ORIGINAL
FILE COPY

Florida Power
CORPORATION

JAMES A. McGEE
SENIOR COUNSEL

April 30, 1997

970507-EI

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 Revise Tariffs for Underground 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 revise tariffs for underground 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.

Very truly yours,

James A. McGee

JAM/kp
Enclosures

ACK
AFA 1
APP
CAF
CMU
CTR
EAG
LEG 1
LIN 5
OPC
RCH
SEC 1
WAS
OTH

DOCUMENT NUMBER-DATE
04356 MAY-1 5
FPSC-RECORDS/REPORTING

GENERAL OFFICE
3201 Thirty-fourth Street South • Post Office Box 14042 • St. Petersburg, Florida 33733-4042 • (813) 866-5184 • Fax: (813) 866-4931
A Florida Progress Company

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to Revise Tariffs for Underground Charges by Florida Power Corporation.

Docket No. _____

Submitted for filing: April 30, 1997

PETITION

Florida Power Corporation (the Company) hereby files this Petition for authority to immediately revise Part XI of the Company's Rules, Underground Residential Distribution Policy, to update the various cost differentials between the installation of overhead and underground facilities for residential service, and in support hereof shows as follows:

1. Pursuant to Commission Rule No. 25-6.078(3), F.A.C., an annual update, based on 1996 costs, has been made of the detailed supporting data used to determine the Company's Estimated Average Cost Differential for new residential distribution. Attached hereto as Exhibit A are revised tariff sheets setting forth the updated differential costs; attached hereto as Exhibit B are existing tariff sheets indicating changes in legislative format, as required by Rule 25-9.005(3), F.A.C.

2. Attached hereto as Exhibit C are workpapers containing the supporting data and the methodology used to update the cost differential described above. The data was taken from the books and records of the Company and is subject to continuing Commission audit, thereby facilitating prompt verification of the differentials by Commission staff personnel.

3. It should be noted that the Company does not seek any change in the Schedule of Binding Cost Estimate Fees of Part XII of the Company's Rules, Underground Electric Distribution Facility Charges. The Company does not believe the engineering design time cost basis for these fees has materially changed since the 1996 annual update.

4. The Company asks that the Commission immediately grants its consent to the operation of these revised tariff sheets and charges, or, in the alternative, to allow them to become effective under operation of law in accordance with the provisions of Section 366.06(4), Florida Statutes.

WHEREFORE, the Company requests that the Commission:

1. Determine that the Company is entitled to the relief requested;

2. Permit the revised tariff charges to go into effect immediately or in accordance with the provisions of Chapter 366.06(4), Florida Statutes; and

3. Grant the Company such other and further relief as is necessary and proper.

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

1997 URD FILING

REVISED TARIFF SHEETS

Eighth Revised Sheet No. 4.113
Eighth Revised Sheet No. 4.114
Eighth Revised Sheet No. 4.115

Florida Power
CORPORATION

(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	$243.00 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	$128.00 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	$ 6.00 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)

#2 AWG U.G. vs. #1/0 AWG O.H.	$ 4.01 per foot
#1/0 AWG U.G. vs. #1/0 AWG O.H.	$ 4.67 per foot
500 MCM U.G. vs. 336 MCM O.H.	$11.27 per foot
1000 MCM U.G. vs. 795 MCM O.H.	$13.61 per foot

The above costs assume that underground feeder construction utilizes spare 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	$ 1.00
Service Laterals, for each Foot of Trench	$ 1.00

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

EFFECTIVE:

Florida Power
CORPORATION

(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 $255.00

For each foot over 80 feet up to 200 feet . . . . . $ 0.79 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 . . . . . $ 1.00

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

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

EFFECTIVE:

Florida Power
CORPORATION

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 $240.29

For each foot over 80 feet up to 200 feet . . . . . $0.58 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

1997 URD FILING

REVISED TARIFF SHEETS - LEGISLATIVE FORMAT

Eighth Revised Sheet No. 4.113
Eighth Revised Sheet No. 4.114
Eighth Revised Sheet No. 4.115

Florida Power
CORPORATION

(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 . . . . . ~~$288.00~~ 243.00 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 . . . . . ~~$153.00~~ 128.00 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 . . . . . $ ~~31.00~~ 6.00 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)

#2 AWG U.G. vs. #1/0 AWG O.H. . . . . $ ~~5.13~~ 4.01 per foot

#1/0 AWG U.G. vs. #1/0 AWG O.H. . . . . $ ~~5.85~~ 4.67 per foot

500 MCM U.G. vs. 336 MCM O.H. . . . . ~~$15.29~~ 11.27 per foot

1000 MCM U.G. vs. 795 MCM O.H. . . . . ~~$15.11~~ 13.61 per foot

The above costs assume that underground feeder construction utilizes spare conduit but does not require the use of pad-mounted switchgear(s) or terminal pole(s). If such ~~switchgear is~~ 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 . . . . . $ ~~0.08~~ 1.00

Service Laterals,
for each Foot of Trench . . . . . $ ~~0.08~~ 1.00

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

EFFECTIVE: ~~May 7, 1996~~

Florida Power
CORPORATION

(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 . . . . . ~~$264.00~~ 255.00

For each foot over 80 feet up to 200 feet . . . . . ~~$0.88~~ 0.79 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 . . . . . $ ~~0.08~~ 1.00

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

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

EFFECTIVE: ~~May 7, 1996~~

Florida Power
CORPORATION

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 . . . . . ~~$249.75~~ 240.29

For each foot over 80 feet up to 200 feet . . . . . ~~$0.66~~ 0.58 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: ~~MAY 7, 1996~~

EXHIBIT C

FLORIDA POWER CORPORATION

1997 URD FILING

WORKPAPERS

DEVELOPMENT OF REVISED COSTS

CONSISTING OF 28 PAGES

Note: Inquiries concerning development of revised costs should be direct to Ms. Vinnie Lavallette at (407) 475-2480.

DISTRIBUTION OPERATIONS AND MAINTENENCE EXPENSES
OVERHEAD AND UNDERGROUND - 1996

ACCOUNT	DESCRIPTION	TOTAL DOLLARS
583.00	Operation - O/H Distribution Lines	$2,634,379
584.00	Operation - U/G Distribution Lines	$2,075,733
593.10	Maintenance - O/H Distribution Lines Lines and Services	$3,103,852
593.20	Maintenance - O/H Distribution Lines Tree Trimming Expense	$11,442,300
594.00	Maintenance - U/G Lines	$1,020,908
595.10	Maintenance - Transformers O/H	$559,208
595.20	Maintenance - Transformers U/G Other	$120,382
595.30	Maintenance - Transformers U/G - URD	$97,206

FLORIDA POWER CORPORATION
CUSTOMER STATISTICS

Year-end O/H Customers Served - 1996	607,908
Year-end U/G Customers Served - 1996	795,381
Year-end Residential O/H Customers	506,294
Year-end Residential U/G Customers	698,260
Joint Trenching Underground Residential Distribution	None

URD REPORT TO THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER CORPORATION **4/23/97**

LOW DENSITY SUBDIVISION - 210 LOTS

OVERHEAD VS UNDERGROUND

SUMMARY SHEET

COST PER LOT

	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	191	361	170
Material	318	391	73
TOTAL	509	752	243

FLORIDA POWER CORPORATION

LOW DENSITY SUBDIVISION - 210 LOTS

COST PER LOT
OVERHEAD MATERIAL & LABOR

	MATERIAL (1)	LABOR (4)	TOTAL
Service(2)	68.71	46.69	115.40
Primary	19.41	25.04	44.45
Secondary	39.96	14.24	54.20
Initial Tree Trim	0.00	16.24	16.24
Poles	81.23	25.09	106.32
Transformers	84.44	9.42	93.86
Sub-Total(1)	293.75	136.72	430.47
Stores Handling(3)	24.07	0.00	24.07
Sub-Total	317.82	136.72	454.54
Engineering(5)	0.00	54.47	54.47
TOTAL	317.82	191.19	509.01

1-Includes Sales Tax.

2-Includes Meter and Meter Socket.

3-11% of all material except transformer units with a cost of: 66.93
and meters with a cost of: 8.00

4-Includes Administration, General and Transportation.

5-15% of all matl. and labor except transformer units with a cost of: 71.31
and meters with a cost of: 20.09

FLORIDA POWER CORPORATION

LOW DENSITY SUBDIVISION - 210 LOTS

COST PER LOT
UNDERGROUND MATERIAL & LABOR

	MATERIAL (1)	LABOR (4)	TOTAL
Service (2)	60.85	91.84	152.69
Primary	88.93	18.60	107.53
Secondary	119.24	27.76	147.00
Transformers	90.89	9.88	100.77
TRENCHING:			
Prim. & Secondary	0.00	127.14	127.14
			0.00
Sub-Total	359.91	275.22	635.13
Stores Handling(3)	31.05	0.00	31.05
Sub-Total	390.96	275.22	666.18
Engineering(5)	0.00	86.22	86.22
TOTAL	390.96	361.44	752.41

1-Includes Sales Tax.

2-Includes Meter and Meter Socket.

3-11% of all material except transformer units with a cost of: 69.61
and meters with a cost of: 8.00

4-Includes Administration, General and Transportation.

5-15% of all matl. and labor except transformer units with a cost of: 71.27
and meters with a cost of: 20.09

URD REPORT TO THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER CORPORATION **4/23/97**

MOBILE HOME PARK - INDIVIDUAL SERVICES - 176

OVERHEAD VS UNDERGROUND

SUMMARY SHEET

COST PER LOT

	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	153	264	111
Material	247	264	17
TOTAL	400	528	128

FLORIDA POWER CORPORATION

MOBILE HOME PARK - INDIVIDUAL SERVICES - 176

COST PER LOT
OVERHEAD MATERIAL & LABOR

	MATERIAL (1)	LABOR (4)	TOTAL
Service(2)	65.59	53.38	118.97
Primary	16.54	13.23	29.77
Secondary	29.97	8.08	38.05
Initial Tree Trim	0.00	16.10	16.10
Poles	38.82	12.02	50.84
Transformers	78.66	9.26	87.92
Sub-Total(1)	229.58	112.07	341.65
Stores Handling(3)	17.55	0.00	17.55
Sub-Total	247.13	112.07	359.20
Engineering(5)	0.00	40.96	40.96
TOTAL	247.13	153.03	400.16

1-Includes Sales Tax.

2-Includes Meter and Meter Socket.

3-11% of all material except transformer units with a cost of: 62.00
and meters with a cost of: 8.00

4-Includes Administration, General and Transportation.

5-15% of all matl. and labor except transformer units with a cost of: 66.08
and meters with a cost of: 20.09

FLORIDA POWER CORPORATION

MOBILE HOME PARK - INDIVIDUAL SERVICES - 176

COST PER LOT
UNDERGROUND MATERIAL & LABOR

	MATERIAL (1)	LABOR (4)	TOTAL
Service (2)	57.31	44.18	101.49
Primary	29.28	5.28	34.56
Secondary	67.79	23.75	91.54
Transformers	91.03	10.35	101.38
TRENCHING:			
Prim. & Secondary	0.00	71.40	71.40
Services	0.00	51.71	51.71
Sub-Total	245.41	206.67	452.08
Stores Handling(3)	18.56	0.00	18.56
Sub-Total	263.97	206.67	470.64
Engineering(5)	0.00	57.01	57.01
TOTAL	263.97	263.68	527.65

1-Includes Sales Tax.

2-Includes Meter and Meter Socket.

3-11% of all material except transformer units with a cost of: 68.68
and meters with a cost of: 8.00

4-Includes Administration, General and Transportation.

5-15% of all matl. and labor except transformer units with a cost of: 70.50
and meters with a cost of: 20.09

URD REPORT TO THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER CORPORATION 4/23/97

MOBILE HOME PARK - GANGED METERS - 176 LOT

OVERHEAD VS UNDERGROUND

SUMMARY SHEET

COST PER LOT

	OVERHEAD	UNDERGROUND	DIFFERENTIAL
Labor	111	130	19
Material	209	196	-13
TOTAL	320	326	6

FLORIDA POWER CORPORATION

MOBILE HOME PARK - GANGED METERS - 176 LOT

COST PER LOT
OVERHEAD MATERIAL & LABOR

	MATERIAL (1)	LABOR (4)	TOTAL
Service(2)	45.31	25.72	71.03
Primary	14.65	13.43	28.08
Secondary	21.89	6.25	28.14
Initial Tree Trim	0.00	15.48	15.48
Poles	30.52	10.21	40.73
Transformers	83.47	10.01	93.48
Sub-Total(1)	195.84	81.10	276.94
Stores Handling(3)	13.57	0.00	13.57
Sub-Total	209.41	81.10	290.51
Engineering(5)	0.00	30.23	30.23
TOTAL	209.41	111.33	320.74

1-Includes Sales Tax.
2-Includes Meter and Meter Socket.
3-11% of all material except transformers and meters. 64.51
and meters with a cost of: 8.00
4-Includes Administration, General and Transportation.
5-15% of all material and labor except transformers 68.89
and meters with a cost of: 20.09

FLORIDA POWER CORPORATION

MOBILE HOME PARK - GANGED METERS - 176 LOT

COST PER LOT

UNDERGROUND MATERIAL & LABOR

	MATERIAL (1)	LABOR (4)	TOTAL
Service (2)	66.69	36.73	103.42
Primary	26.25	4.95	31.20
Secondary	0.00	0.00	0.00
Transformers	91.03	10.35	101.38
TRENCHING:			
Prim. & Secondary	0.00	47.54	47.54
Services	0.00	0.00	0.00
Sub-Total	183.97	99.57	283.54
Stores Handling(3)	11.80	0.00	11.80
Sub-Total	195.77	99.57	295.34
Engineering(5)	0.00	30.71	30.71
TOTAL	195.77	130.28	326.05

1-Includes Sales Tax.
2-Includes Meter and Meter Socket.
3-11% of all material except transformers and meters. 68.68
and meters with a cost of: 8.00
4-Includes Administration, General and Transportation.
5-15% of all material and labor except transformers 70.50
and meters with a cost of: 20.09

AVERAGE DIFFERENTIAL COST OF INSTALLING FEEDER MAINS UNDERGROUND VS. OVERHEAD

The following pages 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.

DIFFERENTIAL COST TO INSTALL FEEDER

Date 4/23/97

Underground vs. Overhead

#2 Al. Underground Cable

	Material	Labor	Total
From Computer Study	$22,387.62	$9,839.56	$32,227.18
Stores 11%	$2,462.64	$0.00	$2,462.64
Subtotal			$34,689.82
Engineering & Supervision 15%			$5,203.47
Total			$39,893.29

1/0 AAAC Overhead Conductor

	Material	Labor	Total
From Computer Study	$8,777.04	$6,521.90	$15,298.94
Stores 11%	$965.47	$0.00	$965.47
Subtotal			$16,264.41
Engineering & Supervision 15%			$2,439.66
Total			$18,704.07

Differential (39,893.29 - 18,704.07) / 5280

$4.01 /ft.

DIFFERENTIAL COST TO INSTALL FEEDER

Date 4/23/97

Underground vs. Overhead

1/0 Al. Underground Cable

	Material	Labor	Total
From Computer Study	$25,122.15	$9,839.56	$34,961.71
Stores 11%	$2,763.44	$0.00	$2,763.44
Subtotal			$37,725.15
Engineering & Supervision 15%			$5,659.00
Total			$43,384.15

1/0 AAAC Overhead Conductor

	Material	Labor	Total
From Computer Study	$8,777.04	$6,521.90	$15,298.94
Stores 11%	$965.47	$0.00	$965.47
Subtotal			$16,264.41
Engineering & Supervision 15%			$2,439.66
Total			$18,704.07

Differential (43,384.15 - 18,704.07) / 5280

$4.67 /ft.

DIFFERENTIAL COST TO INSTALL FEEDER

Date 4/23/97

Underground vs. Overhead

500 MCM Al. Underground Cable

	Material	Labor	Total
From Computer Study	$55,733.77	$12,210.46	$67,944.23
Stores 11%	$6,130.71	$0.00	$6,130.71
Subtotal			$74,074.94
Engineering & Supervision 15%			$11,111.24
Total			$85,186.18

336 MCM AAAC Overhead Conductor

	Material	Labor	Total
From Computer Study	$13,837.92	$6,973.53	$20,811.45
Stores 11%	$1,522.17	$0.00	$1,522.17
Subtotal			$22,333.62
Engineering & Supervision 15%			$3,350.04
Total			$25,683.66

Differential (85,186.18 - 25,683.66) / 5280

$11.27 /ft.

DIFFERENTIAL COST TO INSTALL FEEDER

Date 4/23/97

Underground vs. Overhead

1000 MCM Al. Underground Cable

	Material	Labor	Total
From Computer Study	$74,467.24	$12,210.46	$86,677.70
Stores 11%	$8,191.40	$0.00	$8,191.40
Subtotal			$94,869.10
Engineering & Supervision 15%			$14,230.37
Total			$109,099.47

795 MCM AAAC Overhead Conductor

	Material	Labor	Total
From Computer Study	$22,342.00	$7,576.43	$29,918.43
Stores 11%	$2,457.62	$0.00	$2,457.62
Subtotal			$32,376.05
Engineering & Supervision 15%			$4,856.41
Total			$37,232.46

Differential (109,099.47 - 37,232.46) / 5280

$13.61 /ft.

UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS

To estimate the cost of an overhead to underground service, the costs from a computer study are shown on the following pages.

The study has been arranged to provide a breakdown of the fixed cost of a service of 80 feet or less and the cost of a service in excess of 80 feet. Stores, engineering, and supervision costs are then added.

UNDERGROUND SERVICE LATERALS FROM OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS

Date 4/8/97

Underground Fixed Costs:	Material	Labor	Total
From Computer Study	$124.10	$165.02	$289.12
Stores 11%	$13.65		$13.65
Engineering 2 hrs. @ $32.96		$65.92	$65.92
Total			$368.69

Underground Excess Costs:	Material	Labor	Total
From Computer Study	$103.63	$150.55	$254.18
Stores 11%	$11.40		$11.40
Total (for 120 ft)			$265.58

Overhead Fixed Costs:	Material	Labor	Total
From Computer Study	$33.33	$44.42	$77.75
Stores 11%	$3.67		$3.67
Engineering 1 hrs. @ $32.96		$32.96	$32.96
Total			$114.38

Overhead Excess Costs:	Material	Labor	Total
From Computer Study	$107.97	$51.41	$159.38
Stores 11%	$11.88		$11.88
Total (for 120 ft)			$171.26

DIFFERENTIAL

Fixed Underground	$369.00		
Fixed Overhead	$114.00		
Difference	$255.00		
Excess Underground	$265.58		
Excess Overhead	$171.26	Cost per foot:	
Difference	$94.32	= $94.32/120	$0.79

UNDERGROUND SERVICE LATERALS REPLACING EXISTING RESIDENTIAL OVERHEAD SERVICES

The cost of conversion from overhead to underground service is similar to the cost of the overhead to underground installation previously calculated. The depreciated cost of the overhead service, the removal cost of the service, and the salvage value of the overhead service are all taken into consideration. The calculation is based on the fact that the customer will provide the trenching.

CALCULATION OF CONVERSION OF OVERHEAD TO UNDERGROUND SERVICE

FIXED COST OF OVERHEAD SERVICE - $114.38 (CALCULATED PREVIOUSLY)

COST OF OVERHEAD METER SOCKET - $21.22 (FROM COMPUTER STUDY)

THE AVERAGE AGE OF AN OVERHEAD SERVICE WAS DETERMINED TO BE 12.73 YEARS BY PLANT ACCOUNTING.

THE LATEST AVAILABLE HANDY - WHITMAN INDEX BULLETIN WAS USED TO DETERMINE THE ORIGINAL COST OF A NEW SERVICE 12.73 YEARS PREVIOUSLY THE INDEX NUMBERS AND CALCULATIONS ARE AS FOLLOWS:

	7/1/96	1/1/84
LINE 50 - SERVICES	271	214
LINE 52 - METERS	187	203

OVERHEAD SERVICE COST 12.53 YEARS AGO =
$114.38(214/271) + $21.22(203/187) =
$90.32 + $23.04 = 113.36

THE DEPRECIATED COST OF ORIGINAL SERVICE WAS DETERMINED UTILIZING THE DISTRIBUTION DEPRECIATION RATES FOR ELECTRIC PLANT.

	AVERAGE SERVICE LIFE IN YEARS
SERVICES	34
METERS	28

DEPRECIATED FIXED COST OF OVERHEAD SERVICE =
$90.32(21.27/34) + $23.04(15.27/28) =
$56.50 + $12.56 = 69.07

LIKEWISE, THE DEPRECIATED VARIABLE COST IS DETERMINED (FOR 120 FT):

OVERHEAD EXCESS COST (CALCULATED PREVIOUSLY) - $171.26

ORIGINAL COST - $171.26(214/271) = 135.24

DEPRECIATED EXCESS COST - $135.24(21.27/34) = 84.60

THE SALVAGE VALUE OF THE EXISTING SERVICE WAS DETERMINED USING THE CURRENT PRICE FOR SCRAP ALUMINUM. AS OF 4/8/97, THE SALVAGE VALUE IS $.72/LB. THE WEIGHT OF 2/3 ALUMINUM SERVICE IS .228 LB/FT.

SALVAGE VALUE =
(.228 LBS./FT.)($.72/LB.) = $0.16/FT

UNDERGROUND SERVICE LATERALS REPLACING EXISTING RESIDENTIAL OVERHEAD SERVICES

Date 4/8/97

Fixed Cost

Overhead to Underground Service Differential (Calculated Previously)	$255.00
Removal Cost of Overhead Service (From Computer Study)	$10.62
Less Trenching	($80.00)
Depreciated Cost of Overhead Service	$69.07
Salvage of Overhead Service	($14.40)
Total	$240.29

Variable Cost (Based on 120 ft)

Overhead to Underground Service Differential (Calculated Previously)	$94.32
Less Trenching (From Computer Study)	($120.00)
Removal of Overhead Service (From Computer Study)	$29.38
Depreciated Cost of Overhead Service	$84.60
Salvage of Overhead Service	($19.20)
Total	$69.10

Cost per foot = $69.10/120 = $0.58

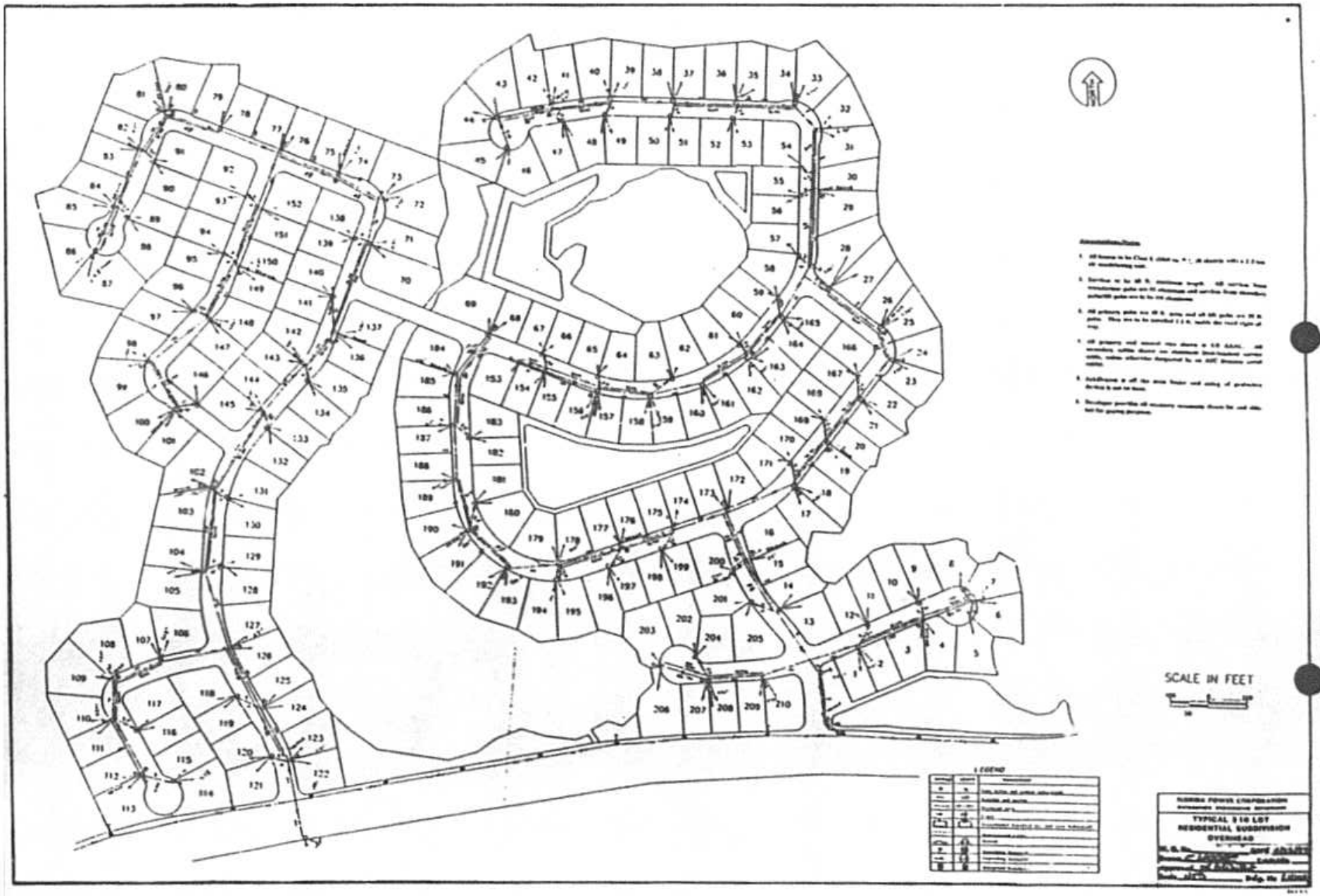
COST OF PROVIDING A BINDING ESTIMATE

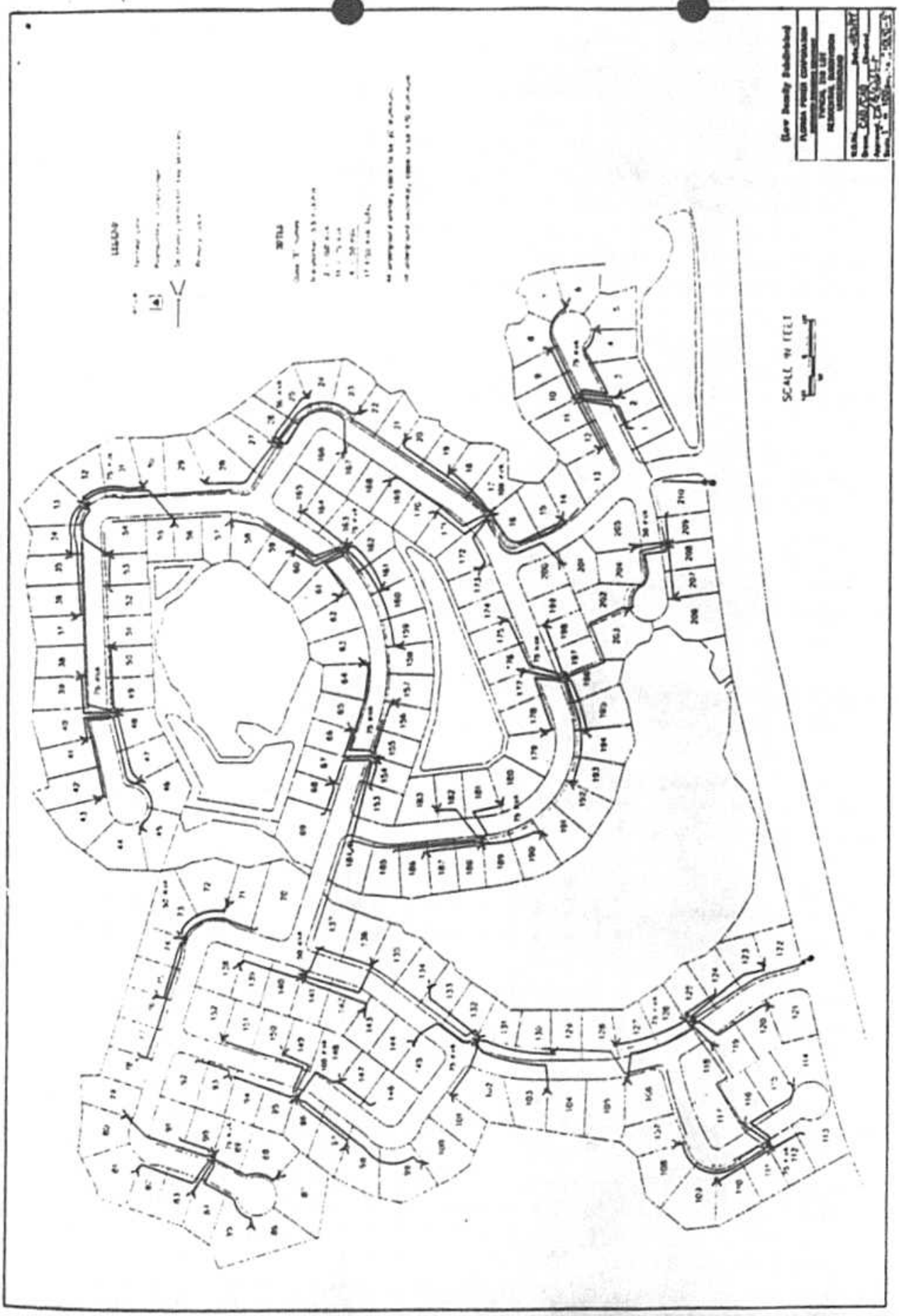
A calculation is made for charging an Applicant for the engineering design time to establish a binding cost estimate by the company under Section 12.04 of the URD tariff.

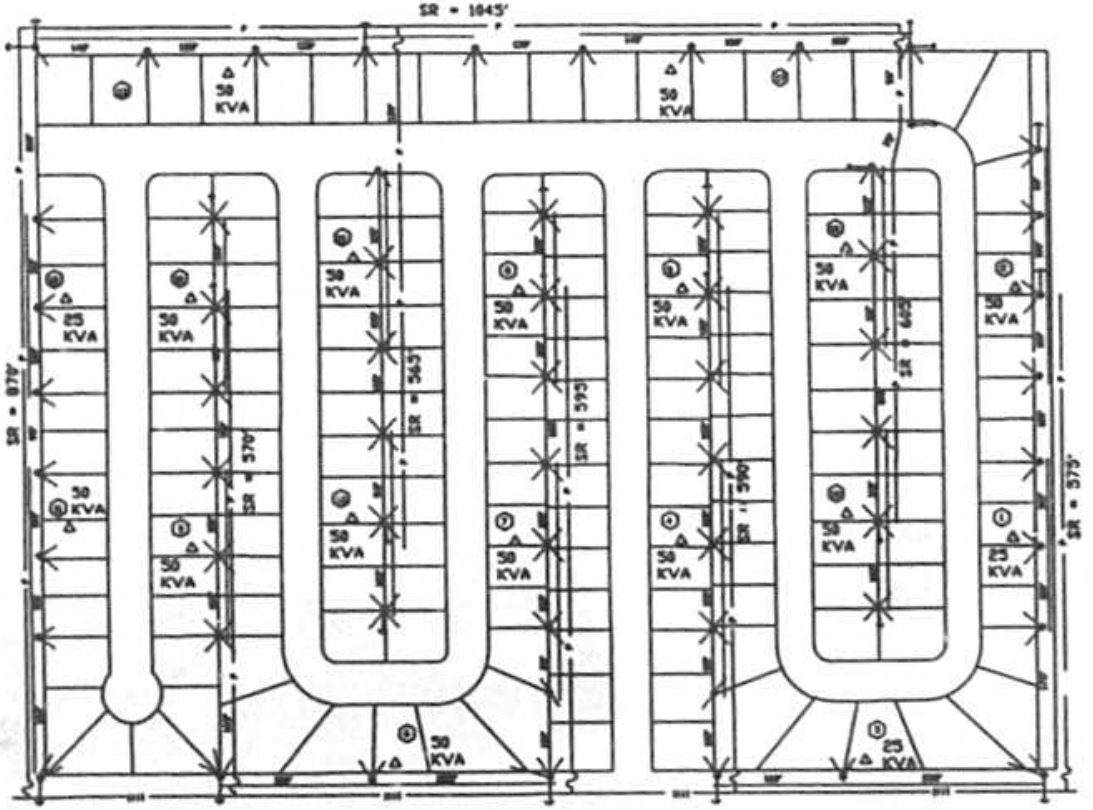
The average cost of engineering personnel engaged in this type of work is determined. The average cost per hour is then multiplied by the estimated time to do each type of estmate.

Average manhours for Engineers

MANHOURS					
New Construction of Underground		Average Manhours/ mile	Cost/ Hr	Cost Estimate Fees	
Urban Commercial		86.92	$34.23	$2,975	per mile
Urban Residential		64.00	$34.23	$2,191	per mile
Rural Residential		48.46	$34.23	$1,659	per mile
Conversion of Overhead to Underground					
Urban Commercial		123.69	$34.23	$4,234	per mile
Urban Residential		101.54	$34.23	$3,476	per mile
Rural Residential		74.46	$34.23	$2,549	per mile
Low Density Subdivision		93.50	$34.23	$15	per lot
High Density Subdivision		68.10	$34.23	$13	per lot


SCALE IN FEET
TYPICAL 3 1 0 LOT
RESIDENTIAL SUBDIVISION
OVERHEAD


SCALE IN FEET



NOTES

CLASS "J" MOBILE HOMES
TRANSFORMER,5.8 KVA/LOT

3 - 25 KVA
15 - 50 KVA
18 - 800 KVA TOTAL

8,085' ALL PRIMARY CABLE 1/0 AL.
5,380' 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

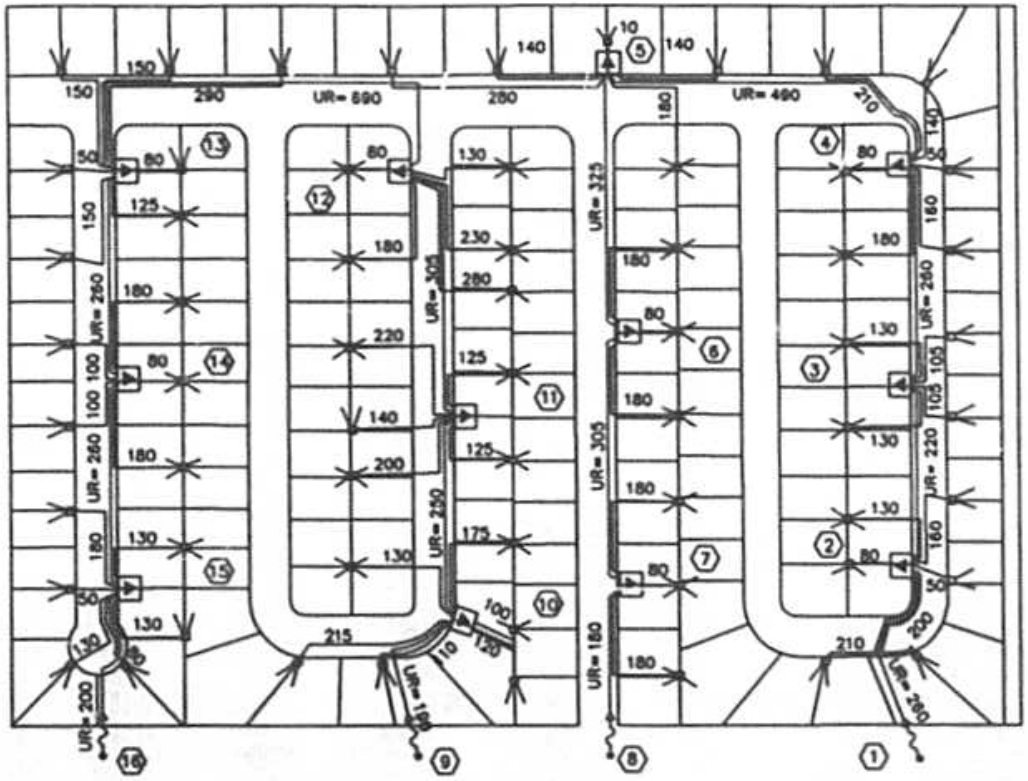
SR = PRIMARY SEGMENT RUN FROM POINT TO POINT
FUSE PULL OFF
TRANSFORMER STATION
—P— PRIMARY WIRE
SECONDARY/2 FPC SERVICES
ANCHOR
① LOCATION NUMBER

(HIGH DENSITY SUBDIVISION)

FLORIDA POWER CORPORATION
DISTRIBUTION ENGINEERING DEPARTMENT

Typical Mobile Home Subdivision 176 Lots
OVERHEAD INDIVIDUAL

W.O. NO. _____ DATE 4/23/87
DRAWN CAD/CAS CHECKED _____
APPROVED _____
SCALE 1" = 100' DWG. NO. 37558-87



Class "J" mobile homes

Transformer, 4.8 KVA/lot

6 – 50 KVA

6 – 75 KVA

12 – 750 KVA TOTAL

4,195' #2 Al. primary cable

280' Secondary cable to FPC pedestal 4/0 Al.

8,435' Secondary cable to FPC pedestal 1/0 Al.

61 FPC Secondary pedestals

Spare conduit installed for secondary and service use.

Terminal pole

Padmounted transformer

Secondary/pedestal/two services

Primary cable

UR — Unit Run (Horizontal length of primary circuit)

Location number

(High Density Subdivision)

FLORIDA POWER CORPORATION
DISTRIBUTION ENGINEERING DEPARTMENT

Typical Mobile Home Subdivision 176 Lots

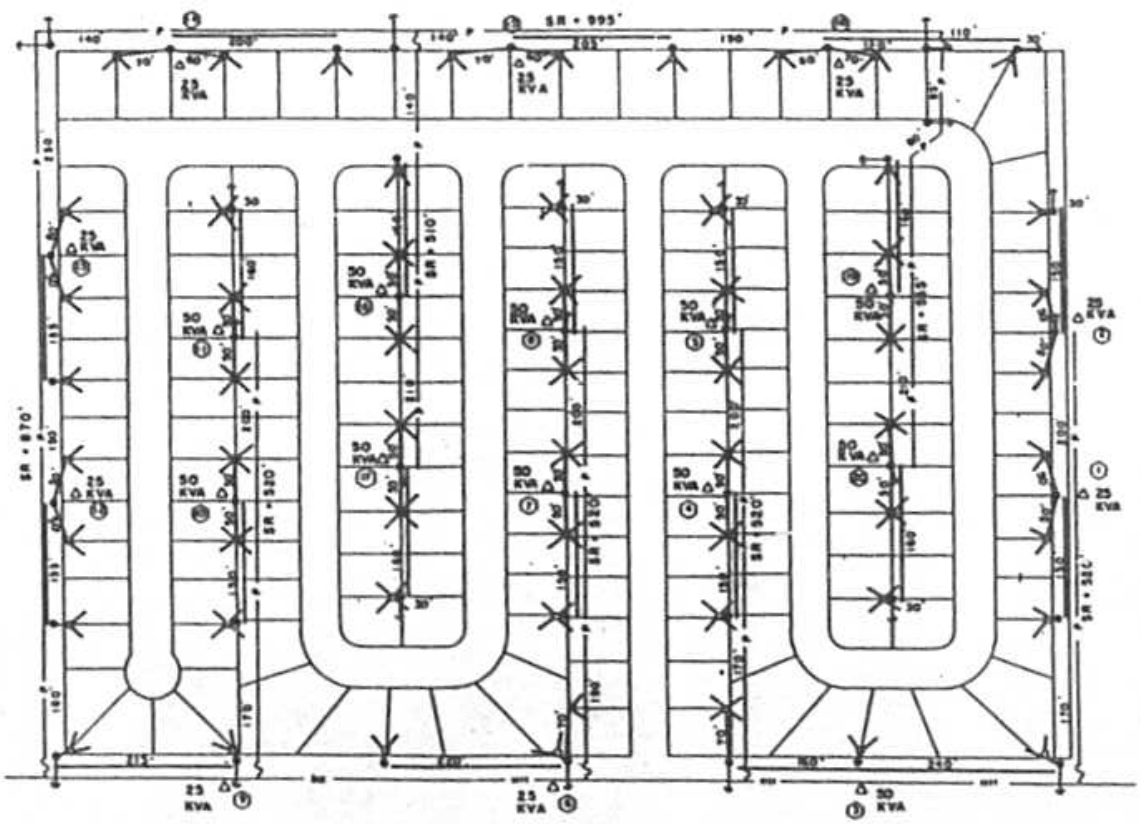
UNDERGROUND – RESIDENTIAL

W.O. NO. DATE 4/23/97

DRAWN CAD/CAS CHECKED

APPROVED

SCALE 1"=100' DWG. NO. 12868-97



NOTES

Class " 3 " mobile homes
Transformer, 4.7 KVA/Kw

9 - 25 KVA
11 - 30 KVA
20 775 KVA TOTAL

9,940' All primary wire 1/0 Al
2,592' All secondary cable 4/0 Al
1,340' All service cable to 2 ganged meter pedestals 1/0 Al
1,326' All service cable to 4 ganged meter pedestals 4/0 Al

LEGEND

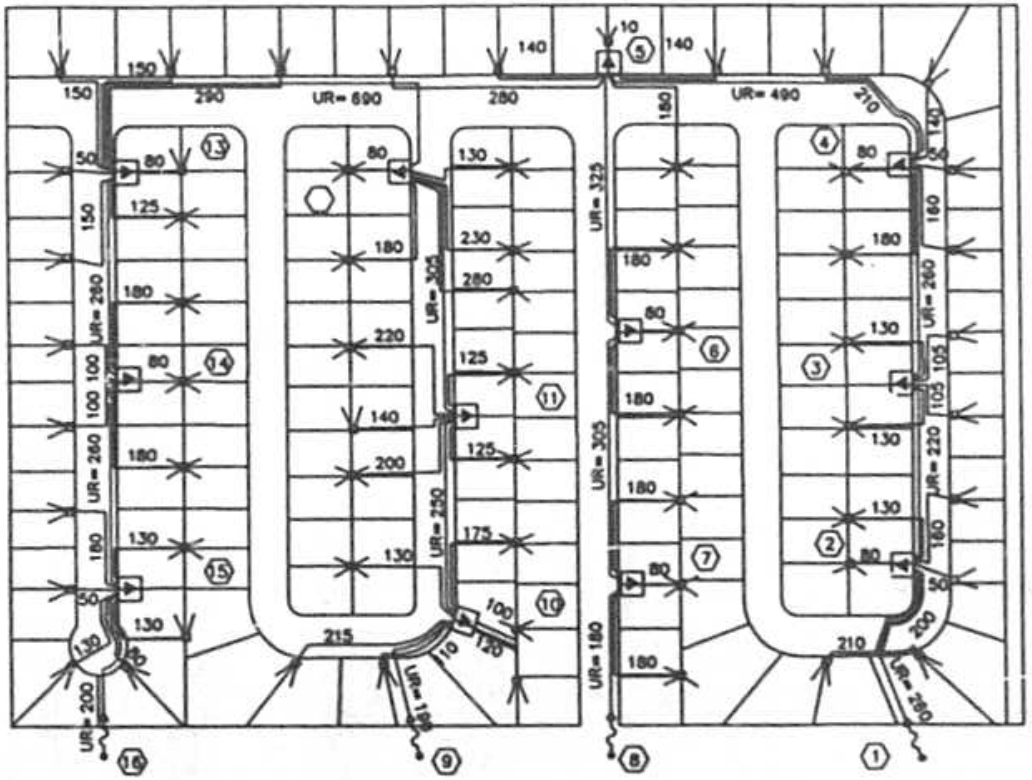
SR • Primary segment run from point to point
Fuse pull off
Transformer station
— P — Primary wire
Secondary/customer metered Customer Service
Anchor

(HIGH DENSITY SUBDIVISION)

FLORIDA POWER CORPORATION
DISTRIBUTION ENGINEERING DEPARTMENT

TYPICAL MOBILE HOME
SUBDIVISION 176 LOTS
OVERHEAD GANGED

W. O. No. _____ Date 8/15/87
Drawn C.A.S. Checked
Approved _____
Scale 1" = 100' Dwg. No. 13808-87



Class "3" mobile homes

Transformer, 4.8 KVA/lot

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.

8,435' Secondary cable to customer owned pedestal 1/0 Al.

61 Customer owned meter pedestals

Spare conduit installed for service use.

Terminal pole

Padmounted transformer

Secondary/pedestal/two services

Primary cable

UR — Unit Run (Horizontal length of primary circuit)

Location number

(High Density Subdivision)

FLORIDA POWER CORPORATION
DISTRIBUTION ENGINEERING DEPARTMENT

Typical Mobile Home Subdivision 176 Lots
UNDERGROUND - GANGED METERS

W.O. NO. _____ DATE 4/23/87
DRAWN CAD/CAS CHECKED _____
APPROVED _____
SCALE 1"=100' DWG. NO. 1760C-87