

JAMES A. MCGEE ASSOCIATE GENERAL COUNSEL

May 4, 2001

Ms. Blanca S. Bayó, Director Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Docket No. 010384 -EI

Dear Ms. Bayó:

Enclosed for filing in the subject docket are an original and fifteen copies of Florida Power Corporation's Amended Petition. This amended petition completely restates and supercedes Florida Power's original petition filed on April 2, 2001.

Please acknowledge your receipt of the above filing on the enclosed copy of this letter and return to the undersigned. Also enclosed is a 3.5 inch diskette containing the above-referenced document in WordPerfect format. Thank you for your assistance in this matter.

Very truly yours,

James A. McGee

JAM/scc Enclosure

> DOCUMENT NUMBER - DATE DOCUMENT NUMBER - DATE 05719 MAY -73 One Progress Plaza, Suite 1500 • Post Office Box 14042 • St. Petersburg, Florida 33733-4042 Phone: 727.820.5184 • Fax: 727.820.5519 • Email: james.mcgee@pgnmailpogc-RECORDS/REPORTING

# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Florida Power Corporation for approval of revised tariffs containing updated underground residential distribution charges.

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Docket No. 010384-EI

Submitted for filing: May 7, 2001

### AMENDED PETITION

Florida Power Corporation (Florida Power or the Company), hereby amends and restates its petition to the Florida Public Service Commission (the Commission) for approval, pursuant to Rule 25-6.078, F.A.C., of revised tariff sheets attached hereto as Exhibit A, which contain updated Underground Residential Distribution (URD) charges based on the differential between the cost of overhead and underground facilities installed to provide residential service in typical low and high density subdivision layouts. The revised tariff sheets for which approval is sought are a part of Florida Power's URD policy established pursuant to Commission Rule 25-6.078 and contained in Part XI of the Company's tariff rules and regulations governing electric service. Exhibit B shows these revised tariff sheets in legislative format. In support of this amended petition, Florida Power states as follows:

1. Florida Power is a public utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes. Florida Power's General Offices are located at One Progress Plaza, St. Petersburg, Florida, 33701.

2. All notices, pleadings and correspondence required to be served on petitioner should be directed to:

James A. McGee, Esquire Post Office Box 14042 St. Petersburg, FL 33733-4042 Facsimile: (727) 820-5519

For express deliveries by private courier, the address is:

One Progress Plaza Suite 1500 St. Petersburg, FL 33701

3. The updated URD charges shown on the revised tariff sheets contained in Exhibit A have been calculated in accordance with Commission Rule 25-6.078, as demonstrated by the detailed supporting data and analyses contained in the Commission form specified by the rule, Form PSC/EAG 13, entitled "Overhead/Underground Residential Differential Cost Data." The schedules comprising Form PSC/EAG 13 are attached hereto as Exhibit C.

4. The proposed URD charges have increased over the current charges established in 1998 from \$264 to \$292, or 10.6%, for a 210-lot low density subdivision; from \$181 to \$270, or 49.2%, for a 176-lot high density individually metered subdivision; and from \$65 to \$116, or 78.5%, for a 176-lot high density gang metered subdivision. A summary of the major changes between the cost components for the proposed URD charges and the 1998 URD charges are described in Exhibit D.

WHEREFORE, Florida Power Corporation respectfully requests that the Commission grant this petition and approve the revised tariff sheets and updated URD charges contained in Exhibit A, effective in accordance with the provisions of Section 366.06(4), Florida Statutes.

Respectfully submitted,

FLORIDA POWER CORPORATION

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James A. McGee Post Office Box 14042 St. Petersburg, FL 33733-4042 Telephone: (727) 820-5184 Facsimile: (727) 820-5519

EXHIBIT A

# **REVISED URD TARIFF SHEETS**

Tenth Revised Sheet No. 4.113 Tenth Revised Sheet No. 4.114 Tenth Revised Sheet No. 4.115



- (2) Contribution by Applicant:
  - (a) Schedule of Charges:

Company standard design underground residential distribution 120/240 volt single-phase service (see also Part 11.03(7)):

To subdivisions with a density of 1.0 or more	
but less than six (6) dwelling units per acre, taking	
service at each dwelling unit\$289.00 per point of delive	гу

To subdivisions with a density of six (6) or more	
dwelling units per acre taking service at each	
dwelling unit	\$267.00 per point of delivery

To subdivisions with a density of six (6) or more dwelling units per acre taking service at grouped meter pedestals ......\$.117.00 per dwelling unit To multi-occupancy buildings.......See Part 11.06(2)

(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:

Three-phase primary main or feeder charge per trench-foot within subdivision:

(U.G Underground, O.H Overhead)	
#1/0 AWG U.G. vs. #1/0 AWG O.H	\$. 5.08 per foot
500 MCM U.G. vs. 336 MCM O.H	\$13.71 per foot
1000 MCM U.G. vs. 795 MCM O.H	\$14.57 per foot

The above costs assume that underground feeder construction utilizes system conduit but does not require the use of pad-mounted switchgear(s) or terminal pole(s). If such facilities are required, a differential cost for same will be determined by the Company on an individual basis and added to charges determined above.

(c) Credits (not to exceed the "average differential costs" stated above) will be allowed where, by mutual agreement, the Applicant provides trenching and backfilling for the use of the Company's facilities in lieu of a portion of the cash payment described above. These credits, based on the Company's design drawings, are:

Primary and/or Secondary Systems, for each Foot of Trench	61.09
Service Laterals, for each Foot of Trench	61.09



(3) Point of Delivery:

The point of delivery shall be determined by the Company and will be on the side of the building that is nearest the point at which the underground secondary electric supply is available to the property. The point of delivery will only be allowed on the rear of the building by special exception. The Applicant shall pay the estimated full cost of service lateral length required in excess of that which would have been needed to reach the Company's designated point of service.

(4) Location of Meter and Socket:

The Applicant shall install a meter socket at the point designated by the Company in accordance with the Company's specifications. Every effort shall be made to locate the meter socket in unobstructed areas in order that the meter can be read without going through fences, etc.

(5) Development of Subdivisions:

The above charges are based on reasonably full use of the land being developed. Where the Company is required to construct underground electric facilities through a section or sections of the subdivision or development where service will not be required for at least two (2) years, the Company may require a deposit from the Applicant before construction is commenced. This deposit, to guarantee performance, will be based on the estimated total cost of such facilities rather than the differential cost. The amount of the deposit, without interest, in excess of any charges for underground service will be returned to the Applicant on a prorata basis at quarterly intervals on the basis of installations to new customers. Any portion of such deposit remaining unrefunded, after five (5) years from the date the Company is first ready to render service from the extension, will be retained by the Company.

(6) Relocation or Removal of Existing Facilities:

If the Company is required to relocate or remove existing overhead and/or underground distribution facilities in the implementation of these Rules, all costs thereof shall be borne exclusively by the Applicant. These costs shall include the costs of relocation or removal, the in-place value (less salvage) of the facilities so removed, and any additional costs due to existing landscaping, pavement or unusual conditions.

(7) Other Provisions:

If soil compaction is required by the Applicant at locations where Company trenching is done, an additional charge may be added to the charges set forth in this tariff. The charge will be estimated based on the Applicant's compaction specifications.

#### 11.04 UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS.

(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 (5) separate dwelling units.

#### (2) Contribution by Applicant:

(a) The Applicant shall pay the Company the following average differential cost between an overhead service and an underground service lateral:

For Service Lateral up to 80 fee	t\$399.00	

For each foot over 80 feet up to 200 feet ......\$ 1.25 per foot

Service laterals in excess of 200 feet shall be based on a specific cost estimate.

(b) Credits will be allowed where, by mutual agreement, the Applicant provides trenching and backfilling in accordance with the Company specifications and for the use of the Company facilities, in lieu of a portion of the cash payment described above. These credits, based on the Company's design drawings, are as follows:

For each Foot of Trench ......\$.. 1.09

The provisions of Paragraphs 11.03(3) and 11.03(4) are also applicable.



#### 11.05 UNDERGROUND SERVICE LATERALS REPLACING EXISTING RESIDENTIAL OVERHEAD SERVICES:

#### (1) Applicability:

When requested by the Applicant, the Company will install underground service laterals from existing overhead lines as replacements for existing overhead services to existing residential buildings containing less than five (5) separate dwelling units.

(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.

(3) Trenching:

The Applicant shall also provide, at no cost to the Company, a suitable trench and perform the backfilling and any landscaping, pavement, or other suitable repairs. If the Applicant requests the Company to supply the trench, the charge to the Applicant for this work shall be based on a specific cost estimate.

(4) Contribution by Applicant:

The charge excluding trenching costs shall be as follows:

For Service Lateral up to 80 feet	\$364.19
For each foot over 80 feet up to 200 feet	\$1.12 per foot

Service laterals in excess of 200 feet shall be based on a specific cost estimate.

#### 11.06 UNDERGROUND DISTRIBUTION FACILITIES TO MULTIPLE-OCCUPANCY RESIDENTIAL BUILDINGS:

(1) Availability:

Underground electric distribution facilities may be installed within the tract of land upon which multiple-occupancy residential buildings containing five (5) or more separate dwelling units will be constructed.

(2) Contribution by Applicant:

There will be no contribution from the Applicant so long as the Company is free to construct the extension in the most economical manner, and reasonably full use is made of the tract of land upon which the multiple-occupancy buildings will be constructed. Other conditions will require special arrangements.

- (3) Responsibility of Applicant:
  - (a) Furnish details and specifications of the proposed building or complex of buildings. The Company will use these in the design of the electric distribution facilities required to render service.
  - (b) Where the Company determines that transformers are to be located inside the building, the Applicant shall provide:
    - i. The vault or vaults necessary for the transformers and the associated equipment, including the ventilation equipment.
    - ii. The necessary raceways or conduit for the Company's supply cables from the vault or vaults to a suitable point five (5) feet outside the building in accordance with the Company's plans and specifications.
    - iii. Conduits underneath all buildings when required for the Company's supply cables. Such conduits shall extend five (5) feet beyond the edge of the buildings for joining to the Company's facilities.
    - iv. The service entrance conductors and raceways from the Applicant's service equipment to the designated point of delivery within the vault.

ISSUED BY: Mark A. Myers, Vice President, Finance EFFECTIVE:

EXHIBIT B

# REVISED URD TARIFF SHEETS (Legislative Format)

Tenth Revised Sheet No. 4.113 Tenth Revised Sheet No. 4.114 Tenth Revised Sheet No. 4.115



(2) Contribution by Applicant:

(a) Schedule of Charges:

Company standard design underground residential distribution 120/240 volt single-phase service (see also Part 11.03(7)).

To subdivisions with a density of 1.0 or more but less than six (6) dwelling units per acre, taking service at each dwelling unit	<b>\$<u>289.00</u>264.00</b> per point of delivery
To subdivisions with a density of six (6) or more dwelling units per acre taking service at each dwelling unit	\$ <u>267.00</u> 181.00 per point of delivery
To subdivisions with a density of six (6) or more dwelling units per acre taking service at grouped meter pedestals	\$ <u><b>117.00</b>-65-0</u> 0 per dwelling unit

To multi-occupancy buildings...... See Part 11.06(2)

(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:

Three-phase primary main or feeder charge per trench-foot within subdivision:

(U.G. - Underground, O.H. - Overhead)

#1/0 AWG U.G. vs. #1/0 AWG O.H	. \$	5.083.65 per foot
500 MCM U.G. vs. 336 MCM O.H	. \$	137112.16 per foot
1000 MCM U.G. vs. 795 MCM O.H.	. \$	14.5713.32 per foot

The above costs assume that underground feeder construction utilizes system conduit but does not require the use of padmounted switchgear(s) or terminal pole(s). If such facilities are required, a differential cost for same will be determined by the Company on an individual basis and added to charges determined above.

(c) Credits (not to exceed the "average differential costs" stated above) will be allowed where, by mutual agreement, the Applicant provides trenching and backfilling for the use of the Company's facilities in lieu of a portion of the cash payment described above. These credits, based on the Company's design drawings, are:

Primary and/or Secondary Systems, for each Foot of Trench\$ #	. <b>.09</b> 1.10
Service Laterals, for each Foot of Trench	1.091.10



#### (3) Point of Delivery:

The point of delivery shall be determined by the Company and will be on the side of the building that is nearest the point at which the underground secondary electric supply is available to the property. The point of delivery will only be allowed on the rear of the building by special exception. The Applicant shall pay the estimated full cost of service lateral length required in excess of that which would have been needed to reach the Company's designated point of service.

(4) Location of Meter and Socket:

The Applicant shall install a meter socket at the point designated by the Company in accordance with the Company's specifications. Every effort shall be made to locate the meter socket in unobstructed areas in order that the meter can be read without going through fences, etc.

(5) Development of Subdivisions:

The above charges are based on reasonably full use of the land being developed. Where the Company is required to construct underground electric facilities through a section or sections of the subdivision or development where service will not be required for at least two (2) years, the Company may require a deposit from the Applicant before construction is commenced. This deposit, to guarantee performance, will be based on the estimated total cost of such facilities rather than the differential cost. The amount of the deposit, without interest, in excess of any charges for underground service will be returned to the Applicant on a prorata basis at quarterly intervals on the basis of installations to new customers. Any portion of such deposit remaining unrefunded, after five (5) years from the date the Company is first ready to render service from the extension, will be retained by the Company.

(6) Relocation or Removal of Existing Facilities:

If the Company is required to relocate or remove existing overhead and/or underground distribution facilities in the implementation of these Rules, all costs thereof shall be borne exclusively by the Applicant. These costs shall include the costs of relocation or removal, the in-place value (less salvage) of the facilities so removed, and any additional costs due to existing landscaping, pavement or unusual conditions.

(7) Other Provisions:

If soil compaction is required by the Applicant at locations where Company trenching is done, an additional charge may be added to the charges set forth in this tariff. The charge will be estimated based on the Applicant's compaction specifications.

#### 11.04 UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS.

(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 (5) separate dwelling units.

- (2) Contribution by Applicant:
  - (a) The Applicant shall pay the Company the following average differential cost between an overhead service and an underground service lateral:

For Service Lateral up to 80 feet	\$399.00349.00
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For each foot over 80 feet up to 200 feet...... \$ 125 0.94 per foot

Service laterals in excess of 200 feet shall be based on a specific cost estimate.

(b) Credits will be allowed where, by mutual agreement, the Applicant provides trenching and backfilling in accordance with the Company specifications and for the use of the Company facilities, in lieu of a portion of the cash payment described above. These credits, based on the Company's design drawings, are as follows:

For each Foot of Trench\$ 109	1.10
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The provisions of Paragraphs 11.03(3) and 11.03(4) are also applicable.



#### 11.05 UNDERGROUND SERVICE LATERALS REPLACING EXISTING RESIDENTIAL OVERHEAD SERVICES:

#### (1) Applicability:

When requested by the Applicant, the Company will install underground service laterals from existing overhead lines as replacements for existing overhead services to existing residential buildings containing less than five (5) separate dwelling units.

(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.

(3) Trenching:

The Applicant shall also provide, at no cost to the Company, a suitable trench and perform the backfilling and any landscaping, pavement, or other suitable repairs. If the Applicant requests the Company to supply the trench, the charge to the Applicant for this work shall be based on a specific cost estimate.

(4) Contribution by Applicant.

Service laterals in excess of 200 feet shall be based on a specific cost estimate.

#### 11.06 UNDERGROUND DISTRIBUTION FACILITIES TO MULTIPLE-OCCUPANCY RESIDENTIAL BUILDINGS:

(1) Availability:

Underground electric distribution facilities may be installed within the tract of land upon which multiple-occupancy residential buildings containing five (5) or more separate dwelling units will be constructed.

(2) Contribution by Applicant:

There will be no contribution from the Applicant so long as the Company is free to construct the extension in the most economical manner, and reasonably full use is made of the tract of land upon which the multiple-occupancy buildings will be constructed. Other conditions will require special arrangements.

- (3) Responsibility of Applicant:
  - (a) Furnish details and specifications of the proposed building or complex of buildings. The Company will use these in the design of the electric distribution facilities required to render service.
  - (b) Where the Company determines that transformers are to be located inside the building, the Applicant shall provide:
    - The vault or vaults necessary for the transformers and the associated equipment, including the ventilation equipment.
    - ii. The necessary raceways or conduit for the Company's supply cables from the vault or vaults to a suitable point five (5) feet outside the building in accordance with the Company's plans and specifications.
    - iii. Conduits underneath all buildings when required for the Company's supply cables. Such conduits shall extend five (5) feet beyond the edge of the buildings for joining to the Company's facilities.
    - iv. The service entrance conductors and raceways from the Applicant's service equipment to the designated point of delivery within the vault.

**EXHIBIT C** 

# DEVELOPMENT OF UPDATED URD COSTS

PSC/EAG Form 13 Schedules 1 through 13

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#### **OVERHEAD vs. UNDERGROUND SUMMARY SHEET**

#### **SCHEDULE NO. 1**

# LOW DENSITY 210 LOT SUBDIVISION COST PER SERVICE LATERALS

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	190	371	181
Material	325	433	108
TOTAL	515	804	289

### COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

#### SCHEDULE NO. 2

#### LOW DENSITY 210 LOT SUBDIVISION

ITEM .	MATERIAL	LABÖR	TOTAL
Service(2)	57.99	44.52	102.51
Primary	23.44	28.97	52.41
Secondary	43.81	15.75	59.56
Initial Tree Trim	0.00	12.10	12.10
Poles	87.99	29.75	117.74
Transformers	91.71	12.68	104.39
Sub-Total(1)	304.94	143.77	448.71
Stores Handling(3)	20.29	0.00	20.29
Sub-Total	325.23	143.77	469.00
Engineering(5)	0.00	45.85	45.85
TOTAL	325.23	189.62	514.85

1-Includes Sales Tax.

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2-Includes Meter and Meter Socket.	
3-10% of all material except transformer units with a cost of:	70.02
and meters with a cost of:	32.00
4-Includes Administration, General and Transportation.	
5-13% of all matl. and labor except transformer units with a cost of:	74.87
and meters with a cost of:	41.45

#### COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

#### SCHEDULE NO. 3

#### TOTAL ITEM MATERIAL LABOR . Service (2) 100.57 92.56 193.13 68.15 19.16 Primary 87.31 Secondary 126.66 49.52 176.18 15.50 Transformers 108.74 124.24 TRENCHING: 0.00 73.14 Prim. & Secondary 73.14 0.00 43.60 Service 43.60 Sub-Total 404.12 293.48 697.60 0.00 Stores Handling(3) 28.71 28.71 432.83 293.48 Sub-Total 726.31 0.00 Engineering(5) 77.63 77.63 TOTAL 432.83 371.11 803.93

#### LOW DENSITY 210 LOT SUBDIVISION

1-Includes Sales Tax.

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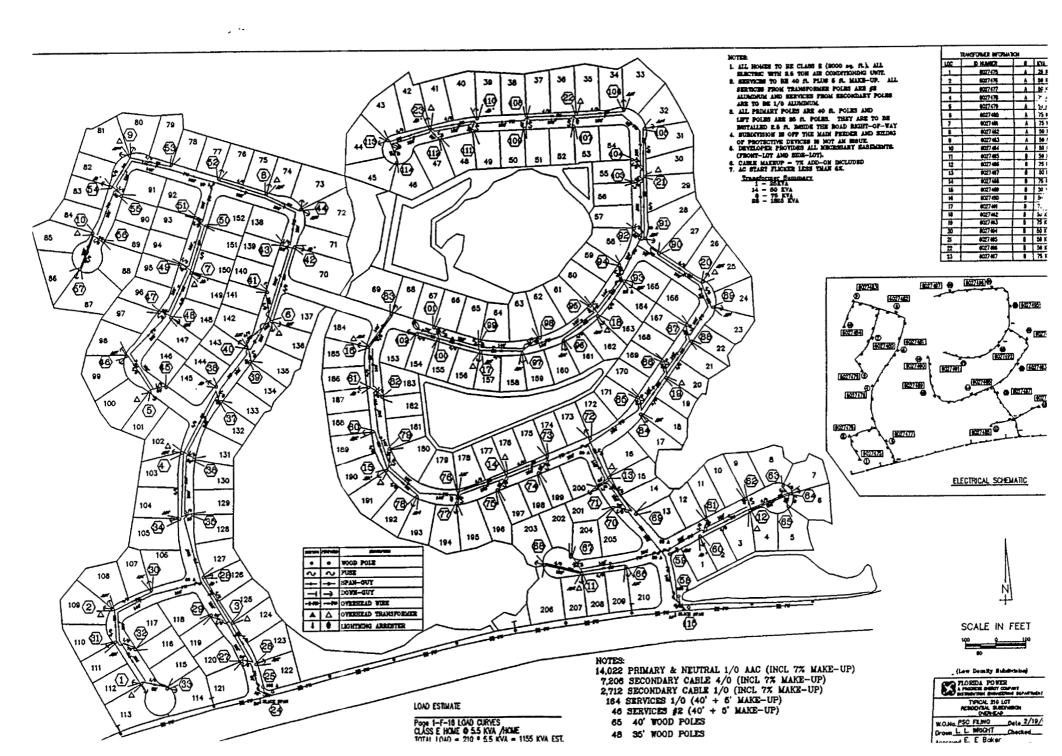
2-Includes Meter and Meter Socket.	
3-10% of all material except transformer units with a cost of:	85.06
and meters with a cost of:	32.00
4-Includes Administration, General and Transportation.	
5-13% of all matl. and labor except transformer units with a cost of:	87.72
and meters with a cost of;	41.45

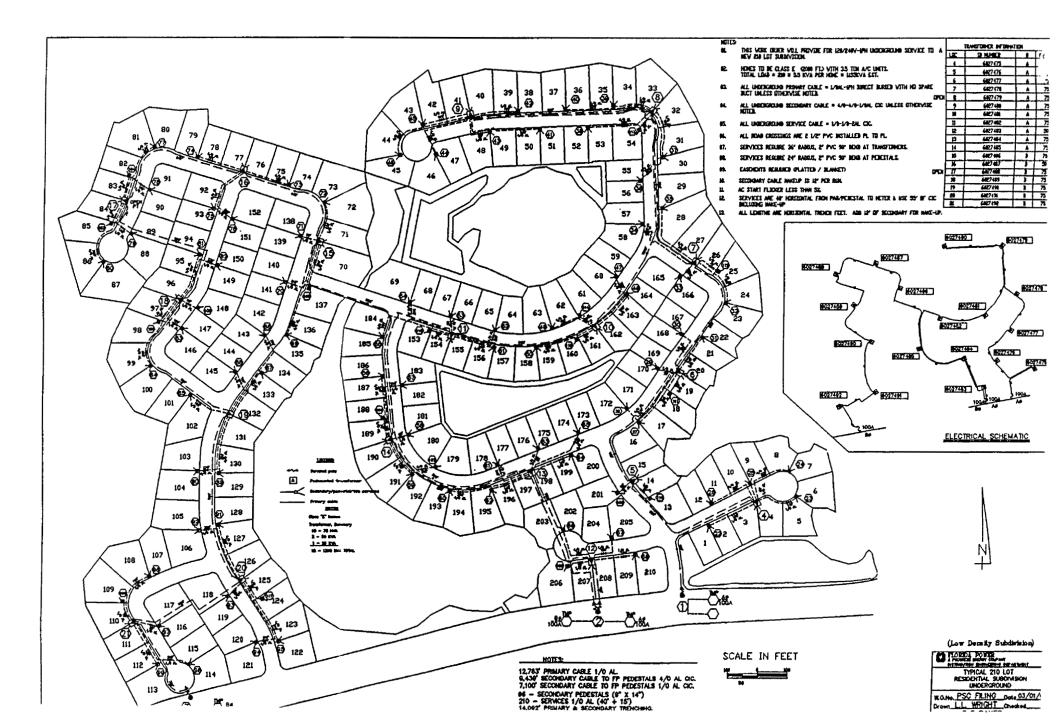
# LOW DENSITY - 210 LOT SUBDIVISION TYPICAL LAYOUT OVERHEAD AND UNDERGROUND DESIGNS

## **SCHEDULE NO. 4**

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#### **OVERHEAD vs. UNDERGROUND SUMMARY SHEET**

#### **SCHEDULE NO. 5**

# HIGH DENSITY 176 LOT SUBDIVISION COMPANY OWNED SERVICE LATERALS COST PER SERVICE LATERAL

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	141	310	169
Material	244	342	98
TOTAL	385	652	267

#### COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR

#### **SCHEDULE NO. 6**

## HIGH DENSITY 176 LOT SUBDIVISION CUSTOMER OWNED SERVICE LATERALS

ITÈM	MATERIAL		TOTAL
Service(2)	55.84	48.38	104.22
Primary	19.03	15.43	34.46
Secondary	31.75	8.68	40.43
Initial Tree Trim	0.00	8.53	8.53
Poles	52.55	16.19	68.74
Transformers	70.44	11.42	81.86
Sub-Total(1)	229.61	108.63	338.24
Stores Handling(3)	14.34	0.00	14.34
Sub-Total	243.95	108.63	352.58
Engineering(5)	0.00	32.82	32.82
TOTAL	243.95	141.45	385.40

1-Includes Sales Tax.

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3-10% of all material except transformer units with a cost of:	
and meters with a cost of:	32.00
4-Includes Administration, General and Transportation.	
5-13% of all matl. and labor except transformer units with a cost of:	58.67
and meters with a cost of:	41.45

#### COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

#### **SCHEDULE NO. 7**

### HIGH DENSITY 176 LOT SUBDIVISION COMPANY OWNED SERVICE LATERALS

ITEM	MATERIAL	LABOR	TOTAL
Service (2)	91.37	87.17	178.54
Primary	29.14	6.80	35.94
Secondary	115.19	44.63	159.82
Transformers	83.96	12.30	96.26
TRENCHING:			
Prim. & Secondary	0.00	64.28	64.28
Service	0.00	32.70	32.70
Sub-Total	319.66	247.88	567.54
Stores Handling(3)	22.30	0.00	22.30
Sub-Total	341.96	247.88	589.84
Engineering(5)	0.00	62.61	62.61
TOTAL	341.96	310.49	652.45

1-Includes Sales Tax.

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 2-Includes Meter and Meter Socket.
 64.65

 3-10% of all material except transformer units with a cost of:
 64.65

 and meters with a cost of:
 32.00

 4-Includes Administration, General and Transportation.
 5-13% of all matl. and labor except transformer units with a cost of:
 66.77

 and meters with a cost of:
 41.45

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#### **OVERHEAD vs. UNDERGROUND SUMMARY SHEET**

#### SCHEDULE NO. 8

## HIGH DENSITY 176 LOT SUBDIVISION GANGED METERS COST PER SERVICE

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	106	186	80
Material	213	250	37
TOTAL	319	436	117

#### COST PER SERVICE OVERHEAD MATERIAL AND LABOR

#### **SCHEDULE NO. 9**

### HIGH DENSITY 176 LOT SUBDIVISION GANGED METERS

ITEM	MATERIAL	LABOR	TOTAL
Service(2)	46.67	24.50	71.17
Primary	17.23	14.59	31.82
Secondary	22.73	6.76	29.49
Initial Tree Trim	0.00	8.53	8.53
Poles	41.56	13.64	55.20
Transformers	73.04	12.61	85.65
Sub-Total(1)	201.23	80.63	281.86
Stores Handling(3)	11.37	0.00	11.37
Sub-Total	212.60	80.63	293.23
Engineering(5)	0.00	24.88	24.88
TOTAL	212.60	105.51	318.11

 1-Includes Sales Tax.

 2-Includes Meter and Meter Socket.

 3-10% of all material except transformer units with a cost of:
 55.53

 and meters with a cost of:
 32.00

 4-Includes Administration, General and Transportation.
 5-13% of all matl. and labor except transformer units with a cost of:
 60.36

 and meters with a cost of:
 41.45

#### COST PER SERVICE UNDERGROUND MATERIAL AND LABOR

#### SCHEDULE NO. 10

### HIGH DENSITY 176 LOT SUBDIVISION GANGED METERS

ITEM	MATERIAL	LABOR	TÖTAL
Service (2)	122.54	65.40	187.94
Primary	29.14	6.80	35.94
Secondary	0.00	0.00	0.00
Transformers	83.96	12.30	96.26
TRENCHING:			
Prim. & Secondary	0.00	64.28	64.28
			0.00
Sub-Total	235.64	148.78	384.42
Stores Handling(3)	13.90	0.00	13.90
Sub-Total	249.54	148.78	398.32
Engineering(5)	0.00	37.71	37.71
TOTAL	249.54	186.49	436.03

1-Includes Sales Tax.

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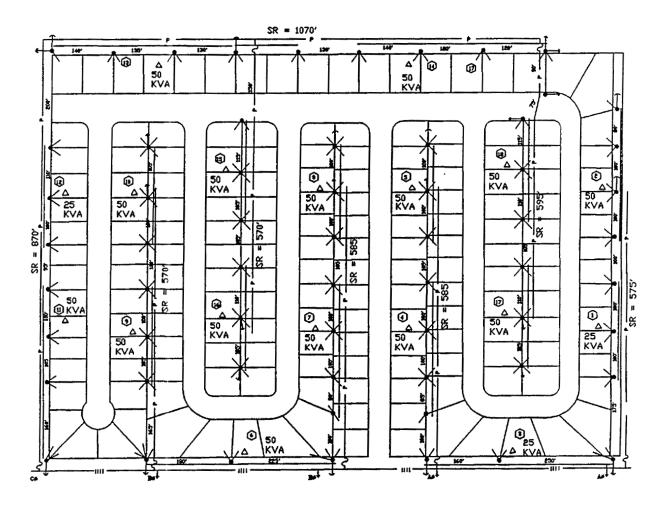
2-Includes Meter and Meter Socket.

3-10% of all material except transformer units with a cost of:	64.65
and meters with a cost of:	32.00
4-Includes Administration, General and Transportation.	
5-13% of all matl. and labor except transformer units with a cost of:	66.77
and meters with a cost of:	41.45

# HIGH DENSITY - 176 LOT SUBDIVISION TYPICAL LAYOUT (Individual Metered and Gang Metered) OVERHEAD AND UNDERGROUND DESIGNS

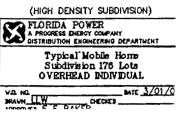
### SCHEDULE NO. 11

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SCALE IN FEET



#### NOTES

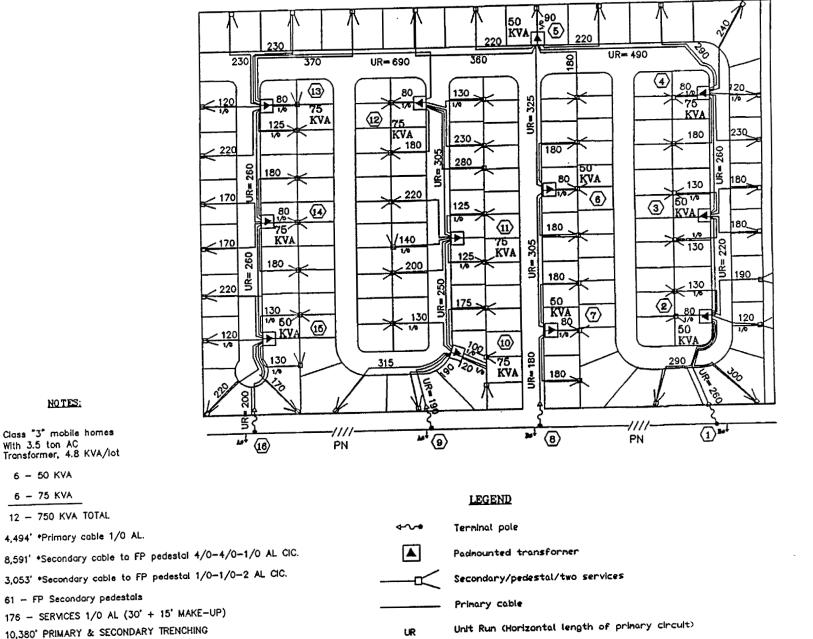
CLASS "3" MOBILE HOMES WITH 3.5 TON AC TRANSFORMER, 4.8 KVA/LOT

- 3 25 KVA
- 15 50 KVA
- 18 825 KVA TOTAL
- 7,832' \*PRIMARY & NEUTRAL WIRE IS 1/0 AAAC.

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- 5,380' \*ALL SECONDARY CABLE 4/OAL
- 6,160' ALL SERVICES 1/0 AL. (30' + 5' MAKE-UP)
- 48 40' PRIMARY DISTRIBUTION POLES.

- LEGEND
- SR = PRIMARY SEGMENT RUN FROM POINT TO POINT
- $\Delta$  TRANSFORMER STATION
- -P- PRIMARY WIRE
- \_\_\_\_\_SECONDARY/2 FPC SERVICES
- ---- ANCHOR
- LOCATION NUMBER



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Location number

NOTES:

Class "3" mobile homes With 3.5 ton AC Transformer, 4.8 KVA/lot

6 - 50 KVA

6 - 75 KVA

12 - 750 KVA TOTAL

4,494" \*Primary cable 1/0 AL.

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61 - FP Secondary pedestals

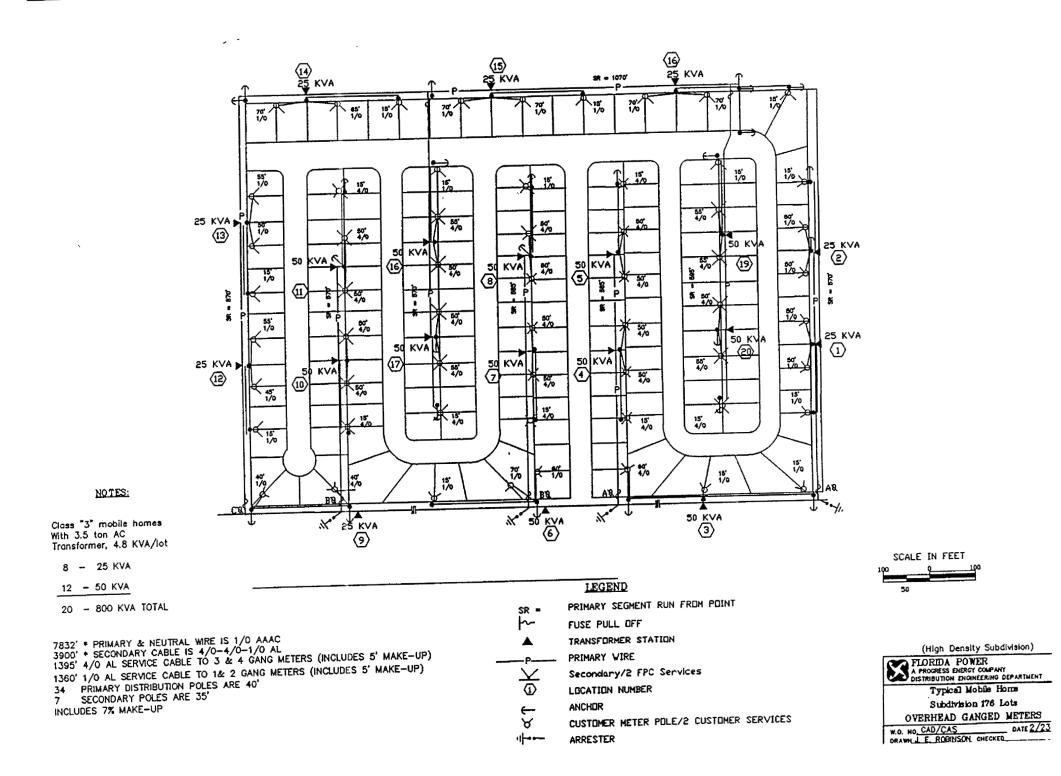
176 - SERVICES 1/0 AL (30' + 15' MAKE-UP)

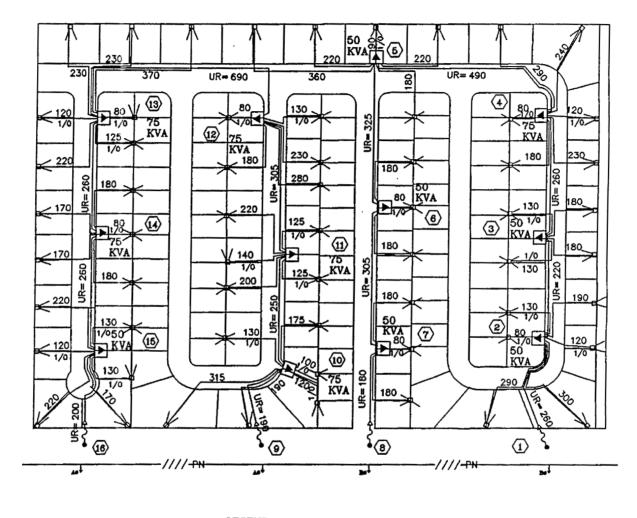
10,380' PRIMARY & SECONDARY TRENCHING

5,280' SERVICE TRENCHING (176 @ 30')

\*Includes 10% make--up

(High Density Subdivision)
FLORIDA POWER A PRODESS DERGY COMPANY DISTRIBUTION ENGINEERING DEPARTMENT
Typical Mobile Home
Subdivision 176 Lots
UNDERGROUND - INDIVIDUAL
W.O. HO DATE 3/01
DRAWN LLW CAS CHECKED





#### NOTES:

Class "3" mobile homes With 3.5 ton AC Transformer, 4.8 KVA/lot

6 – 50 KVA

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6 – 75 KVA

12 – 750 KVA TOTAL

4,494' \*Primary cable 1/0 AL.

8.591' \*Secondary cable to FPC pedestal 4/0 - 4/0 - 1/OAL CIC.

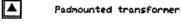
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3,053' \*Secondary cable to FPC pedestal 1/0 - 1/0 -2AL CIC

10,380' Primary & secondary trenching.



Terminal pole



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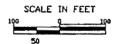
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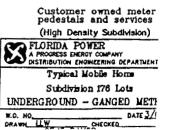
Utility secondary; customer neter pedestal/two customer services

Primary cable

Unit Run (Horizontal length of primary circuit)

Location number





#### **AVERAGE UNDERGROUND FEEDER COSTS**

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#### **SCHEDULE NO. 12**

1/0 AI. Underground Cable

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	Material	Labor	Total
From Computer Study	\$27,983.01	\$9,797.36	\$37,780.37
Stores 10%	\$2,798.30	\$0.00	\$2,798.30
Subtotal			\$40,578.67
Engineering & Supervision	n <b>13%</b>		\$5,275.00
Total			\$45,853.67

### 1/0 AAAC Overhead Conductor

	Material	Labor	Total
From Computer Study	\$8,769.65	\$7,196.80	\$15,966.45
Stores 10%	\$876.97	\$0.00	\$876.97
Subtotal			\$16,843.42
Engineering & Supervision	13%		\$2,189.64
Total			\$19,033.06

Differential = (45,853.67 - 19,033.06) / 5280

= \$5.08 /ft.

#### AVERAGE UNDERGROUND FEEDER COSTS

#### **SCHEDULE NO. 12**

### 500 MCM Al. Underground Cable

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	Material	Labor	Total
From Computer Study	\$61,317.61	\$19,170.53	\$80,488.14
Stores 10%	\$6,131.76	\$0.00	\$6,131.76
Subtotal			\$86,619.90
Engineering & Supervision	13%		\$11,260.59
Total			\$97,880.49

### 336 MCM AAAC Overhead Conductor

	Material	Labor	Total
From Computer Study	\$13,607.36	\$7,586.63	\$21,193.99
Stores 10%	\$1,360.74	\$0.00	\$1,360.74
Subtotal			\$22,554.73
Engineering & Supervision	13%		\$2,932.11
Total			\$25,486.84

Differential = (97,880.49 - 25,486.84) / 5280

=\$13.71 /ft.

#### AVERAGE UNDERGROUND FEEDER COSTS

#### **SCHEDULE NO. 12**

### 1000 MCM Al. Underground Cable

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	Material	Labor	Total
From Computer Study	\$73,634.46	\$20,801.93	\$94,436.39
Stores 10%	\$7,363.45	\$0.00	\$7,363.45
Subtotal			\$101,799.84
Engineering & Supervisior	13%		\$13,233.98
Total			\$115,033.82

### 795 MCM AAAC Overhead Conductor

	Material	Labor	Total
From Computer Study	\$23,009.25	\$8,406.88	\$31,416.13
Stores 10%	\$2,300.93	\$0.00	\$2,300.93
Subtotal			\$33,717.06
Engineering & Supervision	n 13%		\$4,383.22
Total			\$38,100.28

Differential =(115,033.82 - 38,100.28) / 5280

=\$14.57 /ft.

EXHIBIT D

# SUMMARY OF MAJOR CHANGES BETWEEN 2001 AND 1998 URD CHARGES

		Material \$			Labor \$			Total \$	<u></u>
	Overhead	Underground	Differential	Overhead	Underground	Differential	Overhead	Underground	Differential
LOW DENSITY									
Service	57.99	100.57	42.58	44.52	92.56	48.04	102.51	193.13	90.62
Primary	23.44	68.15	44.71	28.97	19.16	(9.81)	52.41	87.31	34.90
Secondary	43.81	126.66	82.85	15.75	49.52	33.77	59.56	176.18	116.62
Initial Tree Trim	-	-	-	12.10	-	(12.10)	12.10	-	(12.10)
Poles	87.99	-	(87.99)	29.75	-	(29.75)	117.74	-	(117.74)
Transformers	91.71	108.74	17.03	12.68	15.50	2.82	104.39	124.24	19.85
Trenching - Prim & Sec	-	-	-	-	73.14	73.14	-	73.14	73.14
Trenching - Service	-	-	-	-	43.60	43.60	-	43.60	43.60
Stores Handling	20.29	28.71	8.42	-	-	-	20.29	28.71	8.42
Engineering	-	-	-	45.85	77.63	31.78	45.85	77.63	31.78
Total	325.23	432.83	107.60	189.62	371.11	181.49	514.85	803.94	289.09
HIGH DENSITY									
Service	55.84	91.37	35.53	48.38	87.17	38.79	104.22	178.54	74.32
Primary	19.03	29.14	10.11	15.43	6.80	(8.63)	34.46	35.94	1.48
Secondary	31.75	115.19	83.44	8.68	44.63	35.95	40.43	159.82	119.39
Initial Tree Trim	-	-	-	8.53	-	(8.53)	8.53	-	(8.53)
Poles	52.55	-	(52.55)	16.19	-	(16.19)	68.74	-	(68.74)
Transformers	70.44	83.96	13.52	11.42	12.30	0.88	81.86	96.26	14.40
Trenching - Prim & Sec	-	-	-	-	64.28	64.28	-	64.28	64.28
Trenching - Service	-	-	-	-	32.70	32.70	-	32.70	32.70
Stores Handling	14.34	22.30	7.96	-	-	-	14.34	22.30	7.96
Engineering	-	-	-	32.82	62.61	29.79	32.82	62.61	29.79
Total	243.95	341.96	98.01	141.45	310.49	169.04	385.40	652.45	267.05
GANG METERED									
Service	46.67	122.54	75.87	24.50	65.40	40.90	71.17	187.94	116.77
Primary	17.23	29.14	11.91	14.59	6.80	(7.79)	31.82	35.94	4.12
Secondary	22.73	-	(22.73)	6.76	-	(6.76)	29.49	-	(29.49)
Initial Tree Trim	-	-	-	8.53	-	(8.53)	8.53	-	(8.53)
Poles	41.56	-	(41.56)	13.64	-	(13.64)	55.20	-	(55.20)
Transformers	73.04	83.96	10.92	12.61	12.30	(0.31)	85.65	96.26	10.61
Trenching - Prim & Sec	-	-	-	-	64.28	64.28	-	64.28	64.28
Trenching - Service	-	-	-	-	-	-	-	-	-
Stores Handling	11.37	13.90	2.53	-	-	- 1	11.37	13.90	2.53
Engineering	-	-	-	24.88	37.71	12.83	24.88	37.71	12.83
Total	212.60	249.54	36.94	105.51	186.49	80.98	318.11	436.03	117.92

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		Material \$			Labor \$		······································	Total \$	
	Overhead	Underground	Differential	Overhead	Underground	Differential	Overhead	Underground	Differential
LOW DENSITY									
Service	52.27	93.00	40.73	49.70	66.18	16.48	101.97	159.18	57.21
Primary	22.65	64.19	41.54	26.43	18.13	(8.30)	49.08	82.32	33.24
Secondary	40.56	129.24	88.68	14.57	27.64	13.07	55.13	156.88	101.75
Initial Tree Trim	-	-	-	16.24	-	(16.24)	16.24	-	(16.24)
Poles	91.44	-	(91.44)	27.58	-	(27.58)	119.02	-	(119.02)
Transformers	102.65	121.74	19.09	11.45	14.27	2.82	114.10	136.01	21.91
Trenching - Prim & Sec	-	-	-	-	73.81	73.81	-	73.81	73.81
Trenching - Service	-	-	-	-	69.30	69.30	-	69.30	69.30
Stores Handling	24.09	33.61	9.52	-	-	-	24.09	33.61	9.52
Engineering	-	-	-	55.81	89.06	33.25	55.81	89.06	33.25
Total	333.66	441.78	108.12	201.78	358.39	156.61	535.44	800.17	264.73
HIGH DENSITY		·····							
Service	48.62	62.28	13.66	54.52	61.52	7.00	103.14	123.80	20.66
Primary	16.85	27.59	10.74	13.49	6.34	(7.15)	30.34	33.93	3.59
Secondary	30.35	109.63	79.28	8.28	22.62	14.34	38.63	132.25	93.62
Initial Tree Trim	-	-	-	16.10	-	(16.10)	16.10	-	(16.10)
Poles	53.00	-	(53.00)	14.46	-	(14.46)	67.46	-	(67.46)
Transformers	79.11	93.92	14.81	10.64	11.37	0.73	89.75	105.29	15.54
Trenching - Prim & Sec	-	-	- (	-	64.08	64.08	-	64.08	64.08
Trenching - Service	-	-	-	-	38.50	38.50	-	38.50	38.50
Stores Handling	17.11	23.35	6.24	-	-	- (	17.11	23.35	6.24
Engineering	-	-	-	41.04	63.86	22.82	41.04	63.86	22.82
Total	245.04	316.77	71.73	158.53	268.29	109.76	403.57	585.06	181.49
GANG METERED									
Service	28.18	90.91	62.73	26.33	36.37	10.04	54.51	127.28	72.77
Primary	16.46	27.59	11.13	13.95	6.34	(7.61)	30.41	33.93	3.52
Secondary	22.23	-	(22.23)	6.38	-	(6.38)	28.61	-	(28.61)
Initial Tree Trim	-	-	-	15.48	-	(15.48)	15.48	-	(15.48)
Poles	40.19	-	(40.19)	11.86	-	(11.86)	52.05	-	(52.05)
Transformers	78.98	92.18	13.20	11.64	10.49	(1.15)	90.62	102.67	12.05
Trenching - Prim & Sec	-	-	-	-	64.08	64.08	-	64.08	64.08
Trenching - Service	-	-	-	-	-	-	-	-	- 1
Stores Handling	12.62	14.20	1.58	-	-	-	12.62	14.20	1.58
Engineering	-	-	-	29.42	36.96	7.54	29.42	36.96	7.54
Total	198.66	224.88	26.22	115.06	154.24	39.18	313.72	379.12	65.40

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#### FLORIDA POWER CORPORATION CHANGES 2001 VS. 1998

		Material \$			Labor \$			Total \$	
	Overhead	Underground	Differential	Overhead	Underground	Differential	Overhead	Underground	Differential
LOW DENSITY									
Service	5.72	7.57	1.85	(5.18)	26.38	31.56	0.54	33.95	33.41
Primary	0.79	3.96	3.17	2.54	1.03	(1.51)	3.33	4.99	1.66
Secondary	3.25	(2.58)	(5.83)	1.18	21.88	20.70	4.43	19.30	14.87
Initial Tree Trim	-	-	-	(4.14)	-	4.14	(4.14)	-	4.14
Poles	(3.45)	-	3.45	2.17	-	(2.17)	(1.28)	-	1.28
Transformers	(10.94)	(13.00)	(2.06)	1.23	1.23	-	(9.71)	(11.77)	(2.06)
Trenching - Prim & Sec	•	· - ´	-	-	(0.67)	(0.67)	-	(0.67)	(0.67)
Trenching - Service	-	-	-	-	(25.70)	(25.70)	-	(25.70)	(25.70)
Stores Handling	(3.80)	(4.90)	(1.10)	-	-	1	(3.80)	(4.90)	(1.10)
Engineering	-	-	-	(9.96)	(11.43)	(1.47)	(9.96)	(11.43)	(1.47)
Total	(8.43)	(8.95)	(0.52)	(12.16)	12.72	24.88	(20.59)	3.77	24.36
HIGH DENSITY			····						
Service	7.22	29.09	21.87	(6.14)	25.65	31.79	1.08	54.74	53.66
Primary	2.18	1.55	(0.63)	1.94	0.46	(1.48)	4.12	2.01	(2.11)
Secondary	1.40	5.56	4.16	0.40	22.01	21.61	1.80	27.57	25.77
Initial Tree Trim	-	-	-	(7.57)	-	7.57	(7.57)	-	7.57
Poles	(0.45)	-	0.45	1.73	-	(1.73)	1.28	-	(1.28)
Transformers	(8.67)	(9.96)	(1.29)	0.78	0.93	0.15	(7.89)	(9.03)	(1.14)
Trenching - Prim & Sec	-	-	- (	-	0.20	0.20	-	0.20	0.20
Trenching - Service	-	-	-	-	(5.80)	(5.80)	-	(5.80)	(5.80)
Stores Handling	(2.77)	(1.05)	1.72	-	-	- (	(2.77)	(1.05)	1.72
Engineering	-	-	-	(8.22)	(1.25)	6.97	(8.22)	(1.25)	6.97
_Total	(1.09)	25.19	26.28	(17.08)	42.20	59.28	(18.17)	67.39	85.56
GANG METERED									
Service	18.49	31.63	13.14	(1.83)	29.03	30.86	16.66	60.66	44.00
Primary	0.77	1.55	0.78	0.64	0.46	(0.18)	1.41	2.01	0.60
Secondary	0.50	-	(0.50)	0.38	-	(0.38)	0.88	-	(0.88)
Initial Tree Trim	-	-	-	(6.95)	-	6.95	(6.95)	-	6.95
Poles	1.37	-	(1.37)	1.78	-	(1.78)	3.15	-	(3.15)
Transformers	(5.94)	(8.22)	(2.28)	0.97	1.81	0.84	(4.97)	(6.41)	(1.44)
Trenching - Prim & Sec	-	-	-	-	0.20	0.20	-	0.20	0.20
Trenching - Service	-	-	-	-	-	-	-	-	-
Stores Handling	(1.25)	(0.30)	0.95	-	•	-	(1.25)	(0.30)	0.95
Engineering	-	-	-	(4.54)	0.75	5.29	(4.54)	0.75	5.29
Total	13.94	24.66	10.72	(9.55)	32.25	41.80	4.39	56.91	52.52

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Note: Major changes are in bold and are explained on the next page.

#### FLORIDA POWER CORPORATION SUMMARY OF MAJOR CHANGES IN DIFFERENTIAL

	Change in Differential (2001 vs. 1998)						
	Material \$	Labor \$	Total \$				
LOW DENSITY							
Service	1.85	<b>31.56</b> (B)	33.41				
Secondary	(5.83)	<b>20.70</b> (B)	14.87				
Trenching - Service	-	(25.70) (C)	(25.70)				
Miscellaneous	3.46	(1.68)	1.78				
Total	(0.52)	24.88	24.36				
HIGH DENSITY							
Service	<b>21.87</b> (A)	<b>31.79</b> (B)	53.66				
Secondary	4.16	<b>21.61</b> (B)	25.77				
Miscellaneous	0.25	5.88	6.13				
Total	26.28	59.28	85.56				
GANG METERED							
Service	<b>13.14</b> (A)	<b>30.86</b> (B)	44.00				
Miscellaneous	(2.42)	10.94	8.52				
Total	10.72	41.80	52.52				

(A) Combined effect of design adjustments (adjusted service lengths, added 90-degree PVC bends, and added conduit road crossings).

(B) Contractor installation cost for CIC (cable in conduit) increased from \$0.15/foot in 1998 to \$0.54/foot in 2001. The 1998 cost estimate was set prior to any significant experience with CIC by FPC or its contractor and has been updated to reflect actual contract costs.

(C) Lower trenching cost due to reduction in service length.

Note: This page provides an explanation of the major changes (in bold) identified on the previous page.