

ORIGINAL

**Florida
Power**
CORPORATION

980436-EI

JAMES A. MCGEE
SENIOR COUNSEL

March 31, 1998

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

RE: Petition to approve revised tariff sheets containing updated underground residential distribution charges by Florida Power Corporation.

Dear Ms. Bayó:

Enclosed for filing in the subject docket are original and fifteen copies of Florida Power Corporation's Petition to approve revised tariff sheets containing updated underground residential distribution charges.

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.

- ACK _____
- AFA /
- APP _____
- CAF _____
- CMU _____
- CTR _____
- EAG _____
- LEG /
- LIN _____
- OPC _____
- RCH _____
- SEC /
- WAS _____
- OTH _____

JAM/kp
Enclosures

Very truly yours,

James A. McGee

DOCUMENT CONTROL
03/18 APR-18

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to approve revised tariff sheets containing updated underground residential distribution charges by Florida Power Corporation.

Docket No. _____

Submitted for filing:
April 1, 1998

PETITION

Florida Power Corporation (Florida Power or the Company), pursuant to Rule 25-6.078, F.A.C., hereby petitions the Florida Public Service Commission (the Commission) for approval of Ninth Revised Tariff Sheet Nos. 4.113, 4.114 and 4.115, attached hereto as Exhibit A, which are a part of Florida Power's Underground Residential Distribution (URD) Policy contained in Part XI of its tariff Rules. In particular, these revised tariff sheets provide updated URD charges based on the cost differential between the installation of overhead and underground facilities for residential service. In support of its petition, Florida Power states as follows:

1. Florida Power has recently completed an comprehensive review of its design and construction standards for overhead and underground distribution facilities. The objective of this effort was to achieve meaningful improvements in the reliability and cost effectiveness of the Company's residential distribution system. The revised tariff sheets in Exhibit A contain updated URD charges based on the enhanced design and construction standards adopted by Florida Power as a result of this comprehensive review.

DOCUMENT NO. 03778

03/78 APR-1 3

2. As recently revised by the Commission on October 31, 1997, Rule 25-6.078, *Schedule of Charges*, requires utilities to file updated URD charges for Commission approval at least every three years, or sooner if a utility's current underground cost differential for the standard low density subdivision varies from its last approved differential by 10 percent or more. Apart from these mandatory filings, the rule does not preclude a utility from filing for approval of updated URD charges on its own initiative, where the utility considers an update to be appropriate. Such is the case with this filing by Florida Power.

3. Since Florida Power's updated underground differential for the standard low density subdivision varies from its approved differential by approximately nine percent, this filing is not expressly mandated by Rule 25-6.078. However, the Company's updated differentials for the two categories of high density subdivisions (those with Company-owned and customer-owned service laterals) and for underground feeders vary from their corresponding approved differentials by well over the 10 percent threshold. These higher variances in three of the four URD categories support the appropriateness of updating the approved URD charges at this time.

4. Furthermore, in view of the enhanced design and construction standards recently adopted by Florida Power, the Company also believes it to be both appropriate and desirable for its URD charges to reflect the same design and construction standards that will actually be used in installing the underground facilities to which the URD charges apply. Because the updated URD charges are based on the enhanced standards now in effect, these charges will provide a more accurate and stable baseline against which to measure any changes in the underground cost differentials over the next three-year cycle than would the

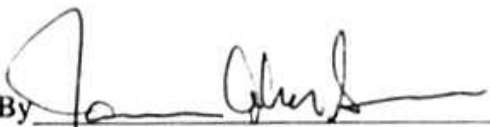
existing URD charges, which are based on design and construction standards no longer in use.

5. In addition to the revised tariff sheets contained in Exhibit A, a copy in legislative format is provided in Exhibit B. As prescribed by Rule 25-6.078(4), PSC/EAG Form 13 showing the development of the updated URD differential charges is included with this petition as Exhibit C.

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

Respectfully submitted,

OFFICE OF THE GENERAL COUNSEL
FLORIDA POWER CORPORATION

By 

James A. McGee
Post Office Box 14042
St. Petersburg, FL 33733-4042
Telephone: (813) 866-5184
Facsimile: (813) 866-4931

EXHIBIT A

FLORIDA POWER CORPORATION

1998 URD FILING

REVISED TARIFF SHEETS

Ninth Revised Sheet No. 4.113

Ninth Revised Sheet No. 4.114

Ninth 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 6 dwelling units per acre, taking service at each building or mobile home \$ 264.00 per point of delivery

To subdivisions with a density of 6 or more dwelling units per acre taking service at each building or mobile home \$ 181.00 per point of delivery

To mobile home subdivisions with a density of 6 or more dwelling units per acre taking service at grouped meter pedestals on the serving property line \$ 65.00 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.	\$ 3.65 per foot
500 MCM U.G. vs. 336 MCM O.H.	\$ 12.16 per foot
1000 MCM U.G. vs. 795 MCM O.H.	\$ 13.32 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	\$ 1.10
Service Laterals, for each foot of Trench	\$ 1.10



- (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 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 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 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	\$ 149.00
For each foot over 80 feet up to 200 feet	\$ 0.91 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	\$ 1.10
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The provisions of Paragraphs 11.03(3) and 11.03(4) are also applicable.

ISSUED BY: W. C. Slusser, Jr., Director, Pricing Department
 EFFECTIVE:



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 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 \$325.94
For each foot over 80 feet up to 200 feet \$0.76 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 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:
 1. The vault or vaults necessary for the transformers and the associated equipment, including the ventilation equipment.
 2. The necessary raceways or conduit for the Company's supply cables from the vault or vaults to a suitable point five feet outside the building in accordance with the Company's plans and specifications.
 3. Conduits underneath all buildings when required for the Company's supply cables. Such conduits shall extend five feet beyond the edge of the buildings for joining to the Company's facilities.
 4. The service entrance conductors and raceways from the Applicant's service equipment to the designated point of delivery within the vault.

ISSUED BY: W. C. Slusser, Jr., Director, Pricing Department

EFFECTIVE:

EXHIBIT B

FLORIDA POWER CORPORATION

1998 URD FILING

REVISED TARIFF SHEETS - LEGISLATIVE FORMAT

Ninth Revised Sheet No. 4.113

Ninth Revised Sheet No. 4.114

Ninth Revised Sheet No. 4.115



- (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 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 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 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 \$ ~~245.00~~ 349.00
 For each foot over 80 feet up to 200 feet \$ ~~0.79~~ 0.91 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 \$ ~~4.00~~ 1.10

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

EXHIBIT C
FLORIDA POWER CORPORATION
1998 URD FILING
PSC/EAG FORM 13
DEVELOPMENT OF UPDATED COSTS
CONSISTING OF 23 PAGES

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

**OVERHEAD vs. UNDERGROUND SUMMARY SHEET
SCHEDULE NO. 1**

*LOW DENSITY 210 LOT SUBDIVISION
COST PER SERVICE LATERAL*

ITEM	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	202 00	358 00	156 00
Material	334 00	442 00	108 00
TOTAL	536.00	800.00	264.00

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

SCHEDULE NO. 3

LOW DENSITY 210 LOT SUBDIVISION

ITEM	MATERIAL⁽¹⁾	LABOR⁽⁴⁾	TOTAL
Service ⁽²⁾	93.00	66.18	159.18
Primary	64.19	18.13	82.32
Secondary	129.24	27.64	156.88
Transformers	121.74	14.27	136.01
Primary Trenching	0.00	49.84	49.84
Secondary Trenching	0.00	23.97	23.97
Service Trenching	0.00	69.30	69.30
Subtotal	408.17	269.33	677.50
Stores Handling ⁽³⁾	33.61	0.00	33.61
Subtotal	441.78	269.33	711.11
Engineering ⁽⁵⁾	0.00	89.06	89.06
TOTAL	441.78	358.39	800.17

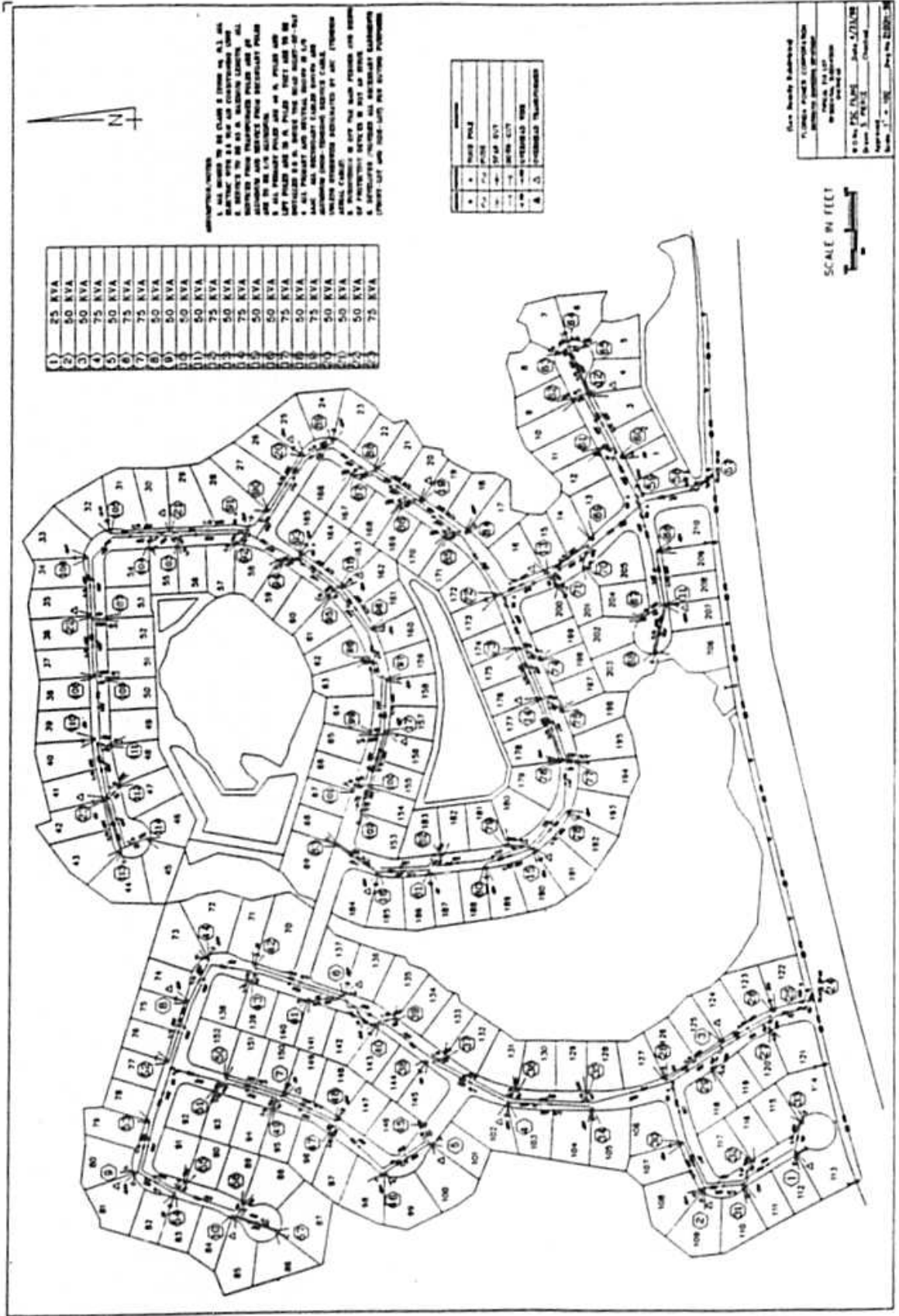
(1) Includes Sales Tax.

(2) Includes Meter and Meter Socket.

(3) 11% of all material transformer units with a cost of: 91.30
and meters with a cost of 11.29

(4) Includes Administration, General and Transportation.

(5) 15% of all material & labor except transformer units with a cost of: 93.65
and meters with a cost of: 23.73



1	25 KVA
2	50 KVA
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GENERAL NOTES:
 1. ALL NOTES ON PLANS & FORM NO. 13, AND DRAWING NO. 13, ARE APPLICABLE TO THIS PLAN.
 2. THE UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 3. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 4. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 5. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 6. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 7. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 8. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 9. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.
 10. ALL UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF CHICAGO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS FOR UTILITY LINES.

1	WATER
2	SEWER
3	GAS
4	ELECTRIC
5	TELEPHONE
6	TELEVISION
7	CABLE
8	OTHER

Plan No. 13-1097
 TITLE: UTILITY LINES
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: [Date]
 SCALE: 1" = 84'
 SHEET NO. 5 OF 23

SCALE 84 FEET



**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

**COST PER SERVICE LATERAL OVERHEAD MATERIAL AND LABOR
SCHEDULE NO. 6**

*HIGH DENSITY 176 LOT SUBDIVISION
COMPANY OWNED SERVICE LATERALS*

ITEM	MATERIAL⁽¹⁾	LABOR⁽⁴⁾	TOTAL
Service ⁽²⁾	48.62	54.52	103.14
Primary	16.85	13.49	30.34
Secondary	30.35	8.28	38.63
Initial Tree Trim	0.00	16.10	16.10
Poles	53.00	14.46	67.46
Transformers	79.11	10.64	89.75
Subtotal	227.93	117.49	345.42
Stores Handling ⁽³⁾	17.11	0.00	17.11
Subtotal	245.04	117.49	362.53
Engineering ⁽⁵⁾	0.00	41.04	41.04
TOTAL	245.04	158.53	403.57

(1) Includes Sales Tax.

(2) Includes Meter Only.

(3) 11% of all material transformer units with a cost of: 61.08
and meters with a cost of: 11.29

(4) Includes Administration, General and Transportation.

(5) 15% of all material & labor except transformer units with a cost of: 65.23
and meters with a cost of: 23.73

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

COST PER SERVICE LATERAL UNDERGROUND MATERIAL AND LABOR

SCHEDULE NO. 7

*HIGH DENSITY 176 LOT SUBDIVISION
COMPANY OWNED SERVICE LATERALS*

ITEM	MATERIAL⁽¹⁾	LABOR⁽⁴⁾	TOTAL
Service ⁽²⁾	62.28	61.52	123.80
Primary	27.59	6.34	33.93
Secondary	109.63	22.62	132.25
Transformers	93.92	11.37	105.29
Primary Trenching	0.00	26.21	26.21
Secondary Trenching	0.00	37.87	37.87
Service Trenching	0.00	38.50	38.50
Subtotal	293.42	204.43	497.85
Stores Handling ⁽³⁾	23.35	0.00	23.35
Subtotal	316.77	204.43	521.20
Engineering ⁽⁵⁾	0.00	63.86	63.86
TOTAL	316.77	268.29	585.06

(1) Includes Sales Tax.

(2) Includes Meter Only.

(3) 11% of all material transformer units with a cost of: 70.29
and meters with a cost of: 11.29

(4) Includes Administration, General and Transportation.

(5) 15% of all material & labor except transformer units with a cost of: 72.15
and meters with a cost of: 23.73

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

COST PER DWELLING UNIT UNDERGROUND MATERIAL AND LABOR

SCHEDULE NO. 10

**HIGH DENSITY 176 LOT SUBDIVISION
CUSTOMER OWNED SERVICE LATERALS FROM METER CENTERS**

ITEM	MATERIAL ⁽¹⁾	LABOR ⁽⁴⁾	TOTAL
Service ⁽²⁾	90.91	36.37	127.28
Primary	27.59	6.34	33.93
Secondary	0.00	0.00	0.00
Transformers	92.18	10.49	102.67
Primary Trenching	0.00	26.21	26.21
Secondary Trenching	0.00	37.87	37.87
Service Trenching	0.00	0.00	0.00
Subtotal	210.68	117.28	327.96
Stores Handling ⁽³⁾	14.20	0.00	14.20
Subtotal	224.88	117.28	342.16
Engineering ⁽⁵⁾	0.00	36.96	36.96
TOTAL	224.88	154.24	379.12

(1) Includes Sales Tax.

(2) Includes Meter Only.

(3) 11% of all material transformer units with a cost of:
and meters with a cost of:

70.29
11.29

(4) Includes Administration, General and Transportation.

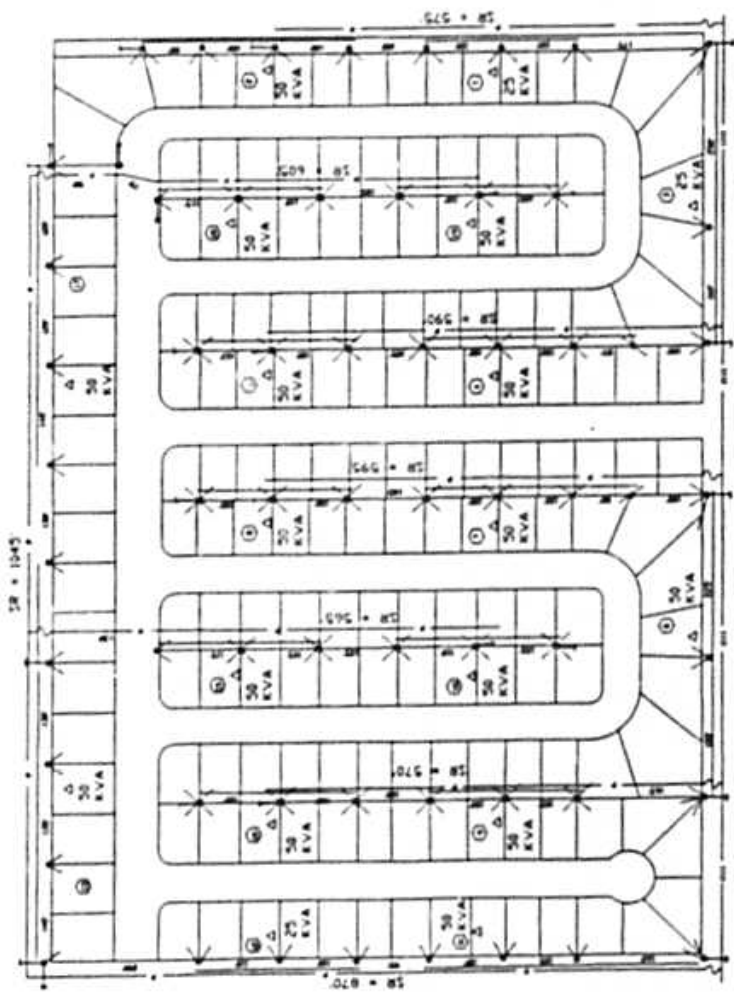
(5) 15% of all material & labor except transformer units with a cost of :
and meters with a cost of:

72.15
23.73

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

**HIGH DENSITY - 176 LOT SUBDIVISION TYPICAL LAYOUT
OVERHEAD AND UNDERGROUND DESIGNS**

SCHEDULE NO. 11



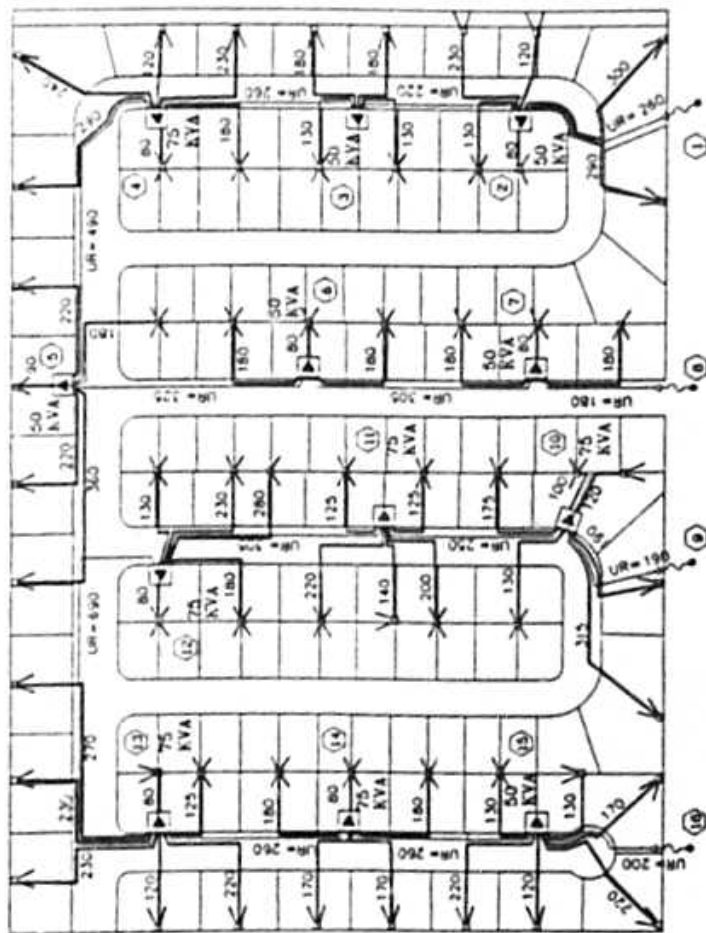
NOTES
CLASS 'J' MOBILE HOMES
TRANSFORMER 5.8 KVA/LOT

- 3 - 25 KVA
- 15 - 50 KVA
- TB - 800 KVA TOTAL
- 8,085' ALL PRIMARY CABLE 1/0 AL
- 5,300' ALL SECONDARY CABLE 4/0AL
- 9,870' ALL SERVICES 1/0 AL
- 1. ALL PRIMARY DISTRIBUTION POLES ARE 35
- 2. ALL SECONDARY POLES ARE 30'

- LEGEND
- 50 - PRIMARY SEGMENT RUN FROM POINT TO POINT
 - ~ - FUSE PULL OFF
 - Δ - TRANSFORMER STATION
 - P- - PRIMARY WIRE
 - S- - SECONDARY/2 PPC SERVICES
 - - ANCHOR
 - ⊙ - LOCATION NUMBER

(HIGH DENSITY SUBDIVISION)

FLORIDA POWER CORPORATION DISTRICT MANAGER, GAITHERSBURG	
Typical Mobile Home Subdivision 178 Lela OVERHEAD INDIVIDUAL	
WB NO. C407635	DATE 3/21/98
DESIGNED BY	CHECKED BY
DRAWN BY	SCALE



NOTES.

Class "J" mobile homes

Transformer, 4.8 KVA/lot

6 - 50 KVA

6 - 75 KVA

12 - 750 KVA TOTAL

4.195' Al primary cable #2 Al

280' Secondary cable to FPC pedestal 4/0 Al

10,845' Secondary cable to FPC pedestal 1/0 Al

81 FPC Secondary pedestals

Spare conduit installed for secondary and service use

LEGEND

Terminal pole

Padmounted transformer

Secondary/pedestal/two services

Primary cable

UR Run horizontal length of primary circuit

Location number

(High Density Substation)

FLORIDA POWER CORPORATION

Substation Identification Worksheet

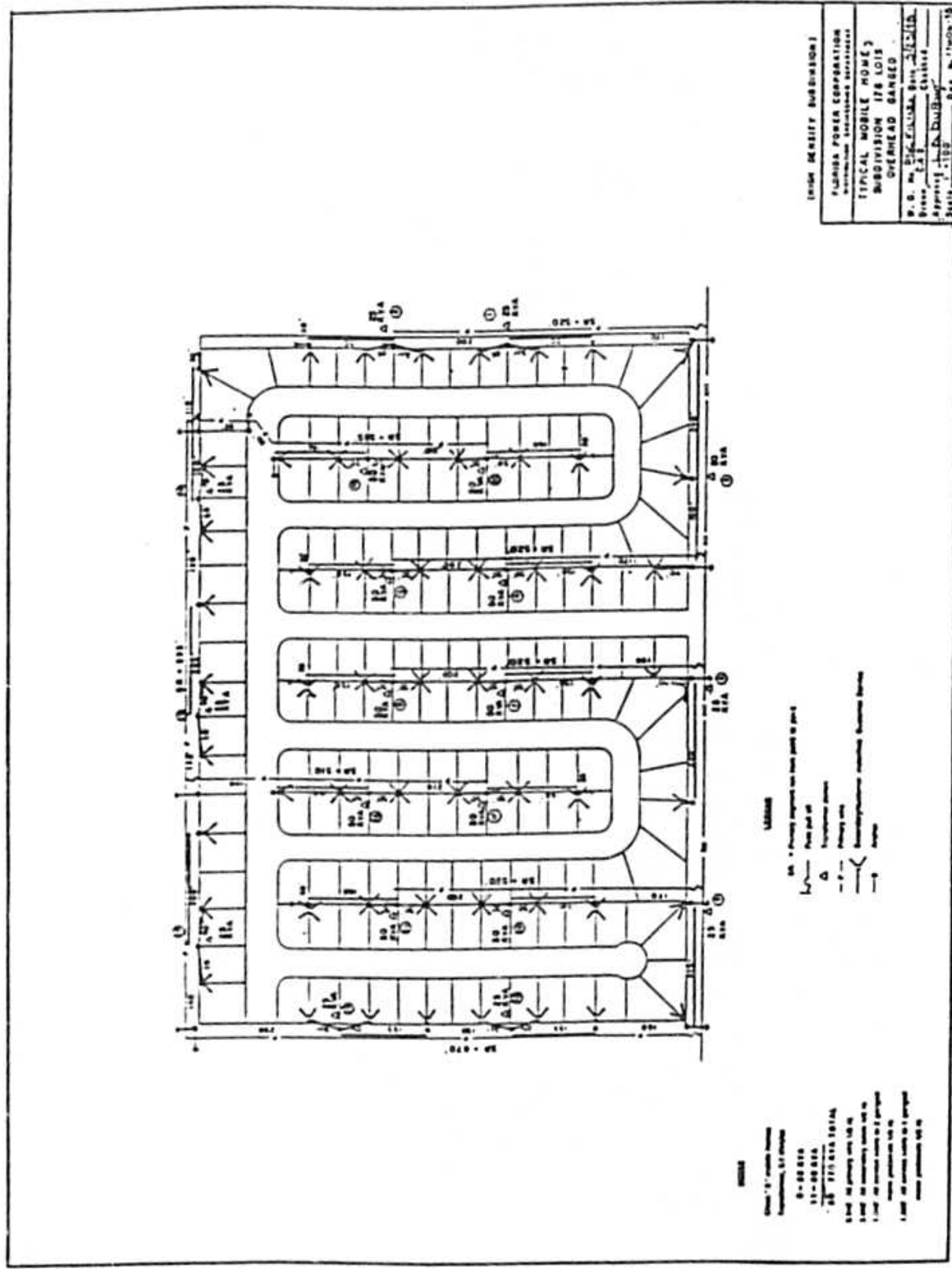
Typical Mobile Home

Substation 178 Lots

UNDEGROUND - INDIVIDUAL

DATE: 12/27/95 CHECKED: DATE: 2/22/98

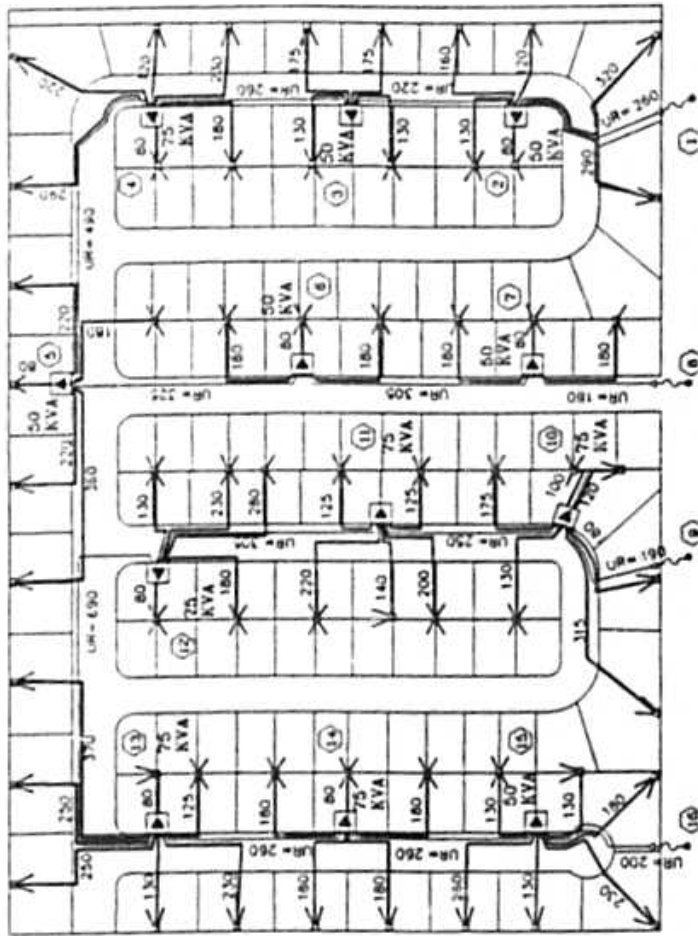
BY: J. J. JONES



HIGH DENSITY SUBMARINE
 FLORIDA POWER CORPORATION
 SUBDIVISION IRE LOUIS
 OVERHEAD GANTRY
 W. B. M. [Signature] Date: 3/23/98
 State: Fla. [Signature] Date: 3/23/98

LEGEND
 1. Primary support for main part of part
 2. Primary support
 3. Primary support
 4. Primary support
 5. Primary support

REVISIONS
 1. 0 - 00 010
 2. 00 010
 3. 00 010
 4. 00 010
 5. 00 010
 6. 00 010
 7. 00 010
 8. 00 010
 9. 00 010
 10. 00 010



NOTES:

- Class "3" mobile homes
- Transformer, 4.8 KVA/ft
- 6 - 50 KVA
- 6 - 75 KVA
- 12 - 750 KVA TOTAL
- 4.195' All primary cable #2 AL
- 280' Secondary cable to customer owned pedestal 4/0 AL
- 10,615' Secondary cable to customer owned pedestal 1/0 AL
- 61 Customer owned meter pedestals
- Spare conduit installed for service use.

LEGEND

- Terminal pole
- Padmounted transformer
- Secondary/pedestal/tee services
- Primary cable
- UR Unit Run (horizontal length of primary circuit)
- Location number

Customer owned meter pedestals and services
(High Density Substation)

FLORIDA POWER CORPORATION distribution facilities structure Typical Mobile Home
Substation 178 Lata
UNDEGROUND - GANGED METERS
Sheet: 650/233 - circuit
Scale: 1"=100' - DWG. NO. 17800333

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

AVERAGE UNDERGROUND FEEDER COSTS

SCHEDULE NO. 12

The following pages (19 - 21) indicate the method used to determine the average differential costs of installing feeder mains Underground vs Overhead.

Florida Power Corporation is currently using the Automatic Construction Estimating (ACE) computer program to provide the material and labor costs for all of the assemblies used in overhead and underground construction. A computer study was made to estimate the cost of one mile of overhead feeder line and one mile of underground cable installation. Charges for stores, engineering and supervision were then added to the results of the computer study.

The cost of overhead construction is subtracted from that of underground and then converted to a differential cost per foot.

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

AVERAGE UNDERGROUND FEEDER COSTS

SCHEDULE NO. 12

	MATERIAL⁽¹⁾	LABOR⁽⁴⁾	TOTAL
1/0 Al. Solid Underground Cable:			
From Computer Study	\$21,959.75	\$9,099.91	\$31,059.66
Stores 11%	\$2,415.57	\$0.00	\$2,415.57
Subtotal			\$33,475.23
Engineering & Supervision 15%			\$5,021.00
Total			\$38,496.23

	MATERIAL⁽¹⁾	LABOR⁽⁴⁾	TOTAL
1/0 AAAC Overhead Conductor:			
From Computer Study	\$9,026.17	\$6,686.48	\$15,712.65
Stores 11%	\$992.88	\$0.00	\$992.88
Subtotal			\$16,705.53
Engineering & Supervision 15%			\$2,505.83
Total			\$19,211.36

$$\begin{aligned} \text{Differential} &= (\$38,496.23 - \$19,211.36) / 5280 \text{ ft.} \\ &= \$3.65/\text{ft.} \end{aligned}$$

FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA

AVERAGE UNDERGROUND FEEDER COSTS

SCHEDULE NO. 12

	MATERIAL ⁽¹⁾	LABOR ⁽⁴⁾	TOTAL
500 MCM Al. Underground Cable:			
From Computer Study	\$55,259.82	\$17,435.07	\$72,694.89
Stores 11%	\$6,078.58	\$0.00	\$6,078.58
Subtotal			\$78,773.47
Engineering & Supervision 15%			\$11,816.02
Total			\$90,589.49

	MATERIAL ⁽¹⁾	LABOR ⁽⁴⁾	TOTAL
336 MCM AAAC Overhead Conductor:			
From Computer Study	\$14,203.69	\$7,172.98	\$21,376.67
Stores 11%	\$1,562.41	\$0.00	\$1,562.41
Subtotal			\$22,939.08
Engineering & Supervision 15%			\$3,440.86
Total			\$26,379.94

Differential = $(\$90,589.49 - \$26,379.94) / 5280 \text{ ft.}$

= \$12.16/ft.

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

AVERAGE UNDERGROUND FEEDER COSTS

SCHEDULE NO. 12

	MATERIAL ⁽¹⁾	LABOR ⁽⁴⁾	TOTAL
1000 MCM Underground Cable:			
From Computer Study	\$68,311.57	\$18,794.57	\$87,106.14
Stores 11%	\$7,514.27	\$0.00	\$7,514.27
Subtotal			\$94,620.41
Engineering & Supervision 15%			\$14,193.06
Total			\$108,813.47

	MATERIAL ⁽¹⁾	LABOR ⁽⁴⁾	TOTAL
795 MCM AAAC Overhead Conductor:			
From Computer Study	\$23,140.99	\$7,770.54	\$30,911.53
Stores 11%	\$2,545.51	\$0.00	\$2,545.51
Subtotal			\$33,457.04
Engineering & Supervision 15%			\$5,018.56
Total			\$38,475.60

Differential = $(\$108,813.47 - \$38,475.60) / 5280 \text{ ft.}$

= $\$13.32/\text{ft.}$

**FLORIDA POWER CORPORATION
OVERHEAD/ UNDERGROUND RESIDENTIAL COST DATA**

**SIGNATURE PAGE
SCHEDULE NO. 14**

I certify that I am the person responsible of MANAGER - FLORIDA POWER CORPORATION'S DISTRIBUTION STANDARDS DEPT. that I have examined the attached schedule(s); that to the best of my knowledge, information, and belief, all statements of fact contained in the schedule(s) are true.

I am aware that Section 837.06, Florida Statutes, provides :

Whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his official duty shall be guilty of a misdemeanor of the second degree, punishable as provides in s. 775.082 and s. 775.083.

3/27/98
Date

V.K. LaVallette (KBC)
Signature

VINCENNES K. LAVALLETTÉ
Name

MANAGER - DISTRIBUTION STANDARDS
AND HARDWARE APPLICATIONS
Title