | \$367 | \$444 | \$563 | \$563 | \$396 | \$478 | 42.63\% |
| \% Change Diff | 2.76\% | 8.36\% | -9.37\% | -20.67\% | -5.75\% | 33.74\% | -15.81\% | 11.55\% | -13.27\% | 40.30\% | -2.39\% | 20.98\% | 26.75\% | 0.08\% | -29.62\% | 20.54\% |  |
| Handy-Whitman | 255 | 263 | 267 | 267 | 270 | 280 | 288 | 288 | 290 | 304 | 313 | 354 | 375 | 461 | 523 | 547 | 114.51\% |
| \% Change $\mathrm{H}-\mathrm{W}$ | 5.81\% | 3.14\% | 1.52\% | 0.00\% | 1.12\% | 3.70\% | 2.86\% | 0.00\% | 0.69\% | 4.83\% | 2.96\% | 13.10\% | 5.93\% | 22.93\% | 13.45\% | 4.59\% |  |
| CPI | 126.1 | 133.8 | 137.9 | 141.9 | 145.8 | 149.7 | 153.5 | 158.6 | 161.3 | 174 | 176.7 | 190.3 | 201.8 | 210.0 | 215.9 | 219.2 | 73.81\% |
| \% Change CPI | 4.65\% | 6.11\% | 3.06\% | 2.90\% | 2.75\% | 2.67\% | 2.54\% | 3.32\% | 1.70\% | 7.87\% | 1.55\% | 7.70\% | 6.04\% | 4.08\% | 2.82\% | 1.50\% |  |


| HIGH DENSITY | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1925 | 1997 | 1998 | 2001 | 2002 | 2005 | 2007 | 2008 | 2010 | 2011 | \% Change 90 to 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overhead | \$598 | \$614 | \$615 | \$616 | \$655 | \$621 | \$656 | \$610 | $\$ 611$ | \$611 | \$686 | \$736 | \$1,066 | \$1,190 | \$1,469 | \$1,590 | 165.92\% |
| \% Change OH | -1.32\% | 2.68\% | 0.16\% | 0.16\% | 6.33\% | -5.19\% | 5.64\% | -7.01\% | 0.16\% | 0.00\% | 12.27\% | 7.33\% | 44.82\% | 11.58\% | 23.50\% | 8.23\% |  |
| Underground | \$823 | \$877 | \$861 | \$778 | \$791 | \$804 | \$849 | \$835 | \$801 | \$930 | \$885 | \$973 | \$1,153 | \$1,330 | \$1,552 | \$1,745 | 111.99\% |
| \% Change UG | 0.61\% | 6.56\% | -1.82\% | -9.64\% | 1.67\% | 1.64\% | 5.60\% | -1.65\% | -4.07\% | 16.10\% | -4.84\% | 9.89\% | 18.55\% | 15.35\% | 16.69\% | 12.42\% |  |
| Differential | \$225 | \$263 | \$246 | \$162 | \$136 | \$183 | \$193 | \$224 | \$190 | \$309 | \$199 | \$236 | \$87 | \$140 | \$83 | \$155 | -31.33\% |
| \% Change Diff | 6.13\% | 16.89\% | -6.46\% | -34.15\% | -16.05\% | 34.56\% | 5.46\% | 16.06\% | -15.18\% | 62.63\% | -35.60\% | 18.74\% | -63.31\% | 81.70\% | $-41.06 \%$ | 85.98\% |  |
| Handy-Whitman | 255 | 263 | 257 | 267 | 270 | 280 | 288 | 288 | 290 | 304 | 313 | 354 | 375 | 461 | 523 | 547 | 114.51\% |
| \% Change H-W | 5.81\% | 3.14\% | 1.52\% | 0.00\% | 1.12\% | 3.70\% | 2.86\% | 0.00\% | 0.69\% | 4.83\% | 2.96\% | 13.10\% | 5.93\% | 22.93\% | 13.45\% | 4.59\% |  |
| CPI | 126.1 | 133.8 | 137.9 | 141.9 | 145.8 | 149.7 | 153.5 | 158.6 | 161.3 | 174 | 176.7 | 190.3 | 201.8 | 210.0 | 215.9 | 219.2 | 73.81\% |
| \% Change CPI | 4.65\% | 6.11\% | 3.06\% | 2.90\% | 2.75\% | 2.67\% | 2.54\% | 3.32\% | 1.70\% | 7.87\% | 1.55\% | 7.70\% | 6.04\% | 4.08\% | 2.82\% | 1.50\% |  |


| METER PEDESTAL | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 2001 | 2002 | 2005 | 2007 | 2008 | 2010 | 2011 | \% Change 90 to 11 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overhead | \$518 | \$530 | \$527 | \$527 | \$559 | \$528 | \$556 | \$516 | \$516 | \$559 | \$582 | \$620 | \$823 | \$890 | \$1,169 | \$1,266 | 144.49\% |
| \% Change OH | -2.08\% | 2.32\% | -0.57\% | 0.00\% | 6.07\% | -5.55\% | 5.30\% | -7.19\% | 0.00\% | 8.33\% | 4.11\% | 6.61\% | 32.61\% | 8.14\% | 31.40\% | 8.32\% |  |
| Underground | \$623 | \$625 | \$637 | \$528 | \$528 | \$536 | \$559 | \$537 | \$521 | \$633 | \$565 | \$662 | \$785 | \$846 | \$979 | \$1,113 | 78.69\% |
| \% Change UG | 5.41\% | 0.32\% | 1.92\% | -17.11\% | 0.00\% | 8.52\% | 4.29\% | -3.94\% | -2.98\% | 21.50\% | -10.74\% | 17.13\% | 18.57\% | 7.81\% | 15.77\% | 13.67\% |  |
| Differential | \$105 | \$95 | \$110 | \$1 | (\$31) | \$8 | \$3 | \$22 | \$4 | \$74 | (\$17) | \$41 | (\$38) | (\$44) | (\$190) | (\$153) | -245.95\% |
| \% Change Diff | 69,35\% | -9.52\% | 15.79\% | -99.09\% | -3200.00\% | -125.81\% | -62.50\% | 633.33\% | -81.82\% | 1750.00\% | -122.97\% | -343.00\% | -192.28\% | 15.03\% | 332.98\% | -19.28\% |  |
| Handy-Whitman | 255 | 263 | 267 | 267 | 270 | 280 | 288 | 288 | 290 | 304 | 313 | 354 | 375 | 461 | 523 | 547 | 114.51\% |
| \% Change H-W | 5.81\% | 3.14\% | 1.52\% | 0.00\% | 1.12\% | 3.70\% | 2.86\% | 0.00\% | 0.69\% | 4.83\% | 2.96\% | 13.10\% | 5.93\% | 22,93\% | 13.45\% | 4.59\% |  |
| CPI | 126.1 | 133.8 | 137.9 | 141.9 | 145.8 | 149.7 | 153.5 | 158.6 | 161.3 | 174 | 176.7 | 190.3 | 201.8 | 210.0 | 215.9 | 219.2 | 73.81\% |
| \% Change CPI | 4.65\% | 6.11\% | 3.06\% | 2.90\% | 2.75\% | 2.67\% | 2.54\% | 3.32\% | 1.70\% | 7.87\% | 1.55\% | 7.70\% | 6.04\% | 4.08\% | 2.82\% | 1.50\% |  |

## APPENDIX 1

UCD

## LEGISLATIVE TARIFF

UCD
(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-in-conduit not to exceed 150 feet in radials and 300 feet in loops.

1) Single phase radial
2) Two phase radial
3) Three phase radial ( 150 KVA )
4) Three phase radial ( 300 KVA )
5) Single phase loop
6) Two phase loop
7) Three phase loop ( 150 KVA )
8) Three phase loop (300 KVA)

## Applicant's Contribution

| From Overhead <br> Termination Point | From Existing <br> Underground <br> Termination Point |
| :---: | :---: |
| $\$ 542.58656 .99$ | $\$ 000.00$ |
| $\$ 1,039.671 .050 .44$ | $\$ 000.00$ |
| $\$ 1,793.612 .318 .67$ | $\$ 000.00$ |
| $\$ 000.00$ | $\$ 000.00$ |
| $\$ 2,011.712 .207 .78$ | $\$ 908.40912 .91$ |
| $\$ 3,558.623 .741 .39$ | $\$ 1,799.751 .879 .37$ |
| $\$ 5,831.316 .756 .33$ | $\$ 3,755.554 .429 .45$ |
| $\$ 1,311.432 .696 .73$ | $\$ 000.00369 .86$ |

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
\$ 604.37678 .48
2) Large single phase
\$ 916.501 .186 .32
3) Small three phase
\$ 826.54900 .15
4) Large three phase
$\$ 1,540.831 .721 .43$
c) FPL service cable installed in customer provided and customer installed 2" PVC (for main line switch size limited to 60 amps for $120 \mathrm{~V}, 2$ wire service, or 125 amps for $120 / 240 \mathrm{v}, 3$ wire service) where customer's meter can is at least 5 feet and no more than 100 feet from the FPL pole.
5) Installed on a wood pole - accessible locations
6) Installed on a wood pole - inaccessible locations
7) Installed on a concrete pole - accessible locations

| 120 v 60 amp | $120 / 240 \mathrm{v} 125 \mathrm{amp}$ |
| :--- | :--- |
| 2 wire service | $\underline{3}$ wire service |

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

1) Handhole
a. Small - per handhole
\$ 212.28225 .58
b. Intermediate - per handhole
$\$ 249.49264 .80$
c. Large - per handhole
\$ 867.45915 .77
2) Pad Mounted secondary Junction Box - per box
$\$ 3,077.433 .116 .91$
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. Only applicable if 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
$\$ 12,711.02 \underline{13.276 .16}$
$\$ 79.08 \underline{86.28}$
(Continued from Sheet No. 6.520)
e) Primary splice box including splices and cable pulling set-up.

| 1) Single Phase - per box | $\$ 1,512.321 .536 .72$ |
| :--- | :--- |
| 2) Two Phase - per box | $\$ 2,134.322 .133 .56$ |
| 3) Three Phase - per box | $\$ 2,313.692 .254 .69$ |

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

| $\$$ | $0.82 \underline{1.44}$ |
| :--- | :--- |
| $\$$ | 2.893 .74 |
| $\$$ | 2.564 .51 |

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

1) Single Phase - per foot
$\begin{array}{lc}\$ & 8.309 .17 \\ \$ & 12.2113 .49 \\ \$ & 13.5516 .63\end{array}$
h) The above costs are based upon arrangements that will permit serving the local underground distribution system within the commercial/industrial development from overhead feeder mains. If feeder mains within the commercial/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 commercial/industrial development and equivalent overhead feeder mains, as follows:

Applicant's
Contribution
Cost per foot of feeder trench within the commercial/industrial development (excluding switches)
\$ 12.1916 .07
Cost per switch package $\quad \$ 25,697.9926 .157 .99$
i) The Company will provide one standby/assistance appointment to the Applicant at no additional charge 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 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
$\$ \quad 3.173 .35$
2) Credit per foot of secondary trench
$\$ \quad 2.963 .12$
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.
3) Credit per foot of $2^{\prime \prime}$ conduit
$\$ \quad 0.55 \underline{0.58}$
4) Credit per foot of larger than $2^{\prime \prime}$ conduit
$\$ \quad 0.770 .81$
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,
5) Credit per large handhole/primary splice box
$\begin{array}{cc}\$ & 212.37224 .26 \\ \$ & 55.8358 .96\end{array}$
6) Credit per small handhole
\$ $55.83 \underline{58.96}$
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
\$ $54.74 \underline{57.80}$
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
\$ $515.60 \underline{544.48}$
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
\$ 606.46640.42

## FINAL TARIFF

 UCD(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-in-conduit not to exceed 150 feet in radials and 300 feet in loops.

|  | Applicant's Contribution |  |
| :---: | :---: | :---: |
|  | From Overhead Termination Point | From Existing Underground Termination Point |
| 1) Single phase radial | \$ 656.99 | \$ 000.00 |
| 2) Two phase radial | \$1,050.44 | \$ 000.00 |
| 3) Three phase radial (150 KVA) | \$2,318.67 | \$ 000.00 |
| 4) Three phase radial ( 300 KVA ) | \$ 000.00 | \$ 000.00 |
| 5) Single phase loop | \$2,207.78 | \$ 912.91 |
| 6) Two phase loop | \$3,741.39 | \$1,879.37 |
| 7) Three phase loop (150 KVA) | \$6,756.33 | \$4,429.45 |
| 8) Three phase loop (300 KVA) | \$2,696.73 | \$ 369.86 |

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 | $\$ 678.48$ |
| :--- | :--- |
| 2) Large single phase | $\$ 1,186.32$ |
| 3) Small three phase | $\$ 900.15$ |
| 4) Large three phase | $\$ 1,721.43$ |

c) FPL service cable installed in customer provided and customer installed $2^{2 \prime}$ PVC (for main line switch size limited to 60 amps for 120 V , 2 wire service, or 125 amps for $120 / 240 \mathrm{v}, 3$ 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 <br> 2 wire service | 120/240v 125 amp <br> 3 wire service |
| :---: | :---: | :---: |
| 1) Installed on a wood pole - accessible locations | \$ 797.24 | \$ 861.40 |
| 2) Installed on a wood pole - inaccessible locations | \$ 915.30 | \$ 981.50 |
| 3) Installed on a concrete pole - accessible locations | \$ 813.09 | \$ 888.83 |

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

1) Handhole
a. Small - per handhole
\$ 225.58
b. Intermediate - per handhole
\$ 264.80
c. Large - per handhole
\$ 915.77
2) Pad Mounted secondary Junction Box - per box
$\$ 3,116.91$
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. Only applicable if the customer's service conductor diameter is less than 500 MCM .
$\begin{array}{ll}\text { Per cabinet (includes connecting up to } 12 \text { sets of conductor) } & \$ 13,276.16 \\ \text { Tapping service conductors (if more than } 12 \text { sets) - per set } & \$ 86.28\end{array}$
(Continued on Sheet No. 6.530)

Issued by: S. E. Romig, Director, Rates and Tariffs Effective:
e) Primary splice box including splices and cable pulling set-up.

| 1) Single Phase - per box | $\$ 1,536.72$ |
| :--- | :--- |
| 2) Two Phase - per box | $\$ 2,133.56$ |
| 3) Three Phase - per box | $\$ 2,254.69$ |

f) Additional instalfation 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 | $\$$ | 1.44 |
| :--- | :--- | :--- |
| 2) Two Phase - per foot | $\$$ | 3.74 |
| 3) Three Phase - per foot | $\$$ | 4.51 |

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
\$ 9.17
2) Two Phase - per foot
\$ 13.49
3) Three Phase - per foot
\$ 16.63
h) The above costs are based upon arrangements that will permit serving the local underground distribution system within the commercial/industrial development from overhead feeder mains. If feeder mains within the commercial/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 commercial/industrial development and equivalent overhead feeder mains, as follows:

Applicant's
Contribution
Cost per foot of feeder trench within the commercial/industrial development (excluding switches)
$\$ 16.07$
Cost per switch package
$\$ 26,157.99$
i) The Company will provide one standby/assistance appointment to the Applicant at no additional charge 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 from Sheet No. 6.530)

### 13.2.13 <br> 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
\$ 3.35
2) Credit per foot of secondary trench
\$ 3.12
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.
3) Credit per foot of 2 " conduit
$\$ 0.58$
4) Credit per foot of larger than $2^{\prime \prime}$ conduit
\$ 0.81
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,
5) Credit per large handhole/primary splice box
\$ 224.26
6) Credit per small handhole
\$ 58.96
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
\$ 57.80
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,

$$
\text { Credit per pad } \quad \$ 544.48
$$

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 \$ 640.42

> Appendix No. 2
> FPL
> 2011 UCD Tariff
> Explanation of Proposed Revisions

This appendix is to summarize proposed revisions to Sections 11 and 13 of FPL's General Rules and Regulations for Electric Service. An explanation of FPL's proposed tariff changes for underground commercial installations can be found in Appendix No. 3.

The following modifications have been made to these sections:

## 2011 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 <br> (150 KVA) | 3 Phase (300 KVA) |
| :---: | :---: | :---: | :---: | :---: |
| Primary Length | 150 feet | 150 feet | 150 feet | 150 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 | 19 | 29 | 39 | 42 |

## 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 | 556 A QPX | \#1/0A QPX | 556 A 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
Two Phase
Three Phase

1,000 feet 2\#1/0 AAAC, 4-40'3 Poles
1,000 feet 3\#1/0 AAAC, 4 - 40'/3 Poles
1,000 feet $4 \# 1 / 0$ AAAC, $4-40^{\prime} / 2$ 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 |
| 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/OA 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 | $120 / 240 \mathrm{~V}$ | 120/240 V | $120 / 208 \mathrm{~V}$ | $120 / 208 \mathrm{~V}$ |
| 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 | 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/OA 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 | $120 / 240 \mathrm{~V}$ | 120/240 V | $120 / 208 \mathrm{~V}$ | 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/OA TPX | $3-750 \mathrm{~A}$ | \#4/0A QPX | $4-750 \mathrm{~A}$ |
| 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 handhole
Intermediate Handhole - 30 inch handhole
Large Handhole - 48 inch handhole
Secondary Junction box - Replacement cabinet and Connectors per I-74.1
Sec. 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

## FPL

## Basis for Underground Commercial Distribution Differential

> New Underground Commercial Development with Overhead Feeder Mains. 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 systemcosts, which were in use at the end of 2010 . Design criteria include the following:

Primary Voltage
Phases, Secondary Voltage

Underground Design
Overhead Design

13,200/7,620 V
Single Phase, $120 / 240 \mathrm{~V}$
Three phase, $120 / 240 \mathrm{~V}$
Three phase, $120 / 208 \mathrm{~V}$
Three phase, $277 / 480 \mathrm{~V}$

All cable-in-conduit
Wood Poles *, Extreme Windload (145 MPH)

* Concrete pole used for 300 KVA OH TX Bank


## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER TRANSFORMER BANK -

## SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND PRIMARY LATERAL TRENCH
WITH CABLE-IN-CONDUIT
2011

| ITEM | OVERHEAD UNDERGROUND |  | DIFFERENTIAL |
| :--- | :---: | ---: | ---: |
| LABOR | $\$ 3,525.96$ | $\$ 3,183.36$ | $(\$ 342.60)$ |
| MATERIAL | $\$ 3,573.04$ | $\$ 4,572.63$ | $\$ 999.59$ |
|  |  |  |  |
| TOTAL | $\$ 7,099.00$ | $\$ 7,755.99$ | $\$ 656.99$ |
|  |  | $\$ 643.64$ |  |
|  |  | $\$ 758.05$ |  |

## OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK SINGLE PHASE PRIMARY LATERAL POLE LINE INCLUDING TRANSFORMER AND SERVICE

$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 84.13$ | $\$ 152.98$ | $\$ 237.11$ |
| Primary | $\$ 255.43$ | $\$ 714.03$ | $\$ 969.46$ |
| Secondary | $\$ 255.43$ | $\$ 595.04$ | $\$ 850.47$ |
| Poles | $\$ 568.49$ | $\$ 999.32$ | $\$ 1,567.81$ |
| Transformers | $\$ 1,369.56$ | $\$ 241.26$ | $\$ 1,610.82$ |
| Sub-Total | $\$ 2,533.04$ | $\$ 2,702.63$ | $\$ 5,235.67$ |
| Stores Handling(2) | $\$ 205.68$ | $\$ 0.00$ | $\$ 205.68$ |
| SubTotal | $\$ 2,738.72$ | $\$ 2,702.63$ | $\$ 5,441.35$ |
| Engineering(4) | $\$ 834.32$ | $\$ 823.33$ | $\$ 1,657.65$ |
| TOTAL | $\$ 3,573.04$ | $\$ 3,525.96$ | $\$ 7,099.00$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See appendix B, page 1, IIA, single phase for design criteria and assumptions

| SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER |  |  |  |
| :---: | :---: | :---: | :---: |
| INCLUDING RISER AND PRIMARY LATERAL TRENCH |  |  |  |
| WITH CABLE-IN-CONDUIT |  |  |  |
| $\underline{2011}$ |  |  |  |
| ITEM | MATERIAL (1) | LABOR(3) | TOTAL |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$1,085.66 | \$1,694.82 | \$2,780.48 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$2,156.02 | \$192.03 | \$2,348.05 |
| Trenching | \$0.00 | \$553.18 | \$553.18 |
| Sub-Total | \$3,241.68 | \$2,440.03 | \$5,681.71 |
| Stores Handling(2) | \$263.22 | \$0.00 | \$263.22 |
| SubTotal | \$3,504.90 | \$2,440.03 | \$5,944.93 |
| Engineering(4) | \$1,067.73 | \$743.33 | \$1,811.06 |
| TOTAL | \$4,572.63 | \$3,183.36 | \$7,755.99 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.

4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, single phase, for design criteria and assumptions

OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER TRANSFORMER BANK -

## TWO PHASE RADIAL PAD MOUNTED TRANSFORMER

## INCLUDING RISER AND PRIMARY LATERAL TRENCH

WITH CABLE-IN-CONDUIT
$\underline{2011}$

| ITEM | OVERHEAD UNDERGROUND DIFFERENTIAL |  |  |
| :--- | :---: | :---: | ---: |
| LABOR | $\$ 5,323.51$ | $\$ 4,494.89$ | $(\$ 828.62)$ |
| MATERIAL | $\$ 6,542.04$ | $\$ 8,421.10$ | $\$ 1,879.06$ |
| TOTAL | $\$ 11,865.55$ | $\$ 12,915.99$ | $\$ 1,050.44$ |

# OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK TWO PHASE PRIMARY LATERAL POLE LINE INCLUDING TRANSFORMER AND SERVICE 

$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 188.43$ | $\$ 325.29$ | $\$ 513.72$ |
| Primary | $\$ 561.25$ | $\$ 1,449.47$ | $\$ 2,010.72$ |
| Secondary | $\$ 280.71$ | $\$ 603.96$ | $\$ 884.67$ |
| Poles | $\$ 868.35$ | $\$ 1,219.19$ | $\$ 2,087.54$ |
| Transformers | $\$ 2,739.11$ | $\$ 482.53$ | $\$ 3,221.64$ |
| Sub-Total | $\$ 4,637.85$ | $\$ 4,080.44$ | $\$ 8,718.29$ |
| Stores Handling(2) | $\$ 376.59$ | $\$ 0.00$ | $\$ 376.59$ |
| SubTotal | $\$ 5,014.44$ | $\$ 4,080.44$ | $\$ 9,094.88$ |
| Engineering(4) | $\$ 1,527.60$ | $\$ 1,243.07$ | $\$ 2,770.67$ |
| TOTAL | $\$ 6,542.04$ | $\$ 5,323.51$ | $\$ 11,865.55$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIA, two phase, for design criteria and assumptions

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK TWO PHASE RADIAL PAD MOUNTED TRANSFORMER INCLUDING RISER AND PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 1,826.99$ | $\$ 2,571.02$ | $\$ 4,398.01$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 4,142.98$ | $\$ 321.11$ | $\$ 4,464.09$ |
| Trenching | $\$ 0.00$ | $\$ 553.18$ | $\$ 553.18$ |
| Sub-Total | $\$ 5,969.97$ | $\$ 3,445.31$ | $\$ 9,415.28$ |
| Stores Handling(2) | $\$ 484.76$ | $\$ 0.00$ | $\$ 484.76$ |
| SubTotal | $\$ 6,454.73$ | $\$ 3,445.31$ | $\$ 9,900.04$ |
| Engineering(4) | $\$ 1,966.37$ | $\$ 1,049.58$ | $\$ 3,015.95$ |
| TOTAL | $\$ 8,421.10$ | $\$ 4,494.89$ | $\$ 12,915.99$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, two phase for design criteria and assumptions

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER TRANSFORMER BANK - 300 KVA

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER
INCLUDING RISER AND PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

$\underline{2011}$

| ITEM | OVERHEAD UNDERGROUND DIFFERENTIAL |  |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 8,443.40$ | $\$ 4,267.43$ | $(\$ 4,175.97)$ |
| MATERIAL | $\$ 14,842.02$ | $\$ 17,765.86$ | $\$ 2,923.84$ |
| TOTAL | $\$ 23,285.42$ | $\$ 22,033.29$ | $(\$ 1,252.13)$ |

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER TRANSFORMER BANK - 150 KVA

THREE PHASE RADIAL PAD MOUNTED TRANSFORMER

INCLUDING RISER AND PRIMARY LATERAL TRENCH
WITH CABLE-IN-CONDUIT

## 2011

| ITEM | OVERHEAD UNDERGROUND DIFFERENTIAL |  |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 7,061.61$ | $\$ 4,399.40$ | $(\$ 2,662.21)$ |
| MATERIAL | $\$ 9,431.96$ | $\$ 14,412.84$ | $\$ 4,980.88$ |
| TOTAL | $\$ 16,493.57$ | $\$ 18,812.24$ | $\$ 2,318.67$ |

# OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> <br> THREE PHASE PRIMARY LATERAL POLE LINE <br> <br> THREE PHASE PRIMARY LATERAL POLE LINE INCLUDING TRANSFORMER AND SERVICE (300 KVA) 

$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 776.78$ | $\$ 768.89$ | $\$ 1,545.67$ |
| Primary | $\$ 902.74$ | $\$ 2,168.09$ | $\$ 3,070.83$ |
| Secondary | $\$ 300.91$ | $\$ 602.26$ | $\$ 903.17$ |
| Poles | $\$ 2,337.88$ | $\$ 2,208.80$ | $\$ 4,546.68$ |
| Transformers | $\$ 6,203.64$ | $\$ 723.78$ | $\$ 6,927.42$ |
| Sub-Total | $\$ 10,521.95$ | $\$ 6,471.82$ | $\$ 16,993.77$ |
| Stores Handling(2) | $\$ 854.38$ | $\$ 0.00$ | $\$ 854.38$ |
| SubTotal | $\$ 11,376.33$ | $\$ 6,471.82$ | $\$ 17,848.15$ |
| Engineering(4) | $\$ 3,465.69$ | $\$ 1,971.58$ | $\$ 5,437.27$ |
| TOTAL | $\$ 14,842.02$ | $\$ 8,443.40$ | $\$ 23,285.42$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.

3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIA, three phase (300 kva) for design criteria and assumptions

# OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> <br> THREE PHASE PRIMARY LATERAL POLE LINE 

 <br> <br> THREE PHASE PRIMARY LATERAL POLE LINE}

INCLUDING TRANSFORMER AND SERVICE (150 KVA)

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 593.26$ | $\$ 633.17$ | $\$ 1,226.43$ |
| Primary | $\$ 872.45$ | $\$ 2,238.89$ | $\$ 3,111.34$ |
| Secondary | $\$ 290.82$ | $\$ 621.93$ | $\$ 912.75$ |
| Poles | $\$ 1,293.24$ | $\$ 1,194.92$ | $\$ 2,488.16$ |
| Transformers | $\$ 3,636.83$ | $\$ 723.78$ | $\$ 4,360.61$ |
| Sub-Total | $\$ 6,686.60$ | $\$ 5,412.69$ | $\$ 12,099.29$ |
| Stores Handling(2) | $\$ 542.95$ | $\$ 0.00$ | $\$ 542.95$ |
| SubTotal | $\$ 7,229.55$ | $\$ 5,412.69$ | $\$ 12,642.24$ |
| Engineering(4) | $\$ 2,202.41$ | $\$ 1,648.92$ | $\$ 3,851.33$ |
| TOTAL | $\$ 9,431.96$ | $\$ 7,061.61$ | $\$ 16,493.57$ |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - 8.12 \% of All Material. |  |  |  |
| 3- Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4 - 30.464\% of All Material and Labor. |  |  |  |


| THREE PHASE RADIAL PAD MOUNTED TRANSFORMER 300 KVA |  |  |  |
| :---: | :---: | :---: | :---: |
| INCLUDING RISER AND PRIMARY LATERAL TRENCH |  |  |  |
| WITH CABLE-IN-CONDUIT |  |  |  |
| 2011 |  |  |  |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$2,791.80 | \$2,514.30 | \$5,306.10 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$9,802.95 | \$203.48 | \$10,006.43 |
| Trenching | \$0.00 | \$553.18 | \$553.18 |
| Sub-Total | \$12,594.75 | \$3,270.96 | \$15,865.71 |
| Stores Handling(2) | \$1,022.69 | \$0.00 | \$1,022.69 |
| SubTotal | \$13,617.44 | \$3,270.96 | \$16,888.40 |
| Engineering(4) | \$4,148.42 | \$996.47 | \$5,144.89 |
| TOTAL | \$17,765.86 | \$4,267.43 | \$22,033.29 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, three phase ( 300 KVA ) for design criteria and assumptions

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> THREE PHASE RADIAL PAD MOUNTED TRANSFORMER 150 KVA <br> INCLUDING RISER AND PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 2,814.44$ | $\$ 2,615.46$ | $\$ 5,429.90$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 7,403.25$ | $\$ 203.48$ | $\$ 7,606.73$ |
| Trenching | $\$ 0.00$ | $\$ 553.18$ | $\$ 553.18$ |
| Sub-Total | $\$ 10,217.69$ | $\$ 3,372.12$ | $\$ 13,589.81$ |
| Stores Handling(2) | $\$ 829.68$ | $\$ 0.00$ | $\$ 829.68$ |
| SubTotal | $\$ 11,047.37$ | $\$ 3,372.12$ | $\$ 14,419.49$ |
| Engineering(4) | $\$ 3,365.47$ | $\$ 1,027.28$ | $\$ 4,392.75$ |
| TOTAL | $\$ 14,412.84$ | $\$ 4,399.40$ | $\$ 18,812.24$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET <br> COST PER TRANSFORMER BANK - <br> SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER

 INCLUDING RISER AND PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT
## $\underline{2011}$

| ITEM | OVERHEAD UNDERGROUND |  | DIFFERENTIAL |
| :--- | :---: | ---: | ---: |
| LABOR | $\$ 3,525.96$ | $\$ 4,318.91$ | $\$ 792.95$ |
| MATERIAL | $\$ 3,573.04$ | $\$ 4,987.87$ | $\$ 1,414.83$ |
| TOTAL | $\$ 7,099.00$ | $\$ 9,306.78$ | $\$ 2,207.78$ |

# OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK SINGLE PHASE PRIMARY LATERAL POLE LINE INCLUDING TRANSFORMER AND SERVICE 

$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service | \$84.13 | \$152.98 | \$237.11 |
| Primary | \$255.43 | \$714.03 | \$969.46 |
| Secondary | \$255.43 | \$595.04 | \$850.47 |
| Poles | \$568.49 | \$999.32 | \$1,567.81 |
| Transformers | \$1,369.56 | \$241.26 | \$1,610.82 |
| Sub-Total | \$2,533.04 | \$2,702.63 | \$5,235.67 |
| Stores Handling(2) | \$205.68 | \$0.00 | \$205.68 |
| SubTotal | \$2,738.72 | \$2,702.63 | \$5,441.35 |
| Engineering(4) | \$834.32 | \$823.33 | \$1,657.65 |
| TOTAL | \$3,573.04 | \$3,525.96 | \$7,099.00 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| 5 - See Appendix B, page 1, IIA, Single Phase, for design criteria and assumptions |  |  |  |

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER
INCLUDING RISER AND PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 1,373.12$ | $\$ 2,012.02$ | $\$ 3,385.14$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 2,162.93$ | $\$ 192.03$ | $\$ 2,354.96$ |
| Trenching | $\$ 0.00$ | $\$ 1,106.37$ | $\$ 1,106.37$ |
| Sub-Total | $\$ 3,536.05$ | $\$ 3,310.42$ | $\$ 6,846.47$ |
| Stores Handling(2) | $\$ 287.13$ | $\$ 0.00$ | $\$ 287.13$ |
| SubTotal | $\$ 3,823.18$ | $\$ 3,310.42$ | $\$ 7,133.60$ |
| Engineering(4) | $\$ 1,164.69$ | $\$ 1,008.49$ | $\$ 2,173.18$ |
| TOTAL | $\$ 4,987.87$ | $\$ 4,318.91$ | $\$ 9,306.78$ |

1 - Includes Sales Tax.

2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.

Note: See Appendix B, page 2, IIIA, single phase (loop), for design criteria and assumptions

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER TRANSFORMER BANK -

TWO PHASE LOOP PAD MOUNTED TRANSFORMER

INCLUDING RISER AND PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

 2011| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | :---: | ---: | ---: |
| LABOR | $\$ 5,323.51$ | $\$ 6,163.15$ | $\$ 839.64$ |
| MATERIAL | $\$ 6,542.04$ | $\$ 9,443.79$ | $\$ 2,901.75$ |
| TOTAL | $\$ 11,865.55$ | $\$ 15,606.94$ | $\$ 3,741.39$ |

# OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK TWO PHASE PRIMARY LATERAL POLE LINE INCLUDING TRANSFORMER AND SERVICE 

| 2011 |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$188.43 | \$325.29 | \$513.72 |
| Primary | \$561.25 | \$1,449.47 | \$2,010.72 |
| Secondary | \$280.71 | \$603.96 | \$884.67 |
| Poles | \$868.35 | \$1,219.19 | \$2,087.54 |
| Transformers | \$2,739.11 | \$482.53 | \$3,221.64 |
| Sub-Total | \$4,637.85 | \$4,080.44 | \$8,718.29 |
| Stores Handling(2) | \$376.59 | \$0.00 | \$376.59 |
| SubTotal | \$5,014.44 | \$4,080.44 | \$9,094.88 |
| Engineering(4) | \$1,527.60 | \$1,243.07 | \$2,770.67 |
| TOTAL | \$6,542.04 | \$5,323.51 | \$11,865.55 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 1, IIA, two phase, for design criteria and assumptions |  |  |  |


| TWO PHASE LOOP PAD MOUNTED TRANSFORMER |  |  |  |
| :---: | :---: | :---: | :---: |
| INCLUDING RISER AND PRIMARY LATERAL TRENCH |  |  |  |
| WITH CABLE-IN-CONDUIT |  |  |  |
| $\underline{2011}$ |  |  |  |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$2,557.21 | \$3,309.64 | \$5,866.85 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$4,137.78 | \$308.01 | \$4,445.79 |
| Trenching | \$0.00 | \$1,106.37 | \$1,106.37 |
| Sub-Total | \$6,694.99 | \$4,724.02 | \$11,419.01 |
| Stores Handling(2) | \$543.63 | \$0.00 | \$543.63 |
| SubTotal | \$7,238.62 | \$4,724.02 | \$11,962.64 |
| Engineering(4) | \$2,205.17 | \$1,439.13 | \$3,644.30 |
| TOTAL | \$9,443.79 | \$6,163.15 | \$15,606.94 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, two phase (loop)for design criteria and assumptions

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

COST PER TRANSFORMER BANK -

## THREE PHASE 150 KVA LOOP PAD MOUNTED TRANSFORMER

## INCLUDING RISER AND PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

## 2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 7,061.61$ | $\$ 5,838.77$ | $(\$ 1,222.84)$ |
| MATERIAL | $\$ 9,431.96$ | $\$ 17,411.13$ | $\$ 7,979.17$ |
| TOTAL | $\$ 16,493.57$ | $\$ 23,249.90$ | $\$ 6,756.33$ |

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER TRANSFORMER BANK -

THREE PHASE 300 KVA LOOP PAD MOUNTED TRANSFORMER INCLUDING RISER AND PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

 $\underline{2011}$| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 8,443.40$ | $\$ 5,838.77$ | $(\$ 2,604.63)$ |
| MATERIAL | $\$ 14,842.02$ | $\$ 20,143.38$ | $\$ 5,301.36$ |
| TOTAL | $\$ 23,285.42$ | $\$ 25,982.15$ | $\$ 2,696.73$ |

# OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> <br> THREE PHASE PRIMARY LATERAL POLE LINE <br> <br> THREE PHASE PRIMARY LATERAL POLE LINE INCLUDING TRANSFORMER AND SERVICE (150 KVA) 

## 2011

| ITEM | MATERIAL (1) | LABOR(3) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service | \$593.26 | \$633.17 | \$1,226.43 |
| Primary | \$872.45 | \$2,238.89 | \$3,111.34 |
| Secondary | \$290.82 | \$621.93 | \$912.75 |
| Poles | \$1,293.24 | \$1,194.92 | \$2,488.16 |
| Transformers | \$3,636.83 | \$723.78 | \$4,360.61 |
| Sub-Total | \$6,686.60 | \$5,412.69 | \$12,099.29 |
| Stores Handling(2) | \$542.95 | \$0.00 | \$542.95 |
| SubTotal | \$7,229.55 | \$5,412.69 | \$12,642.24 |
| Engineering(4) | \$2,202.41 | \$1,648.92 | \$3,851.33 |
| TOTAL | \$9,431.96 | \$7,061.61 | \$16,493.57 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All | and Labor. |  |  |

## OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> THREE PHASE PRIMARY LATERAL POLE LINE INCLUDING TRANSFORMER (300 TOTAL. KVA) AND SERVICE

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 776.78$ | $\$ 768.89$ | $\$ 1,545.67$ |
| Primary | $\$ 902.74$ | $\$ 2,168.09$ | $\$ 3,070.83$ |
| Secondary | $\$ 300.91$ | $\$ 602.26$ | $\$ 903.17$ |
| Poles | $\$ 2,337.88$ | $\$ 2,208.80$ | $\$ 4,546.68$ |
| Transformers | $\$ 6,203.64$ | $\$ 723.78$ | $\$ 6,927.42$ |
| Sub-Total | $\$ 10,521.95$ | $\$ 6,471.82$ | $\$ 16,993.77$ |
| Stores Handling(2) | $\$ 854.38$ | $\$ 0.00$ | $\$ 854.38$ |
| SubTotal | $\$ 11,376.33$ | $\$ 6,471.82$ | $\$ 17,848.15$ |
| Engineering(4) | $\$ 3,465.69$ | $\$ 1,971.58$ | $\$ 5,437.27$ |
| TOTAL | $\$ 14,842.02$ | $\$ 8,443.40$ | $\$ 23,285.42$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIA, 3 phase ( 300 KVA ) for design criteria and assumptions

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> THREE PHASE 150 KVA LOOP PAD MOUNTED TRANSFORMER <br> INCLUDING RISER AND PRIMARY LATERAL TRENCH <br> WITH CABLE-IN-CONDUIT

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 4,094.08$ | $\$ 3,165.54$ | $\$ 7,259.62$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 8,249.19$ | $\$ 203.48$ | $\$ 8,452.67$ |
| Trenching | $\$ 0.00$ | $\$ 1,106.37$ | $\$ 1,106.37$ |
| Sub-Total | $\$ 12,343.27$ | $\$ 4,475.39$ | $\$ 16,818.66$ |
| Stores Handling(2) | $\$ 1,002.27$ | $\$ 0.00$ | $\$ 1,002.27$ |
| SubTotal | $\$ 13,345.54$ | $\$ 4,475.39$ | $\$ 17,820.93$ |
| Engineering(4) | $\$ 4,065.59$ | $\$ 1,363.38$ | $\$ 5,428.97$ |
| TOTAL | $\$ 17,411.13$ | $\$ 5,838.77$ | $\$ 23,249.90$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, three phase (300kva-loop) for design criteria and assumptions

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

 THREE PHASE 300 KVA LOOP PAD MOUNTED TRANSFORMER INCLUDING RISER AND PRIMARY LATERAL TRENCH
## WITH CABLE-IN-CONDUIT

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 4,094.08$ | $\$ 3,165.54$ | $\$ 7,259.62$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 10,186.16$ | $\$ 203.48$ | $\$ 10,389.64$ |
| Trenching | $\$ 0.00$ | $\$ 1,106.37$ | $\$ 1,106.37$ |
| Sub-Total | $\$ 14,280.24$ | $\$ 4,475.39$ | $\$ 18,755.63$ |
| Stores Handling(2) | $\$ 1,159.56$ | $\$ 0.00$ | $\$ 1,159.56$ |
| SubTotal | $\$ 15,439.80$ | $\$ 4,475.39$ | $\$ 19,915.19$ |
| Engineering(4) | $\$ 4,703.58$ | $\$ 1,363.38$ | $\$ 6,066.96$ |
| TOTAL | $\$ 20,143.38$ | $\$ 5,838.77$ | $\$ 25,982.15$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, three phase (300kva-loop) for design criteria and assumptions

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER TRANSFORMER BANK :

## SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT
INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT
2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 3,525.96$ | $\$ 3,378.47$ | $(\$ 147.49)$ |
| MATERIAL | $\$ 3,573.04$ | $\$ 4,633.44$ | $\$ 1,060.40$ |
| TOTAL | $\$ 7,099.00$ | $\$ 8,011.91$ | $\$ 912.91$ |

# OVERHEAD VS. UNDERGROUND 

## SUMMARY SHEET

## COST PER TRANSFORMER BANK -

## SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER

## FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT
$\underline{2011}$

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | :---: | ---: | ---: |
| LABOR | $\$ 3,525.96$ | $\$ 2,449.20$ | $(\$ 1,076.76)$ |
| MATERIAL | $\$ 3,573.04$ | $\$ 4,228.36$ | $\$ 655.32$ |
| TOTAL | $\$ 7,099.00$ | $\$ 6,677.56$ | $(\$ 421.44)$ |

# OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> SINGLE PHASE PRIMARY LATERAL POLE LINE 

INCLUDING TRANSFORMER AND SERVICE

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 84.13$ | $\$ 152.98$ | $\$ 237.11$ |
| Primary | $\$ 255.43$ | $\$ 714.03$ | $\$ 969.46$ |
| Secondary | $\$ 255.43$ | $\$ 595.04$ | $\$ 850.47$ |
| Poles | $\$ 568.49$ | $\$ 999.32$ | $\$ 1,567.81$ |
| Transformers | $\$ 1,369.56$ | $\$ 241.26$ | $\$ 1,610.82$ |
| Sub-Total | $\$ 2,533.04$ | $\$ 2,702.63$ | $\$ 5,235.67$ |
| Stores Handling(2) | $\$ 205.68$ | $\$ 0.00$ | $\$ 205.68$ |
| SubTotal | $\$ 2,738.72$ | $\$ 2,702.63$ | $\$ 5,441.35$ |
| Engineering(4) | $\$ 834.32$ | $\$ 823.33$ | $\$ 1,657.65$ |
| TOTAL | $\$ 3,573.04$ | $\$ 3,525.96$ | $\$ 7,099.00$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIA single phase, for design criteria and assumptions

| SINGLE PHASE LOOP PAD MOUNTED TRANSFORMER |  |  |  |
| :---: | :---: | :---: | :---: |
| FROM EXISTING UNDERGROUND TERMINATION POINT |  |  |  |
| INCLUDING PRIMARY LATERAL AND TRENCH WITH CABLE-IN-CONDUIT |  |  |  |
| 2011 |  |  |  |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$1,121.86 | \$1,291.18 | \$2,413.04 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$2,162.93 | \$192.03 | \$2,354.96 |
| Trenching | \$0.00 | \$1,106.37 | \$1,106.37 |
| Sub-Total | \$3,284.79 | \$2,589.58 | \$5,874.37 |
| Stores Handling(2) | \$266.72 | \$0.00 | \$266.72 |
| SubTotal | \$3,551.51 | \$2,589.58 | \$6,141.09 |
| Engineering(4) | \$1,081.93 | \$788.89 | \$1,870.82 |
| TOTAL | \$4,633.44 | \$3,378.47 | \$8,011.91 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, single phase (loop), for design criteria and assumptions. Riser length and riser size are not applicable.

| SINGLE PHASE RADIAL PAD MOUNTED TRANSFORMER |  |  |  |
| :---: | :---: | :---: | :---: |
| FROM EXISTING UNDERGROUND TERMINATION POINT |  |  |  |
| INCLUDING PRIMARY LATERAL AND TRENCH WITH CABLE-IN-CONDUIT |  |  |  |
| 2011 |  |  |  |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$834.68 | \$578.90 | \$1,413.58 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$2,162.93 | \$192.03 | \$2,354.96 |
| Trenching | \$0.00 | \$1,106.37 | \$1,106.37 |
| Sub-Total | \$2,997.61 | \$1,877.30 | \$4,874.91 |
| Stores Handling(2) | \$243.41 | \$0.00 | \$243.41 |
| SubTotal | \$3,241.02 | \$1,877.30 | \$5,118.32 |
| Engineering(4) | \$987.34 | \$571.90 | \$1,559.24 |
| TOTAL | \$4,228.36 | \$2,449.20 | \$6,677.56 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, single phase (radial), for design criteria and assumptions. Riser length and riser size are not applicable.

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET <br> COST PER TRANSFORMER BANK -

TWO PHASE LOOP PAD MOUNTED TRANSFORMER
FROM EXISTING UNDERGROUND TERMINATION POINT

## INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

2011

| ITEM | OVERHEAD |  | UNDERGROUND |
| :--- | :---: | ---: | ---: | DIFFERENTIAL

FPL 3/15/2011

## OVERHEAD VS. UNDERGROUND <br> SUMMARY SHEET <br> COST PER TRANSFORMER BANK :

TWO PHASE RADIAL PAD MOUNTED TRANSFORMER
FROM EXISTING UNDERGROUND TERMINATION POINT
INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 5,323.51$ | $\$ 3,653.55$ | $(\$ 1,669.96)$ |
| MATERIAL | $\$ 6,542.04$ | $\$ 7,766.99$ | $\$ 1,224.95$ |
| TOTAL | $\$ 11,865.55$ | $\$ 11,420.54$ | $(\$ 445.01)$ |


| TWO PHASE PRIMARY LATERAL POLE LINE |  |  |  |
| :---: | :---: | :---: | :---: |
| INCLUDING TRANSFORMER AND SERVICE |  |  |  |
|  | 2011 |  |  |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$188.43 | \$325.29 | \$513.72 |
| Primary | \$561.25 | \$1,449.47 | \$2,010.72 |
| Secondary | \$280.71 | \$603.96 | \$884.67 |
| Poles | \$868.35 | \$1,219.19 | \$2,087.54 |
| Transformers | \$2,739.11 | \$482.53 | \$3,221.64 |
| Sub-Total | \$4,637.85 | \$4,080.44 | \$8,718.29 |
| Stores Handling(2) | \$376.59 | \$0.00 | \$376.59 |
| SubTotal | \$5,014.44 | \$4,080.44 | \$9,094.88 |
| Engineering(4) | \$1,527.60 | \$1,243.07 | \$2,770.67 |
| TOTAL | \$6,542.04 | \$5,323.51 | \$11,865.55 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIA, two phase, for design criteria and assumptions

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

 TWO PHASE LOOP PAD MOUNTED TRANSFORMER
## FROM EXISTING UNDERGROUND TERMINATION POINT

INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 2,112.46$ | $\$ 2,365.52$ | $\$ 4,477.98$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 4,139.13$ | $\$ 304.30$ | $\$ 4,443.43$ |
| Trenching | $\$ 0.00$ | $\$ 1,106.37$ | $\$ 1,106.37$ |
| Sub-Total | $\$ 6,251.59$ | $\$ 3,776.19$ | $\$ 10,027.78$ |
| Stores Handling(2) | $\$ 507.63$ | $\$ 0.00$ | $\$ 507.63$ |
| SubTotal | $\$ 6,759.22$ | $\$ 3,776.19$ | $\$ 10,535.41$ |
| Engineering(4) | $\$ 2,059.13$ | $\$ 1,150.38$ | $\$ 3,209.51$ |
| TOTAL | $\$ 8,818.35$ | $\$ 4,926.57$ | $\$ 13,744.92$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: Appendix B, page 2, IIIA, two phase (loop), for design criteria and assumptions. Riser length and riser size are not applicable.

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

 TWO PHASE RADIAL PAD MOUNTED TRANSFORMERFROM EXISTING UNDERGROUND TERMINATION POINT
INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 1,359.65$ | $\$ 1,366.30$ | $\$ 2,725.95$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 4,146.60$ | $\$ 327.76$ | $\$ 4,474.36$ |
| Trenching | $\$ 0.00$ | $\$ 1,106.37$ | $\$ 1,106.37$ |
| Sub-Total | $\$ 5,506.25$ | $\$ 2,800.43$ | $\$ 8,306.68$ |
| Stores Handling(2) | $\$ 447.11$ | $\$ 0.00$ | $\$ 447.11$ |
| SubTotal | $\$ 5,953.36$ | $\$ 2,800.43$ | $\$ 8,753.79$ |
| Engineering(4) | $\$ 1,813.63$ | $\$ 853.12$ | $\$ 2,666.75$ |
| TOTAL | $\$ 7,766.99$ | $\$ 3,653.55$ | $\$ 11,420.54$ |

1 - Includes Sales Tax.

2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.

4-30.464\% of All Material and Labor.
Note: Appendix B, page 2, IIIA, two phase (radial), for design criteria and assumptions. Riser length and riser size are not applicable.

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET <br> COST PER TRANSFORMER BANK -

THREE PHASE 150 KVA LOOP PAD MOUNTED TRANSFORMER
FROM EXISTING UNDERGROUND TERMINATION POINT
INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT
$\underline{2011}$

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 7,061.61$ | $\$ 4,271.04$ | $(\$ 2,790.57)$ |
| MATERIAL | $\$ 9,431.96$ | $\$ 16,651.98$ | $\$ 7,220.02$ |
| TOTAL | $\$ 16,493.57$ | $\$ 20,923.02$ | $\$ 4,429.45$ |

## OVERHEAD VS. UNDERGROUND <br> SUMMARY SHEET <br> COST PER TRANSFORMER BANK -

## THREE PHASE 300 KVA LOOP PAD MOUNTED TRANSFORMER

## FROM EXISTING UNDERGROUND TERMINATION POINT

## INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

$\underline{2011}$

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 8,443.40$ | $\$ 4,271.04$ | $(\$ 4,172.36)$ |
| MATERIAL | $\$ 14,842.02$ | $\$ 19,384.24$ | $\$ 4,542.22$ |
| TOTAL | $\$ 23,285.42$ | $\$ 23,655.28$ | $\$ 369.86$ |

## OVERHEAD VS. UNDERGROUND <br> SUMMARY SHEET <br> COST PER TRANSFORMER BANK -

THREE PHASE 150 KVA RADIAL PAD MOUNTED TRANSFORMER
FROM EXISTING UNDERGROUND TERMINATION POINT
INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT
$\underline{2011}$

| ITEM | OVERHEAD UNDERGROUND |  | DIFFERENTIAL |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 7,061.61$ | $\$ 2,751.13$ | $(\$ 4,310.48)$ |
| MATERIAL | $\$ 9,431.96$ | $\$ 13,550.15$ | $\$ 4,118.19$ |
| TOTAL | $\$ 16,493.57$ | $\$ 16,301.28$ | $(\$ 192.29)$ |

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET <br> COST PER TRANSFORMER BANK -

## THREE PHASE 300 KVA RADIAL PAD MOUNTED TRANSFORMER

FROM EXISTING UNDERGROUND TERMINATION POINT
INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

## 2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL. |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 8,443.40$ | $\$ 2,748.16$ | $(\$ 5,695.24)$ |
| MATERIAL | $\$ 14,842.02$ | $\$ 16,887.82$ | $\$ 2,045.80$ |
| TOTAL | $\$ 23,285.42$ | $\$ 19,635.98$ | $(\$ 3,649.44)$ |


| THREE PHASE PRIMARY LATERAL POLE LINE |  |  |  |
| :---: | :---: | :---: | :---: |
| INCLUDING TRANSFORMER (150 TOTAL KVA) AND SERVICE |  |  |  |
|  | 2011 |  |  |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$593.26 | \$633.17 | \$1,226.43 |
| Primary | \$872.45 | \$2,238.89 | \$3,111.34 |
| Secondary | \$290.82 | \$621.93 | \$912.75 |
| Poles | \$1,293.24 | \$1,194.92 | \$2,488.16 |
| Transformers | \$3,636.83 | \$723.78 | \$4,360.61 |
| Sub-Total | \$6,686.60 | \$5,412.69 | \$12,099.29 |
| Stores Handling(2) | \$542.95 | \$0.00 | \$542.95 |
| SubTotal | \$7,229.55 | \$5,412.69 | \$12,642.24 |
| Engineering(4) | \$2,202.41 | \$1,648.92 | \$3,851.33 |
| TOTAL | \$9,431.96 | \$7,061.61 | \$16,493.57 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIA, three phase ( 150 KVA ), for design criteria and assumptions

## OVERHEAD MATERIAL AND LABOR COST PER TRANSFORMER BANK <br> THREE PHASE PRIMARY LATERAL POLE LINE <br> INCLUDING TRANSFORMER ( 300 TOTAL KVA) AND SERVICE

$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 776.78$ | $\$ 768.89$ | $\$ 1,545.67$ |
| Primary | $\$ 902.74$ | $\$ 2,168.09$ | $\$ 3,070.83$ |
| Secondary | $\$ 300.91$ | $\$ 602.26$ | $\$ 903.17$ |
| Poles | $\$ 2,337.88$ | $\$ 2,208.80$ | $\$ 4,546.68$ |
| Transformers | $\$ 6,203.64$ | $\$ 723.78$ | $\$ 6,927.42$ |
| Sub-Total | $\$ 10,521.95$ | $\$ 6,471.82$ | $\$ 16,993.77$ |
| Stores Handling(2) | $\$ 854.38$ | $\$ 0.00$ | $\$ 854.38$ |
| SubTotal | $\$ 11,376.33$ | $\$ 6,471.82$ | $\$ 17,848.15$ |
| Engineering(4) | $\$ 3,465.69$ | $\$ 1,971.58$ | $\$ 5,437.27$ |
| TOTAL | $\$ 14,842.02$ | $\$ 8,443.40$ | $\$ 23,285.42$ |

1 - Includes Sales Tax.

2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIA, three phase ( 300 KVA ), for design criteria and assumptions

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK THREE PHASE LOOP PAD MOUNTED TRANSFORMER (150 KVA) FROM EXISTING UNDERGROUND TERMINATION POINT <br> INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 3,555.90$ | $\$ 1,963.88$ | $\$ 5,519.78$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 8,249.19$ | $\$ 203.48$ | $\$ 8,452.67$ |
| Trenching | $\$ 0.00$ | $\$ 1,106.37$ | $\$ 1,106.37$ |
| Sub-Total | $\$ 11,805.09$ | $\$ 3,273.73$ | $\$ 15,078.82$ |
| Stores Handling(2) | $\$ 958.57$ | $\$ 0.00$ | $\$ 958.57$ |
| SubTotal | $\$ 12,763.66$ | $\$ 3,273.73$ | $\$ 16,037.39$ |
| Engineering(4) | $\$ 3,888.32$ | $\$ 997.31$ | $\$ 4,885.63$ |
| TOTAL | $\$ 16,651.98$ | $\$ 4,271.04$ | $\$ 20,923.02$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, three phase (150kva-loop) for design criteria and assumptions. Riser length and riser size are not applicable.

| THREE PHASE LOOP PAD MOUNTED TRANSFORMER ( $300 \mathrm{KVA)}$ |  |  |  |
| :---: | :---: | :---: | :---: |
| FROM EXISTING UNDERGROUND TERMINATION POINT |  |  |  |
| INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT |  |  |  |
| $\underline{2011}$ |  |  |  |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$3,555.90 | \$1,963.88 | \$5,519.78 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$10,186.16 | \$203.48 | \$10,389.64 |
| Trenching | \$0.00 | \$1,106.37 | \$1,106.37 |
| Sub-Total | \$13,742.06 | \$3,273.73 | \$17,015.79 |
| Stores Handling(2) | \$1,115.86 | \$0.00 | \$1,115.86 |
| SubTotal | \$14,857.92 | \$3,273.73 | \$18,131.65 |
| Engineering(4) | \$4,526.32 | \$997.31 | \$5,523.63 |
| TOTAL | \$19,384.24 | \$4,271.04 | \$23,655.28 |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, three phase (300kva-loop) for design criteria and assumptions. Riser length and riser size are not applicable.

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK

## THREE PHASE RADIAL PAD MOUNTED TRANSFORMER (150 KVA)

FROM EXISTING UNDERGROUND TERMINATION POINT
INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT
$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$2,202.85 | \$798.88 | \$3,001.73 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$7,403.25 | \$203.48 | \$7,606.73 |
| Trenching | \$0.00 | \$1,106.37 | \$1,106.37 |
| Sub-Total | \$9,606.10 | \$2,108.73 | \$11,714.83 |
| Stores Handling(2) | \$780.02 | \$0.00 | \$780.02 |
| SubTotal | \$10,386.12 | \$2,108.73 | \$12,494.85 |
| Engineering(4) | \$3,164.03 | \$642.40 | \$3,806.43 |
| TOTAL | \$13,550.15 | \$2,751.13 | \$16,301.28 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 2, IIIA, three phase (150kva-radial) for design criteria and assumptions. Riser length and riser size are not applicable. |  |  |  |

## UNDERGROUND MATERIAL AND LABOR COST PER TRANSFORMER BANK THREE PHASE RADIAL PAD MOUNTED TRANSFORMER (300 KVA) <br> FROM EXISTING UNDERGROUND TERMINATION POINT <br> INCLUDING PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 2,169.33$ | $\$ 796.60$ | $\$ 2,965.93$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 9,802.95$ | $\$ 203.48$ | $\$ 10,006.43$ |
| Trenching | $\$ 0.00$ | $\$ 1,106.37$ | $\$ 1,106.37$ |
| Sub-Total | $\$ 11,972.28$ | $\$ 2,106.45$ | $\$ 14,078.73$ |
| Stores Handling(2) | $\$ 972.15$ | $\$ 0.00$ | $\$ 972.15$ |
| SubTotal | $\$ 12,944.43$ | $\$ 2,106.45$ | $\$ 15,050.88$ |
| Engineering(4) | $\$ 3,943.39$ | $\$ 641.71$ | $\$ 4,585.10$ |
| TOTAL | $\$ 16,887.82$ | $\$ 2,748.16$ | $\$ 19,635.98$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIIA, three phase (300kva-radial) for design criteria and assumptions. Riser length and riser size are not applicable.

# OVERHEAD VS. UNDERGROUND SUMMARY SHEET <br> <br> COST PER RISER - <br> <br> COST PER RISER - <br> <br> SMALL SINGLE PHASE RISER <br> <br> SMALL SINGLE PHASE RISER 2011 

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 199.58$ | $\$ 660.30$ | $\$ 460.72$ |
| MATERIAL | $\$ 86.72$ | $\$ 304.48$ | $\$ 217.76$ |
| TOTAL | $\$ 286.30$ | $\$ 964.78$ | $\$ 678.48$ |

# OVERHEAD MATERIAL AND LABOR COST PER SERVICE <br> <br> SINGLE PHASE SMALL SERVICE 

 <br> <br> SINGLE PHASE SMALL SERVICE}

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service | \$61.48 | \$152.98 | \$214.46 |
| Primary | \$0.00 | \$0.00 | \$0.00 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Poles | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$0.00 | \$0.00 | \$0.00 |
| Sub-Total | \$61.48 | \$152.98 | \$214.46 |
| Stores Handling(2) | \$4.99 | \$0.00 | \$4.99 |
| SubTotal | \$66.47 | \$152.98 | \$219.45 |
| Engineering(4) | \$20.25 | \$46.60 | \$66.85 |
| TOTAL | \$86.72 | \$199.58 | \$286.30 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 1, B, small single phase, for design criteria and assumptions |  |  |  |

# UNDERGROUND MATERIAL AND LABOR COST PER RISER 

## SMALL SINGLE PHASE RISER

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 215.85$ | $\$ 506.12$ | $\$ 721.97$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 215.85$ | $\$ 506.12$ | $\$ 721.97$ |
| Stores Handling(2) | $\$ 17.53$ | $\$ 0.00$ | $\$ 17.53$ |
| SubTotal | $\$ 233.38$ | $\$ 506.12$ | $\$ 739.50$ |
| Engineering(4) | $\$ 71.10$ | $\$ 154.18$ | $\$ 225.28$ |
| TOTAL | $\$ 304.48$ | $\$ 660.30$ | $\$ 964.78$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIIB, small single phase, for design criteria and assumptions

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER RISER -

## LARGE SINGLE PHASE RISER

## 2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 424.39$ | $\$ 954.58$ | $\$ 530.19$ |
| MATERIAL | $\$ 429.11$ | $\$ 1,085.24$ | $\$ 656.13$ |
| TOTAL | $\$ 853.50$ | $\$ 2,039.82$ | $\$ 1,186.32$ |

## OVERHEAD MATERIAL AND LABOR COST PER SERVICE

## SINGLE PHASE LARGE SERVICE

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 304.21$ | $\$ 325.29$ | $\$ 629.50$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Poles | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 304.21$ | $\$ 325.29$ | $\$ 629.50$ |
| Stores Handling(2) | $\$ 24.70$ | $\$ 0.00$ | $\$ 24.70$ |
| SubTotal | $\$ 328.91$ | $\$ 325.29$ | $\$ 654.20$ |
| Engineering(4) | $\$ 100.20$ | $\$ 99.10$ | $\$ 199.30$ |
| TOTAL. | $\$ 429.11$ | $\$ 424.39$ | $\$ 853.50$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIB, large single phase, for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER RISER <br> <br> LARGE SINGLE PHASE RISER 

 <br> <br> LARGE SINGLE PHASE RISER}

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 769.36$ | $\$ 731.68$ | $\$ 1,501.04$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 769.36$ | $\$ 731.68$ | $\$ 1,501.04$ |
| Stores Handling(2) | $\$ 62.47$ | $\$ 0.00$ | $\$ 62.47$ |
| SubTotal | $\$ 831.83$ | $\$ 731.68$ | $\$ 1,563.51$ |
| Engineering(4) | $\$ 253.41$ | $\$ 222.90$ | $\$ 476.31$ |
| TOTAL | $\$ 1,085.24$ | $\$ 954.58$ | $\$ 2,039.82$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIIB, large single phase, for design criteria and assumptions

## OVERHEAD VS. UNDERGROUND <br> SUMMARY SHEET <br> COST PER RISER - <br> SMALL THREE PHASE RISER 2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 250.92$ | $\$ 787.38$ | $\$ 536.46$ |
| MATERIAL | $\$ 111.04$ | $\$ 474.73$ | $\$ 363.69$ |
| TOTAL | $\$ 361.96$ | $\$ 1,262.11$ | $\$ 900.15$ |

## OVERHEAD MATERIAL AND LABOR COST PER SERVICE

## THREE PHASE SMALL SERVICE

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 78.72$ | $\$ 192.33$ | $\$ 271.05$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Poles | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 78.72$ | $\$ 192.33$ | $\$ 271.05$ |
| Stores Handling(2) | $\$ 6.39$ | $\$ 0.00$ | $\$ 6.39$ |
| SubTotal | $\$ 85.11$ | $\$ 192.33$ | $\$ 277.44$ |
| Engineering(4) | $\$ 25.93$ | $\$ 58.59$ | $\$ 84.52$ |
| TOTAL | $\$ 111.04$ | $\$ 250.92$ | $\$ 361.96$ |
|  |  |  |  |
| 1- Includes Sales Tax. |  |  |  |
| 2 - 8.12 \% of All Material. |  |  |  |
| 3- Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 1, IIB, small three phase, for design criteria and |  |  |  |
| assumptions |  |  |  |

# UNDERGROUND MATERIAL AND LABOR COST PER RISER <br> SMALL THREE PHASE RISER 

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 336.55$ | $\$ 603.52$ | $\$ 940.07$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 336.55$ | $\$ 603.52$ | $\$ 940.07$ |
| Stores Handling(2) | $\$ 27.33$ | $\$ 0.00$ | $\$ 27.33$ |
| SubTotal | $\$ 363.88$ | $\$ 603.52$ | $\$ 967.40$ |
| Engineering(4) | $\$ 110.85$ | $\$ 183.86$ | $\$ 294.71$ |
| TOTAL | $\$ 474.73$ | $\$ 787.38$ | $\$ 1,262.11$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.

3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIIB, small three phase, for design criteria and assumptions

# OVERHEAD VS. UNDERGROUND 

## SUMMARY SHEET

## COST PER RISER -

## LARGE THREE PHASE RISER

## 2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 424.39$ | $\$ 1,201.38$ | $\$ 776.99$ |
| MATERIAL | $\$ 429.11$ | $\$ 1,373.55$ | $\$ 944.44$ |
| TOTAL | $\$ 853.50$ | $\$ 2,574.93$ | $\$ 1,721.43$ |

# OVERHEAD MATERIAL AND LABOR COST PER SERVICE 

## THREE PHASE LARGE SERVICE

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 304.21$ | $\$ 325.29$ | $\$ 629.50$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Poles | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 304.21$ | $\$ 325.29$ | $\$ 629.50$ |
| Stores Handling(2) | $\$ 24.70$ | $\$ 0.00$ | $\$ 24.70$ |
| SubTotal | $\$ 328.91$ | $\$ 325.29$ | $\$ 654.20$ |
| Engineering(4) | $\$ 100.20$ | $\$ 99.10$ | $\$ 199.30$ |
| TOTAL | $\$ 429.11$ | $\$ 424.39$ | $\$ 853.50$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 1, IIB, large three phase, for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER RISER 

## LARGE THREE PHASE RISER

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$0.00 | \$0.00 | \$0.00 |
| Secondary | \$973.75 | \$920.85 | \$1,894.60 |
| Transformers | \$0.00 | \$0.00 | \$0.00 |
| Trenching | \$0.00 | \$0.00 | \$0.00 |
| Sub-Total | \$973.75 | \$920.85 | \$1,894.60 |
| Stores Handling(2) | \$79.07 | \$0.00 | \$79.07 |
| SubTotal | \$1,052.82 | \$920.85 | \$1,973.67 |
| Engineering(4) | \$320.73 | \$280.53 | \$601.26 |
| TOTAL | \$1,373.55 | \$1,201.38 | \$2,574.93 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 3, IIIB, large three phase, for design criteria and assumptions |  |  |  |

## UNDERGROUND MATERIAL AND LABOR COST PER RISER

## SMALL HANDHOLE

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | :---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 99.34$ | $\$ 65.50$ | $\$ 164.84$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 99.34$ | $\$ 65.50$ | $\$ 164.84$ |
| Stores Handling(2) | $\$ 8.07$ | $\$ 0.00$ | $\$ 8.07$ |
| SubTotal | $\$ 107.41$ | $\$ 65.50$ | $\$ 172.91$ |
| Engineering(4) | $\$ 32.72$ | $\$ 19.95$ | $\$ 52.67$ |
| TOTAL | $\$ 140.13$ | $\$ 85.45$ | $\$ 225.58$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIIC, small handhole, for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER RISER INTERMEDIATE HANDHOLE 

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :---: | :---: | :---: | :---: |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$0.00 | \$0.00 | \$0.00 |
| Secondary | \$127.15 | \$65.50 | \$192.65 |
| Transformers | \$0.00 | \$0.00 | \$0.00 |
| Trenching | \$0.00 | \$0.00 | \$0.00 |
| Sub-Total | \$127.15 | \$65.50 | \$192.65 |
| Stores Handling(2) | \$10.32 | \$0.00 | \$10.32 |
| SubTotal | \$137.47 | \$65.50 | \$202.97 |
| Engineering(4) | \$41.88 | \$19.95 | \$61.83 |
| TOTAL | \$179.35 | \$85.45 | \$264.80 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 3, IIIC, intermediate handhole for design criteria and assumptions |  |  |  |

# UNDERGROUND MATERIAL AND LABOR COST PER RISER 

## LARGE HANDHOLE

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 420.45$ | $\$ 247.34$ | $\$ 667.79$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 420.45$ | $\$ 247.34$ | $\$ 667.79$ |
| Stores Handling(2) | $\$ 34.14$ | $\$ 0.00$ | $\$ 34.14$ |
| SubTotal | $\$ 454.59$ | $\$ 247.34$ | $\$ 701.93$ |
| Engineering(4) | $\$ 138.49$ | $\$ 75.35$ | $\$ 213.84$ |
| TOTAL | $\$ 593.08$ | $\$ 322.69$ | $\$ 915.77$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIIC, large handhole for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER RISER 

PADMOUNTED SECONDARY JUNCTION BOX

2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 1,815.53$ | $\$ 426.15$ | $\$ 2,241.68$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 1,815.53$ | $\$ 426.15$ | $\$ 2,241.68$ |
| Stores Handling(2) | $\$ 147.42$ | $\$ 0.00$ | $\$ 147.42$ |
| SubTotal | $\$ 1,962.95$ | $\$ 426.15$ | $\$ 2,389.10$ |
| Engineering(4) | $\$ 597.99$ | $\$ 129.82$ | $\$ 727.81$ |
| TOTAL | $\$ 2,560.94$ | $\$ 555.97$ | $\$ 3,116.91$ |

1 - Includes Sales Tax.

2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.

Note: See Apendix B, page 3, IIIC, secondary junction box, for design criteria and assumptions

## UNDERGROUND MATERIAL AND LABOR COST PER CABINET

## PADMOUNTED SECONDARY JUNCTION CABINET

2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Secondary | $\$ 5,383.93$ | $\$ 391.79$ | $\$ 5,775.72$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 5,383.93$ | $\$ 391.79$ | $\$ 5,775.72$ |
| Stores Handling(2) | $\$ 437.18$ | $\$ 0.00$ | $\$ 437.18$ |
| SubTotal | $\$ 5,821.11$ | $\$ 391.79$ | $\$ 6,212.90$ |
| Engineering(4) | $\$ 1,773.34$ | $\$ 119.35$ | $\$ 1,892.69$ |
| TOTAL | $\$ 7,594.45$ | $\$ 511.14$ | $\$ 8,105.59$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.

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

4-30.464\% of All Material and Labor.
Note: See Apendix B, page 3, IIIC, secondary junction cabinet, for design criteria and assumptions

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

## $\underline{2011}$

| ITEM | MATERIAL(1) |  | LABOR(2) | TOTAL |
| :---: | :---: | :---: | :---: | :---: |
| 350 MCM Al Wire (per set) | 1,092.40 |  | \$0.00 | \$1,092.40 |
| 500 MCM Cu Wire (per set) | 2,005.00 |  | \$0.00 | \$2,005.00 |
| 750 MCM Al Wire (per set) | 1,194.60 |  | \$0.00 | \$1,194.60 |
| $750 \mathrm{MCM} \mathrm{Cu} \mathrm{Wire} \mathrm{(per} \mathrm{set)}$ | 2,146.80 |  | \$0.00 | \$2,146.80 |
| Pull Setup (one per cab) | \$0.00 | \$ | 177.52 | \$177.52 |
| Pulling Cable (per set) | \$0.00 | \$ | 76.36 | \$76.36 |
| Tap Wires in Transformer and Cabinet (per set) | \$0.00 | \$ | 172.56 | \$172.56 |
| Usage Statistics |  |  |  |  |
| 350 MCM Al Wire | 0\% |  |  |  |
| 500 MCM CU Wire | 25\% |  |  |  |
| 750 MCM Al Wire | 50\% |  |  |  |
| 750 MCM Cu Wire | 25\% |  |  |  |
| Weighted Cost of Wire | \$1,635.25 |  |  |  |
| Number of Sets |  |  |  |  |
| 1 Set | 15\% |  |  |  |
| 2 Sets | 30\% |  |  |  |
| 3 Sets | 30\% |  |  |  |
| 4 Sets | 25\% |  |  |  |
| Weighted Pulling Cost | \$0.00 |  | \$379.87 |  |
| Weighted Wire Subtotal | \$4,333.41 |  | \$457.28 |  |
| Total Cost of Secondary | \$5,170.57 |  |  |  |

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:
$\$ 86.28$

1 - Includes Sales Tax, 8.12 \% Stores Loading of All Material, and $30.464 \%$ Engineering Overhead of all Material.

2 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation, and $30.464 \%$ Engineering Overhead of all Labor.

3-8 foot spacing between cabinet and transformer needs $20^{\prime}$ of conductor per set.
4 - Usage statistics based on all new installations during 2003 \& 2004 .

# UNDERGROUND MATERIAL AND LABOR COST PER HANDHOLE 

## SINGLE PHASE PRIMARY 48" SPLICE BOX

## WITH SPLICES AND PULL LABOR

$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 501.61$ | $\$ 635.55$ | $\$ 1,137.16$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 501.61$ | $\$ 635.55$ | $\$ 1,137.16$ |
| Stores Handling(2) | $\$ 40.73$ | $\$ 0.00$ | $\$ 40.73$ |
| SubTotal | $\$ 542.34$ | $\$ 635.55$ | $\$ 1,177.89$ |
| Engineering(4) | $\$ 165.22$ | $\$ 193.61$ | $\$ 358.83$ |
| TOTAL | $\$ 707.56$ | $\$ 829.16$ | $\$ 1,536.72$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.

3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIID, single phase primary 48" splice box, for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER HANDHOLE TWO PHASE PRIMARY 48" SPLICE BOX 

## WITH SPLICES AND PULL LABOR

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 583.31$ | $\$ 1,004.69$ | $\$ 1,588.00$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 583.31$ | $\$ 1,004.69$ | $\$ 1,588.00$ |
| Stores Handling(2) | $\$ 47.36$ | $\$ 0.00$ | $\$ 47.36$ |
| SubTotal | $\$ 630.67$ | $\$ 1,004.69$ | $\$ 1,635.36$ |
| Engineering(4) | $\$ 192.13$ | $\$ 306.07$ | $\$ 498.20$ |
| TOTAL | $\$ 822.80$ | $\$ 1,310.76$ | $\$ 2,133.56$ |

1 - Includes Sales Tax.

2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIID, two phase primary 48" splice box for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER HANDHOLE <br> <br> THREE PHASE PRIMARY 48" SPLICE BOX 

 <br> <br> THREE PHASE PRIMARY 48" SPLICE BOX}

## WITH SPLICES AND PULL LABOR

| 2011 |  |  |  |
| :---: | :---: | :---: | :---: |
| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| Service | \$0.00 | \$0.00 | \$0.00 |
| Primary | \$669.03 | \$1,004.85 | \$1,673.88 |
| Secondary | \$0.00 | \$0.00 | \$0.00 |
| Transformers | \$0.00 | \$0.00 | \$0.00 |
| Trenching | \$0.00 | \$0.00 | \$0.00 |
| Sub-Total | \$669.03 | \$1,004.85 | \$1,673.88 |
| Stores Handling(2) | \$54.33 | \$0.00 | \$54.33 |
| SubTotal | \$723.36 | \$1,004.85 | \$1,728.21 |
| Engineering(4) | \$220.36 | \$306.12 | \$526.48 |
| TOTAL | \$943.72 | \$1,310.97 | \$2,254.69 |
| 1 - Includes Sales Tax. |  |  |  |
| 2-8.12\% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 3, IIID, three phase 48" primary splice box for design criteria and assumptions <br> EXHIBIT XLV |  |  |  |

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

COST PER FOOT .
SINGLE PHASE PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

## 2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 4,938.44$ | $\$ 6,273.04$ | $\$ 1,334.60$ |
| MATERIAL | $\$ 2,795.62$ | $\$ 2,896.47$ | $\$ 100.85$ |
| TOTAL | $\$ 7,734.06$ | $\$ 9,169.51$ | $\$ 1,435.45$ |
| PER FOOT TOTAL | $\$ 7.73$ | $\$ 9.17$ | $\$ 1.44$ |

# OVERHEAD MATERIAL AND LABOR COST PER FOOT 

## SINGLE PHASE PRIMARY LATERAL POLE LINE

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 382.99$ | $\$ 1,180.25$ | $\$ 1,563.24$ |
| Secondary | $\$ 382.99$ | $\$ 1,180.25$ | $\$ 1,563.24$ |
| Poles | $\$ 1,215.92$ | $\$ 1,424.79$ | $\$ 2,640.71$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 1,981.90$ | $\$ 3,785.29$ | $\$ 5,767.19$ |
| Stores Handling(2) | $\$ 160.93$ | $\$ 0.00$ | $\$ 160.93$ |
| SubTotal | $\$ 2,142.83$ | $\$ 3,785.29$ | $\$ 5,928.12$ |
| Engineering(4) | $\$ 652.79$ | $\$ 1,153.15$ | $\$ 1,805.94$ |
| TOTAL | $\$ 2,795.62$ | $\$ 4,938.44$ | $\$ 7,734.06$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIE, single phase for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER FOOT 

## SINGLE PHASE PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 2,053.39$ | $\$ 1,120.36$ | $\$ 3,173.75$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 3,687.89$ | $\$ 3,687.89$ |
| Sub-Total | $\$ 2,053.39$ | $\$ 4,808.25$ | $\$ 6,861.64$ |
| Stores Handling(2) | $\$ 166.74$ | $\$ 0.00$ | $\$ 166.74$ |
| SubTotal | $\$ 2,220.13$ | $\$ 4,808.25$ | $\$ 7,028.38$ |
| Engineering(4) | $\$ 676.34$ | $\$ 1,464.79$ | $\$ 2,141.13$ |
| TOTAL | $\$ 2,896.47$ | $\$ 6,273.04$ | $\$ 9,169.51$ |
| PER FOOT TOTAL | $\$ 2.90$ | $\$ 6.27$ | $\$ 9.17$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 3, IIIE, single phase for design criteria and assumptions

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER FOOT -

## TWO PHASE PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

2011

| ITEM | OVERHEAD UNDERGROUND | DIFFERENTIAL |  |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 6,308.43$ | $\$ 7,699.85$ | $\$ 1,391.42$ |
| MATERIAL | $\$ 3,438.99$ | $\$ 5,792.86$ | $\$ 2,353.87$ |
| TOTAL | $\$ 9,747.42$ | $\$ 13,492.71$ | $\$ 3,745.29$ |
| PER FOOT TOTAL | $\$ 9.75$ | $\$ 13.49$ | $\$ 3.74$ |

## OVERHEAD MATERIAL AND LABOR COST PER FOOT

## TWO PHASE PRIMARY LATERAL POLE LINE

$\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 776.21$ | $\$ 2,273.73$ | $\$ 3,049.94$ |
| Secondary | $\$ 388.11$ | $\$ 1,136.86$ | $\$ 1,524.97$ |
| Poles | $\$ 1,273.68$ | $\$ 1,424.79$ | $\$ 2,698.47$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 2,438.00$ | $\$ 4,835.38$ | $\$ 7,273.38$ |
| Stores Handling(2) | $\$ 197.97$ | $\$ 0.00$ | $\$ 197.97$ |
| SubTotal | $\$ 2,635.97$ | $\$ 4,835.38$ | $\$ 7,471.35$ |
| Engineering(4) | $\$ 803.02$ | $\$ 1,473.05$ | $\$ 2,276.07$ |
| TOTAL | $\$ 3,438.99$ | $\$ 6,308.43$ | $\$ 9,747.42$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIE, two phase for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER FOOT TWO PHASE PRIMARY LATERAL TRENCH 

## WITH CABLE-IN-CONDUIT

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 4,106.73$ | $\$ 2,214.01$ | $\$ 6,320.74$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 3,687.89$ | $\$ 3,687.89$ |
| Sub-Total | $\$ 4,106.73$ | $\$ 5,901.90$ | $\$ 10,008.63$ |
| Stores Handling(2) | $\$ 333.47$ | $\$ 0.00$ | $\$ 333.47$ |
| SubTotal | $\$ 4,440.20$ | $\$ 5,901.90$ | $\$ 10,342.10$ |
| Engineering(4) | $\$ 1,352.66$ | $\$ 1,797.95$ | $\$ 3,150.61$ |
| TOTAL | $\$ 5,792.86$ | $\$ 7,699.85$ | $\$ 13,492.71$ |
| PER FOOT TOTAL | $\$ 5.79$ | $\$ 7.70$ | $\$ 13.49$ |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - 8.12 \% of All Material. |  |  |  |
| 3-Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4 - 30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 3, lliE, two phase for design criteria and |  |  |  |
| assumptions |  |  |  |

## OVERHEAD VS. UNDERGROUND

## SUMMARY SHEET

## COST PER FOOT -

## THREE PHASE PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

## 2011

| ITEM | OVERHEAD | UNDERGROUND | DIFFERENTIAL |
| :--- | ---: | ---: | ---: |
| LABOR | $\$ 7,678.26$ | $\$ 6,639.68$ | $(\$ 1,038.58)$ |
| MATERIAL | $\$ 4,437.47$ | $\$ 9,992.41$ | $\$ 5,554.94$ |
| TOTAL | $\$ 12,115.73$ | $\$ 16,632.09$ | $\$ 4,516.36$ |
| PER FOOT TOTAL | $\$ 12.12$ | $\$ 16.63$ | $\$ 4.51$ |

## OVERHEAD MATERIAL AND LABOR COST PER FOOT

## THREE PHASE PRIMARY LATERAL POLE LINE

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 1,236.91$ | $\$ 3,345.42$ | $\$ 4,582.33$ |
| Secondary | $\$ 412.30$ | $\$ 1,115.14$ | $\$ 1,527.44$ |
| Poles | $\$ 1,496.65$ | $\$ 1,424.79$ | $\$ 2,921.44$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Sub-Total | $\$ 3,145.86$ | $\$ 5,885.35$ | $\$ 9,031.21$ |
| Stores Handling(2) | $\$ 255.44$ | $\$ 0.00$ | $\$ 255.44$ |
| SubTotal | $\$ 3,401.30$ | $\$ 5,885.35$ | $\$ 9,286.65$ |
| Engineering(4) | $\$ 1,036.17$ | $\$ 1,792.91$ | $\$ 2,829.08$ |
| TOTAL | $\$ 4,437.47$ | $\$ 7,678.26$ | $\$ 12,115.73$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.
3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.
Note: See Appendix B, page 2, IIE, three phase for design criteria and assumptions

# UNDERGROUND MATERIAL AND LABOR COST PER FOOT <br> THREE PHASE PRIMARY LATERAL TRENCH 

WITH CABLE-IN-CONDUIT

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 7,083.92$ | $\$ 1,401.39$ | $\$ 8,485.31$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 3,687.89$ | $\$ 3,687.89$ |
| Sub-Total | $\$ 7,083.92$ | $\$ 5,089.28$ | $\$ 12,173.20$ |
| Stores Handling(2) | $\$ 575.21$ | $\$ 0.00$ | $\$ 575.21$ |
| SubTotal | $\$ 7,659.13$ | $\$ 5,089.28$ | $\$ 12,748.41$ |
| Engineering(4) | $\$ 2,333.28$ | $\$ 1,550.40$ | $\$ 3,883.68$ |
| TOTAL | $\$ 9,992.41$ | $\$ 6,639.68$ | $\$ 16,632.09$ |
| PER FOOT TOTAL | $\$ 9.99$ | $\$ 6.64$ | $\$ 16.63$ |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - 8.12 \% of All Material. |  |  |  |
| 3-Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4-30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 3, IIIE, three phase for design criteria and |  |  |  |
| assumptions |  |  |  |

## UNDERGROUND MATERIAL AND LABOR COST PER FOOT

## SINGLE PHASE PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

## 2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 2,053.39$ | $\$ 1,120.36$ | $\$ 3,173.75$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 3,687.89$ | $\$ 3,687.89$ |
| Sub-Total | $\$ 2,053.39$ | $\$ 4,808.25$ | $\$ 6,861.64$ |
| Stores Handling(2) | $\$ 166.74$ | $\$ 0.00$ | $\$ 166.74$ |
| SubTotal | $\$ 2,220.13$ | $\$ 4,808.25$ | $\$ 7,028.38$ |
| Engineering(4) | $\$ 676.34$ | $\$ 1,464.79$ | $\$ 2,141.13$ |
| TOTAL | $\$ 2,896.47$ | $\$ 6,273.04$ | $\$ 9,169.51$ |
| PER FOOT TOTAL | $\$ 2.90$ | $\$ 6.27$ | $\$ 9.17$ |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - 8.12 \% of All Material. |  |  |  |
| 3- Inciudes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4 - 30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 3, IllF, single phase for design criteria and |  |  |  |
| assumptions |  |  |  |

## UNDERGROUND MATERIAL AND LABOR COST PER FOOT

## TWO PHASE PRIMARY LATERAL TRENCH

## WITH CABLE-IN-CONDUIT

## $\underline{2011}$

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 4,106.73$ | $\$ 2,214.01$ | $\$ 6,320.74$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 3,687.89$ | $\$ 3,687.89$ |
| Sub-Total | $\$ 4,106.73$ | $\$ 5,901.90$ | $\$ 10,008.63$ |
| Stores Handling(2) | $\$ 333.47$ | $\$ 0.00$ | $\$ 333.47$ |
| SubTotal | $\$ 4,440.20$ | $\$ 5,901.90$ | $\$ 10,342.10$ |
| Engineering(4) | $\$ 1,352.66$ | $\$ 1,797.95$ | $\$ 3,150.61$ |
| TOTAL | $\$ 5,792.86$ | $\$ 7,699.85$ | $\$ 13,492.71$ |
| PER FOOT TOTAL | $\$ 5.79$ | $\$ 7.70$ | $\$ 13.49$ |
| 1 - Includes Sales Tax. |  |  |  |
| 2 - 8.12 \% of All Material. |  |  |  |
| 3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation. |  |  |  |
| 4 - 30.464\% of All Material and Labor. |  |  |  |
| Note: See Appendix B, page 3, IIIF, two phase for design criteria and |  |  |  |
| assumptions |  |  |  |

UNDERGROUND MATERIAL AND LABOR COST PER FOOT THREE PHASE PRIMARY LATERAL TRENCH WITH CABLE-IN-CONDUIT

2011

| ITEM | MATERIAL(1) | LABOR(3) | TOTAL |
| :--- | ---: | ---: | ---: |
| Service | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Primary | $\$ 7,083.92$ | $\$ 1,401.39$ | $\$ 8,485.31$ |
| Secondary | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Transformers | $\$ 0.00$ | $\$ 0.00$ | $\$ 0.00$ |
| Trenching | $\$ 0.00$ | $\$ 3,687.89$ | $\$ 3,687.89$ |
| Sub-Total | $\$ 7,083.92$ | $\$ 5,089.28$ | $\$ 12,173.20$ |
| Stores Handling(2) | $\$ 575.21$ | $\$ 0.00$ | $\$ 575.21$ |
| SubTotal | $\$ 7,659.13$ | $\$ 5,089.28$ | $\$ 12,748.41$ |
| Engineering(4) | $\$ 2,333.28$ | $\$ 1,550.40$ | $\$ 3,883.68$ |
| TOTAL | $\$ 9,992.41$ | $\$ 6,639.68$ | $\$ 16,632.09$ |

1 - Includes Sales Tax.
2-8.12 \% of All Material.

3 - Includes Payroll, Taxes, Insurance, P\&W, \& Transportation.
4-30.464\% of All Material and Labor.

Note: See Appendix B, page 3, IIIF, three phase for design criteria and assumptions

## 2011 UCD TARIFF

## AVERAGE UCD UNDERGROUND FEEDER COST

$\frac{\text { Underground }}{\$ / F t . . . . . . . . . . . ~} \$ 37.74 \quad \frac{\text { Overhead }}{\$ / F t . . . . . . . . . . ~} \$ 21.67 \quad \frac{\text { Difference }}{\$ / F t . . . . . . . . . . . ~}$ ..... $\$ 16.07$
Round To: \$/Ft. ..... \$16.07
13 kV UG Switch Cabinet ( $9 / 3$ cabinet w/ all hardware \& cable) = ..... \$23,616.22
13 kV Salt Spray UG Switch Cabinet ( $9 / 3$ cabinet w/ all hardware \& cable) $=$ ..... \$30,017.04
23 kV UG Switch Cabinet (9/3 cabinet w/ all hardware \& cable) = ..... \$29,651.89
23 kV Salt Spray UG Switch Cabinet (9/3 cabinet w/ all hardware \& cable) $=\ldots$ ..... \$37,216.28
13 kV UG Switch Cabinet (6/6 cabinet w/ all hardware \& cable) = ..... \$23,062.30
13 kV Salt Spray UG Switch Cabinet ( $6 / 6$ cabinet w/ all hardware \& cable) $=$ ..... \$28,829.78
23 kV UG Switch Cabinet ( $6 / 6$ cabinet w/ all hardware \& cable) = ..... \$25,303.33
23 kV Salt Spray UG Switch Cabinet ( $6 / 6$ cabinet w/ all hardware \& cable) $=$ ..... \$35,595.71
Based on data from Inventory Services on switch cabinet utilization (new construction only):

$$
\begin{array}{rl}
5 & 13 \mathrm{kV} 9 / 3 \text { cabinets } \\
0 & 13 \mathrm{kV} \mathrm{SS} 9 / 3 \text { cabinets } \\
5 & 23 \mathrm{kV} \mathrm{9/3} \text { cabinets } \\
2 & 23 \mathrm{kV} \mathrm{SS} 9 / 3 \text { cabinets } \\
16 & 13 \mathrm{kV} \mathrm{6/6} \text { cabinets } \\
3 & 13 \mathrm{kV} \mathrm{SS} 6 / 6 \text { cabinets } \\
16 & 23 \mathrm{kV} \mathrm{6/6} \mathrm{cabinets} \\
3 & 23 \mathrm{kV} \text { SS } 6 / 6 \text { cabinets }
\end{array}
$$

$$
50 \quad \text { Weighted Average: } \quad \$ 26,157.99
$$

\$/Switch Cabinet

$$
\$ 26,157.99
$$

NOTE: All estimates based on three phase requirements.
See Exhibit LIX for details.
Note: See Appendix B, page 4, for design criteria and assumptions.

## 2011 UCD TARIFF

## FEEDER COST

Feeder Length $=$ ..... 25,428
UG Feeder Cost* (excluding UG switches) = ..... \$1,038,703.93
26 UG Lateral Risers not required if UG Feeder is used
Cost of each Lateral Riser $=$ ..... \$3,041.26
26 Lateral Risers $X \quad \$ 3,041.26=$ ..... (\$79,072.76)
Net UG Feeder Cost = ..... \$959,631.17
UG Feeder per foot cost $=$ ..... $\$ 37.74$
OH Feeder Cost (excluding OH switches \& hardware) $=$ ..... \$551,012.47
OH Feeder per foot cost $=$ ..... \$21.67
Feeder Differential Cost $($ per foot $) ~=$ ..... $\$ 16.07$
13 kV UG Switch Cabinet ( $9 / 3$ cabinet w/ all hardware \& cable) $=$ ..... \$29,197.11
13 kV Salt Spray UG Switch Cabinet ( $9 / 3$ cabinet w/ all hardware \& cable) $=$... 23 kV UG Switch Cabinet ( $9 / 3$ cabinet w/ all hardware \& cable) $=$ ..... \$35,353.04
23 kV Salt Spray UG Switch Cabinet ( $9 / 3$ cabinet w/ all hardware \& cable) $=\ldots$ ..... \$43,831.27
13 kV UG Switch Cabinet ( $6 / 6$ cabinet w/ all hardware \& cable) $=$ ..... \$28,643.19
13 kV Salt Spray UG Switch Cabinet ( $6 / 6$ cabinet w/ all hardware \& cable) $=$... ..... $\$ 35,285.88$
23 kV UG Switch Cabinet ( $6 / 6$ cabinet w/ all hardware \& cable) $=$ ..... \$31,004.48
23 kV Salt Spray UG Switch Cabinet ( $6 / 6$ cabinet w/ all hardware \& cable) $=$... ..... \$42,210.70
13 kV OH Switch Cabinet (including switch, pole, and all Hardware) $=$ ..... \$5,580.89
13 kV OH Salt Spray Switch Cabinet (including switch, pole, and all Hardware) $=\ldots$ ..... \$6,456.10
23 kV OH Switch Cabinet (including switch, pole, and all Hardware) $=$ ..... \$5,701.15
23 kV OH Salt Spray Switch Cabinet (including switch, pole, and all Hardware) $=\ldots$ ..... \$6,614.99
13 kV UG Switch Cabinet - $9 / 3$ Cabinet Differential $=$ ..... \$23,616.22
13 kV Salt Spray UG Switch Cabinet - 9/3 Cabinet Differential = ..... \$30,017.04
23 kV UG Switch Cabinet - $9 / 3$ Cabinet Differential = ..... \$29,651.89
23 kV Salt Spray UG Switch Cabinet -9/3 Cabinet Differential = ..... \$23,062.30
13 kV Salt Spray UG Switch Cabinet - 6/6 Cabinet Differential = ..... $\$ 28,829.78$
23 kV UG Switch Cabinet - 6/6 Cabinet Differential = ..... $\$ 35,595.71$
Switch Cabinet Differential (Weighted Average) =\$26,157.99

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

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

## 2011 UCD TARIFF

## SMALL COMMERCIAL SERVICES

WOOD POLE, ACCESSIBLE

|  | 120 VOLT, 2-WIRE SERVICE OVERHEAD UNDERGROUND DIFFERENTIAL |  |  | 120/240 VOLT, 3-WIRE SERVICE OVERHEAD UNDERGROUND DIFFERENTIAL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATERIAL (2) | \$23.18 | \$124.26 | \$101.08 | \$72.30 | \$211.10 | \$138.80 |
| LABOR(4) | \$106.93 | \$609.53 | \$502.60 | \$119.26 | \$630.55 | \$511.29 |
| STORES HANDLING (3 | \$1.70 | \$9.10 | \$7.40 | \$5.30 | \$15.47 | \$10.17 |
| ENGINEERING (5) | \$40.16 | \$226.32 | \$186.16 | \$59.97 | \$261.11 | \$201.14 |
| TOTAL | \$171.97 | \$969.21 | \$797.24 | \$256.83 | \$1,118.23 | \$861.40 |

WOOD POLE, INACCESSIBLE

|  | 120 VOLT, 2-WIRE SERVICE |  |  |
| :--- | :---: | :---: | :---: |
|  | OVERHEAD UNDERGROUND DIFFERENTIAL |  |  |
| MATERIAL (2) | $\$ 23.18$ | $\$ 124.26$ | $\$ 101.08$ |
| LABOR(4) | $\$ 126.17$ | $\$ 719.26$ | $\$ 593.09$ |
| STORES HANDLING (3 | $\$ 1.70$ | $\$ 9.10$ | $\$ 7.40$ |
| ENGINEERING (5) | $\$ 46.02$ | $\$ 259.75$ | $\$ 213.73$ |
| TOTAL | $\$ 197.07$ | $\$ 1.112 .37$ | $\$ 915.30$ |


| 120/240 VOLT, | 3-WIRE SERVICE |  |
| :---: | :---: | :---: |
| OVERHEAD UNDERGROUND DIFFERENTIAL |  |  |
| $\$ 72.30$ | $\$ 211.10$ | $\$ 138.80$ |
| $\$ 140.72$ | $\$ 744.07$ | $\$ 603.35$ |
| $\$ 5.30$ | $\$ 15.47$ | $\$ 10.17$ |
| $\$ 66.51$ | $\$ 295.69$ | $\$ 229.18$ |
| $\$ 284.83$ | $\$ 1,266.33$ | $\$ 981.50$ |

## CONCRETE POLE, ACCESSIBLE

120 VOLT, 2-WIRE SERVICE
OVERHEAD UNDERGROUND DIFFERENTIAL

| MATERIAL (2) | $\$ 23.18$ | $\$ 135.58$ | $\$ 112.40$ |
| :--- | :---: | :---: | :---: |
| LABOR(4) | $\$ 106.93$ | $\$ 609.53$ | $\$ 502.60$ |
| STORES HANDLING (3 | $\$ 1.70$ | $\$ 9.93$ | $\$ 8.23$ |
| ENGINEERING (5) | $\$ 40.16$ | $\$ 230.02$ | $\$ 189.86$ |
| TOTAL | $\$ 171.97$ | $\$ 985.06$ | $\$ 813.09$ |

120/240 VOLT, 3-WIRE SERVICE

| OVERHEAD UNDERGROUND DIFFERENTIAL |  |  |
| :---: | :---: | :---: |
| $\$ 72.30$ | $\$ 230.69$ | $\$ 158.39$ |
| $\$ 119.26$ | $\$ 630.55$ | $\$ 511.29$ |
| $\$ 5.30$ | $\$ 16.90$ | $\$ 11.60$ |
| $\$ 59.97$ | $\$ 267.52$ | $\$ 207.55$ |
| $\$ 256.83$ | $\$ 1,145.66$ | $\$ 888.83$ |

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

## 2 - Includes Sales Tax

3-8.12 \% of All Material.

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

5 - 30.464\% of All Material and Labor.

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

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


[^0]:    ' Pursuant to the settlement agreement reached by the parties in consolidated Docket No. 070231-EI, Docket No. 080244-EI and Docket No. 080522-EI, and approved by the Commission April 22, 2010 in Order No. PSC-10-0247-FOF-EI, the non-storm portion of the operational cost differential in the URD and UCD tariffs remains at zero (0) dollars through December 31, 2012.

