

FLORIDA PUBLIC SERVICE COMMISSION
Capital Circle Office Center, 2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

M E M O R A N D U M

APRIL 25, 1996

TO : DIRECTOR OF RECORD AND REPORTING

FROM : DIVISION OF ELECTRIC AND GAS (WHEELER, BREMAN) *DW*
DIVISION OF LEGAL SERVICES (WAGNER) *WJ* *JFB* *RT*

RE : DOCKET NO. 960325-EI - REVISION OF TARIFFS ON UNDERGROUND
DISTRIBUTION DIFFERENTIAL COSTS FOR FLORIDA POWER AND
LIGHT COMPANY, FLORIDA POWER CORPORATION, GULF POWER
COMPANY AND TAMPA ELECTRIC COMPANY

AGENDA: MAY 7, 1996 - TARIFF FILING
INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: MAY 11, 1996: 60-DAY TARIFF SUSPENSION DATE

SPECIAL INSTRUCTIONS: I:\PSC\EAG\WP\960325.RCM

CASE BACKGROUND

Florida Power Corporation (FPC), Florida Power & Light Company (FPL), Gulf Power Company (Gulf), and Tampa Electric Company (TECO) have filed updated tariffs and charges which are applicable to the installation of underground residential distribution service. Rule 25-6.078, Florida Administrative Code requires that these charges be updated annually. The charges represent the additional costs to provide underground service in place of standard overhead service. The proposed changes were accompanied by work papers explaining their derivation.

DOCUMENT NUMBER-DATE

04757 APR 25 96

FPSC-RECORDS/REPORTING

April 25, 1996
Docket No. 960325-EI

ISSUE 1: Should the Commission suspend Gulf Power Company's updated tariff sheets and charges associated with the installation of underground electric distribution facilities?

RECOMMENDATION: Yes. (WHEELER, BREMAN)

STAFF ANALYSIS: The method used by Gulf to determine its underground residential distribution charges this year differs from that used in the past. In addition, Gulf has indicated to the staff that they intend to file revisions to the tariffs that were filed initially. As a consequence, the staff is unable to make a recommendation regarding Gulf's tariff changes at this time, and the tariffs should be suspended to allow time for additional discovery.

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ISSUE 2: Should the Commission approve Florida Power & Light Company's, Tampa Electric Company's, and Florida Power Corporation's updated tariff sheets and charges associated with the installation of underground electric distribution facilities?

RECOMMENDATION: Yes. The changes are appropriate and should be approved. (WHEELER, BREMAN)

STAFF ANALYSIS: The underground residential distribution (URD) tariffs provide customers with standard charges for certain types of new underground service. Each utility develops the charges based on the same three model subdivisions: a 210-lot low-density single-family home subdivision, a 176-lot high density subdivision served by individual meters, and a 176-lot high density mobile home subdivision served by ganged meters.

This year the utilities are utilizing a new subdivision design for developing the differential for low-density subdivisions. The new design was adopted to reflect the typical subdivision being built today, and was approved for use in the 1996 filings in Docket No. 951199-EI. As reflected in the new design, subdivisions typically employ more curved streets than they have in the past.

The differential rates for each model subdivision are developed by estimating the cost per lot of both underground service and overhead service. The difference between these numbers is the per lot charge that customers must pay when they request underground service in lieu of standard overhead service. The estimates are based on each company's standard engineering and design practices, and incorporate company-wide material costs and labor rates. Table 1 below shows the proposed 1996 differentials.

TABLE 1

1996 UNDERGROUND PER LOT DIFFERENTIAL COSTS

RESIDENTIAL SUBDIVISIONS	FPC	FPL	TECO	GULF
Low Density	\$288	\$277	\$251	N/A
High Density Individual Meters	\$151	\$193	\$195	N/A
High Density Ganged Meters	\$31	\$0	N/A	N/A

Because TECO does not install a large number of ganged meter high density subdivisions, they have not developed a differential for this type of installation. FPL's differential for their ganged meter high density subdivision is \$0 because the differential costs for this subdivision were found to be minimal (\$3.16). FPL has determined that it would not be cost-effective to bill such a small differential, and has rounded the differential to zero. Staff believes that this is reasonable.

In addition to changes to the differentials for each of the subdivision types, the utilities also proposed changes to the credits they offer customers who chose to do their own trenching or other work. Changes were also proposed to the charges for other types of underground service, such as underground service laterals from overhead lines and the undergrounding of primary feeder mains.

FPC has also proposed changes to its fees for binding cost estimates for commercial and residential conversion to underground facilities which are not covered by the tariff for new residential subdivisions. These fees cover the engineering design time required to provide a cost estimate which is valid for 180 days.

Tables 2, 3, and 4 show comparisons between the existing and proposed underground differentials for each subdivision type.

TABLE 2

1996 OVERHEAD VS. UNDERGROUND PER LOT COST DIFFERENTIALS

210-Lot Low-Density Subdivision	1995 Existing	1996 Proposed	Percent (%) Change
FPC	\$256.50	\$288.01	12.28
FPL	\$329.33	\$276.85	-15.94
TECO	\$273.75	\$250.67	-8.43
GULF	N/A	N/A	N/A

TABLE 3

1996 OVERHEAD VS. UNDERGROUND PER LOT COST DIFFERENTIALS

176-Lot High-Density Individual Meters	1995 Existing	1996 Proposed	Percent (%) Change
FPC	\$174.89	\$151.46	-13.40
FPL	\$182.32	\$192.99	5.85
TECO	\$183.44	\$194.80	6.19
GULF	N/A	N/A	N/A

TABLE 4

1996 OVERHEAD VS. UNDERGROUND PER LOT COST DIFFERENTIALS

176-Lot High-Density Ganged Meters	1995 Existing	1996 Proposed	Percent (%) Change
FPC	\$40.84	\$30.78	-24.63
FPL	\$ 8.46	\$ 3.16	-62.65

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Staff has reviewed all the proposed changes and recommends that they be approved. The attached Schedules 1 through 4 are for informational purposes. Schedule 1 contains a comparison of present and proposed underground and overhead per unit costs segregated into labor and material costs. Schedule 2 contains a series of graphs which show the total underground and overhead costs for each subdivision type for years 1975 through 1995. Schedule 3 provides a detailed breakdown of the overhead and underground per lot costs which were used to arrive at the differential charges. Schedule 4 shows for each company the total numbers and percentages of customers at year end which were served from underground and overhead lines for the years 1988 through 1995.

ISSUE 3: What are the appropriate effective dates for the revised tariffs?

RECOMMENDATION: FPL: June 6, 1996.
FPC: May 7, 1996.
TECO: May 7, 1996. (WAGNER)

STAFF ANALYSIS: If the Commission approves the revised tariffs, they should become effective immediately, with the exception of FPL, who requested that their tariffs become effective 30 days from the date of the Commission vote approving the tariffs.

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ISSUE 4: Should the Commission's decisions to approve the tariff revisions for the updated tariff sheets and charges associated with the installation of underground electric distribution facilities be severable for each utility?

RECOMMENDATION: Yes. (WAGNER)

STAFF ANALYSIS: Staff recommends that the issues relative to each utility be severable from the others and if a protest is filed it will be specific to the respective utility's proposed tariff. Staff recommends that a protest of one proposed utility's tariff will not delay or prevent another utility's proposed tariff revision from becoming final.

ISSUE 5: Should this docket be closed?

RECOMMENDATION: No. This docket should remain open pending resolution of Gulf Power Company's updated tariff. If no timely protests are filed to the tariff revisions for FPL, FPC, and TECO (ISSUE 2) then as to those utilities this docket should be automatically closed. Staff, however, recommends that in the event a protest is filed specific to FPL's, FPC's, or TECO's tariff (ISSUE 2), within 21 days from the issuance date of the order, the tariff should remain in effect with any increase held subject to refund, pending resolution of the protest for that particular utility. (WAGNER)

STAFF ANALYSIS: Staff recommends that this docket should remain open pending resolution of Gulf Power Company's updated tariff sheets and charges associated with the installation of underground electric distribution facilities. (ISSUE 1). Staff, however, recommends that in the event a protest is filed specific to FPL's, FPC's, or TECO's tariff (ISSUE 2), this docket shall remain open for that respective utility's tariff. If no timely protest is filed regarding FPL's, FPC's, or TECO's tariff, this docket should be closed regarding these utilities.

**1995 AND 1996 PER LOST COSTS
OVERHEAD, UNDERGROUND AND DIFFERENTIAL COSTS
SINGLE FAMILY DWELLING (LOW DENSITY)**

SCHEDULE 1
Page 1 OF 3

	FPC(a)			FPL			TECO(a)			GULF		
	1995	1996	% Increase	1995 (b)	1996 (c)	% Increase	1995	1996	% Increase	1995	1996	% Increase
OVERHEAD COST												
MATERIAL	\$329.18	\$344.75	4.73%	\$461.14	\$564.66	22.45%	\$347.92	\$424.96	13.78%			
LABOR	\$202.14	\$188.76	-6.62%	\$338.28	\$402.00	18.84%	\$295.36	\$264.32	-10.51%			
TOTAL	\$531.32	\$533.51	0.41%	\$799.42	\$966.66	20.92%	\$643.28	\$689.18	2.63%			
UNDERGROUND												
MATERIAL	\$424.84	\$461.73	8.68%	\$535.66	\$625.13	16.70%	\$417.85	\$488.13	16.82%			
LABOR	\$362.98	\$359.79	-0.89%	\$593.09	\$618.38	4.26%	\$499.18	\$422.72	-15.32%			
TOTAL	\$787.82	\$821.52	4.28%	\$1,128.75	\$1,243.51	10.17%	\$917.03	\$910.85	-0.67%			
DIFFERENTIAL COST												
MATERIAL	\$95.66	\$116.98	22.29%	\$74.52	\$60.47	-18.85%	\$69.93	\$92.27	31.95%			
LABOR	\$160.84	\$171.03	6.34%	\$254.81	\$216.38	-15.08%	\$203.82	\$158.40	-22.28%			
NET	\$256.50	\$288.01	12.28%	\$329.33	\$276.85	-15.94%	\$273.75	\$250.67	-8.43%			

Notes:

- (a) To subdivisions with a density of 1.0 but less than 6 dwelling units per acre.
- (b) To subdivisions with a density of 0.5 to 6 units per acre (excludes multiple occupancy buildings).
- (c) To subdivisions with a density of 0.5 to 6 units per acre (excludes multiple occupancy buildings greater than 4 units per service lateral).

**1995 AND 1996 PER LOST COSTS
OVERHEAD, UNDERGROUND AND DIFFERENTIAL COSTS
HIGH DENSITY - INDIVIDUAL METERS**

SCHEDULE 1
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	FPC(a)			FPL(b)			TECO(a)			GULF		
	1995	1996	% Increase	1995	1996	% Increase	1995	1996	% Increase	1995	1996	% Increase
OVERHEAD COST												
MATERIAL	\$251.78	\$271.99	8.03%	\$353.52	\$382.05	8.07%	\$269.93	\$308.75	14.38%			
LABOR	\$162.90	\$151.01	-7.30%	\$267.82	\$274.40	2.46%	\$239.03	\$241.60	1.08%			
TOTAL	\$414.68	\$423.00	2.01%	\$621.34	\$656.45	5.65%	\$508.96	\$550.35	8.13%			
UNDERGROUND												
MATERIAL	\$296.55	\$313.65	5.77%	\$405.30	\$444.86	9.76%	\$323.88	\$378.28	16.80%			
LABOR	\$293.02	\$260.81	-10.99%	\$398.36	\$404.58	1.56%	\$368.52	\$366.87	-0.45%			
TOTAL	\$589.57	\$574.46	-2.56%	\$803.66	\$849.44	5.70%	\$692.40	\$745.15	7.62%			
DIFFERENTIAL COST												
MATERIAL	\$44.77	\$41.66	-6.95%	\$51.78	\$62.81	21.30%	\$53.95	\$69.53	28.88%			
LABOR	\$130.12	\$109.80	-15.62%	\$130.54	\$130.18	-0.28%	\$129.49	\$125.27	-3.26%			
NET	\$174.89	\$151.46	-13.40%	\$182.32	\$192.99	5.85%	\$183.44	\$194.80	6.19%			

Notes:

(a) To subdivisions with a density of 6 or more dwelling units per acre.

(b) To subdivisions with a density of 6 or more dwelling units per acre. (Excludes multiple occupancy buildings greater than 4 units per service lateral).

**1995 AND 1996 PER LOST COSTS
OVERHEAD, UNDERGROUND AND DIFFERENTIAL COSTS
HIGH DENSITY - GANGED METERS**

	FPC			FPL		
	1995 (a)	1996 (b)	% Increase	1995 (a)	1996 (c)	% Increase
OVERHEAD COST						
MATERIAL	\$215.16	\$230.01	6.90%	\$308.70	\$330.96	7.21%
LABOR	\$117.04	\$110.04	-5.98%	\$218.92	\$224.86	2.71%
TOTAL	\$332.20	\$340.05	2.36%	\$527.62	\$555.82	5.34%
UNDERGROUND						
MATERIAL	\$228.92	\$240.90	5.23%	\$321.24	\$341.25	6.23%
LABOR	\$144.12	\$129.93	-9.85%	\$214.84	\$217.73	1.35%
TOTAL	\$373.04	\$370.83	-0.59%	\$536.08	\$558.98	4.27%
DIFFERENTIAL COST						
MATERIAL	\$13.76	\$10.89	-20.86%	\$12.54	\$10.29	-17.94%
LABOR	\$27.08	\$19.89	-26.55%	(\$4.08)	(\$7.13)	74.75%
NET	\$40.84	\$30.78	-24.64%	\$8.46	\$3.16	
				(d)	(e)	

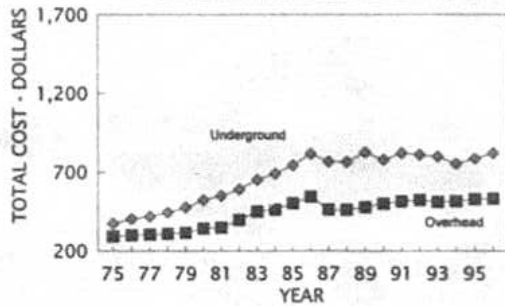
- (a) To subdivisions with a density of 6 or more dwelling units per acre taking service from a multi-unit meter center.
 (b) To subdivisions with a density of 6 or more dwelling units per acre taking service at grouped meter pedestals on serving property line.
 (c) To subdivisions with a density of 6 or more dwelling units per acre taking service from a multi-unit meter center installed adjacent to the primary trench route.
 (d) Because differential was only \$8.46, differential was \$0.
 (e) Because differential is only \$3.16, FPL is proposing a tariff differential of \$0.

TOTAL OVERHEAD AND UNDERGROUND COST VS. TIME

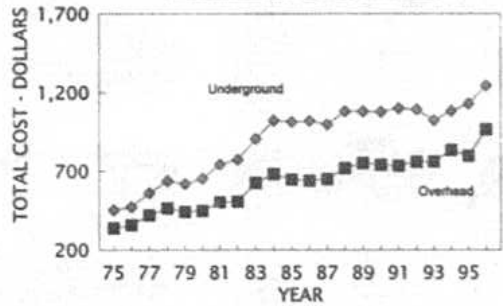
Low Density Subdivision

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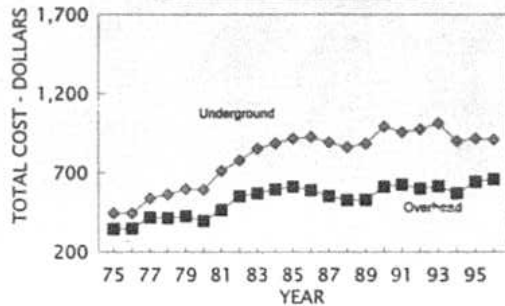
FPC SINGLE FAMILY DWELLING



FPL SINGLE FAMILY DWELLING



TECO SINGLE FAMILY DWELLING



TOTAL OVERHEAD AND UNDERGROUND COST VS. TIME

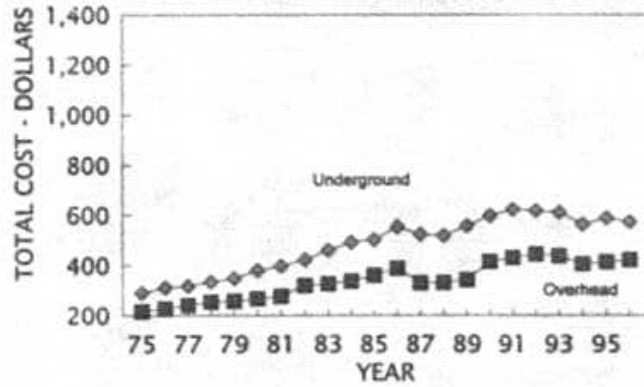
High Density - Individual Meters

SCHEDULE 2

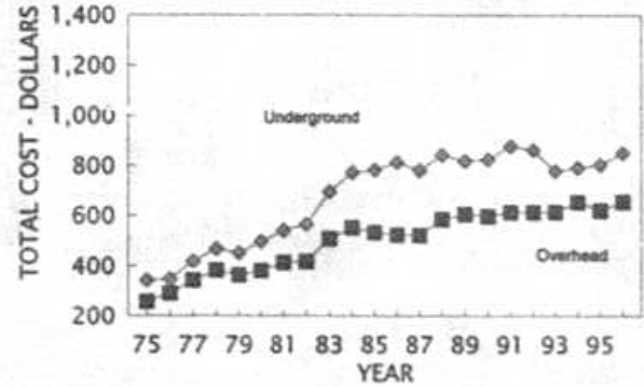
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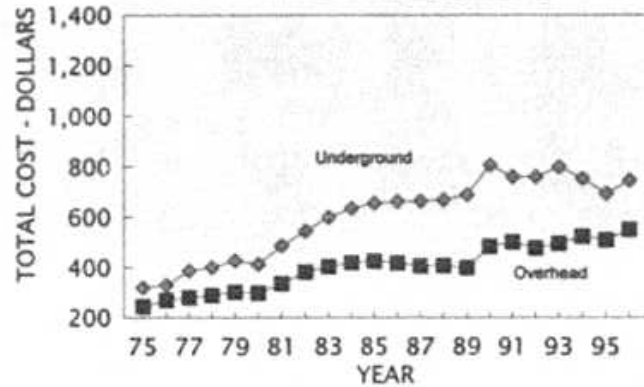
FPC INDIVIDUAL METERS



FPL INDIVIDUAL METERS



TECO INDIVIDUAL METERS



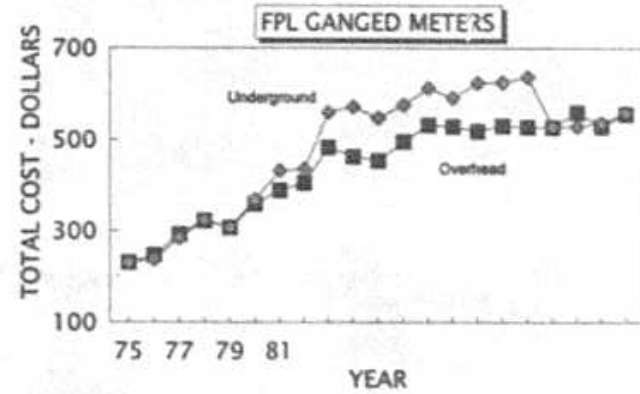
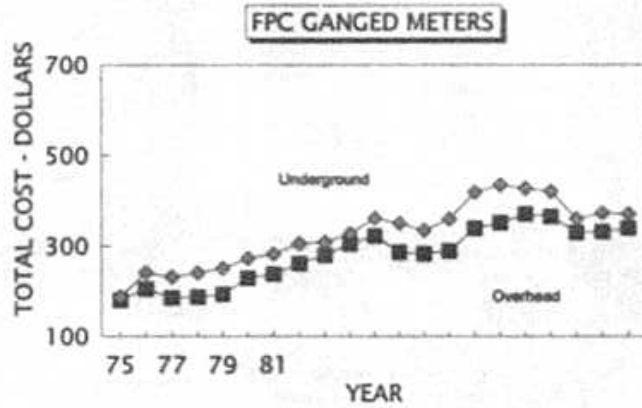
TOTAL OVERHEAD AND UNDERGROUND COST VS. TIME

High Density - Ganged Meters

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ELECTRIC UTILITIES
OVERHEAD AND UNDERGROUND COSTS
1996 TOTAL COSTS

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	1996				1996				1996			
	SINGLE FAMILY DWELLINGS (LOW DENSITY)				HIGH DENSITY INDIVIDUAL METERS				HIGH DENSITY GANGED METERS			
	EPC	FPL	TECO	QAUE	EPC	FPL	TECO	QAUE	EPC	FPL	TECO	QAUE
OVERHEAD												
SERVICE (b)	\$129.71	\$143.17	\$159.81		\$132.33	\$125.74	\$137.25		\$82.90	\$58.01		
PRIMARY	44.37	81.75	25.79		28.37	58.14	23.20		28.36	56.70		
SECONDARY	55.95	124.05	85.12		39.42	90.52	63.41		29.10	86.22		
INITIAL TREE TRIM	15.92				15.78				15.18			
POLES	105.22	252.49	138.00		51.95	140.42	115.90		41.57	136.55		
TRANSFORMERS	102.06	135.57	173.02		95.18	87.54	140.07		98.22	83.72		
STORES HANDLING (c)	24.95	46.17	35.99		18.29	30.86	28.07		14.02	26.58		
ENGINEERING (e)	55.33	181.46	42.45		41.86	123.23	42.45		30.68	104.34		
OVERHEAD TOTAL	\$533.51	\$966.66	\$690.18		\$423.00	\$656.45	\$550.35		\$340.05	\$555.82		
UNDERGROUND												
SERVICE (b)	\$167.89	\$356.03	\$168.58		\$116.59	\$242.43	\$181.88		\$119.67	\$36.90		
PRIMARY	126.24	223.57	120.39		39.84	144.31	101.23		35.83	180.73		
SECONDARY	155.14	50.39	151.50		95.30	43.85	39.59			75.14		
TRANSFORMERS	122.00	109.95	147.03		123.19	83.79	155.91		123.19	72.84		
TRENCHING												
PRIMARY & SECONDARY SERVICES	123.86	134.35	115.33		69.57	53.47	65.92		46.31	61.00		
STORES HANDLING (c)	35.08	51.26	44.38		50.37	86.00	123.78					
ENGINEERING (e)	91.31	233.43	42.45		20.46	36.13	34.39		13.25	27.44		
UNDERGROUND TOTAL	\$821.52	\$1,158.98	\$910.85		\$574.46	\$848.44	\$745.15		\$370.63	\$558.98		
UNDERGROUND DIFFERENTIAL	\$268.01	\$192.32	\$250.82		\$151.46	\$192.99	\$194.80		\$30.78	\$3.16		

Notes: ALL NOTES ARE INDICATED ON PAGE 5 OF 5

ELECTRIC UTILITIES
OVERHEAD AND UNDERGROUND COSTS
SINGLE FAMILY DWELLINGS (LOW DENSITY)

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1996 TOTAL COSTS

	MATERIAL (a)				LABOR (d)				TOTAL			
	EPC	EPL	TECO	QA/E	EPC	EPL	TECO	QA/E	EPC	EPL	TECO	QA/E
OVERHEAD												
SERVICE (b)	\$83.95	\$78.13	\$91.73		\$45.76	\$67.04	\$68.09		\$129.71	\$145.17	\$159.81	\$101.99
PRIMARY	20.05	41.79	9.08		24.32	39.96	16.71		44.37	81.75	25.72	22.28
SECONDARY	42.10	63.61	57.60		13.85	60.44	27.52		55.95	124.05	85.12	14.81
INITIAL TREE TRIM						15.92			15.92			31.93
POLES	80.81	113.10	67.49		24.41	139.39	70.51		105.22	252.49	138.00	196.12
TRANSFORMERS	92.89	115.86	133.97		9.17	19.71	39.05		102.06	135.57	173.02	269.57
STORES HANDLING (c)	24.95	46.17	35.99						24.95	46.17	35.99	32.96
ENGINEERING (e)		106.00			55.33	75.46	42.45		55.33	181.46	42.45	93.58
OVERHEAD TOTAL	\$344.75	\$564.66	\$395.86		\$188.76	\$402.00	\$264.32		\$533.51	\$966.66	\$660.18	\$776.04
UNDERGROUND												
SERVICE (b)	\$78.15	\$174.85	\$106.18		\$89.74	\$181.18	\$80.40		\$167.89	\$356.03	\$166.58	\$259.46
PRIMARY	108.11	143.57	99.30		16.13	80.00	21.09		126.24	223.57	120.39	328.13
SECONDARY	128.11	34.67	107.21		27.03	15.72	44.29		155.14	50.39	151.50	137.33
TRANSFORMERS	112.28	103.43	131.06		9.72	6.52	15.97		122.00	109.95	147.03	291.54
TRENCHING						84.53				84.53		
PRIMARY & SECONDARY SERVICES					123.86	134.35	115.33		123.86	134.35	115.33	121.31
STORES HANDLING (c)	35.08	51.26	44.38				123.19		35.08	51.26	44.38	130.55
ENGINEERING (e)		117.35			91.31	116.08	42.45		91.31	233.43	42.45	197.66
UNDERGROUND TOTAL	\$461.73	\$625.13	\$488.13		\$359.79	\$616.38	\$422.72		\$821.52	*****	\$910.85	*****
UNDERGROUND DIFFERENTIAL	\$116.98	\$80.47	\$92.27		\$171.03	\$216.38	\$158.40		\$288.01	\$278.85	\$250.67	\$744.57

Notes: ALL NOTES ARE INDICATED ON PAGE 5 OF 5

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ELECTRIC UTILITIES
OVERHEAD AND UNDERGROUND COSTS
HIGH DENSITY
INDIVIDUAL METERS

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1996 TOTAL COSTS

	MATERIAL (a)				LABOR (d)				TOTAL			
	EPC	EPL	TECO	GALE	EPC	EPL	TECO	GALE	EPC	EPL	TECO	GALE
OVERHEAD												
SERVICE (b)	\$60.04	\$65.32	\$73.60		\$52.29	\$60.42	\$63.65		\$132.33	\$125.74	\$137.25	\$60.24
PRIMARY	15.72	27.56	6.97		12.55	30.58	16.23		28.37	58.14	23.20	21.28
SECONDARY	31.56	50.42	35.43		7.86	40.10	27.96		39.42	90.52	63.41	15.08
INITIAL TREE TRIM					15.78				15.78			19.05
POLES	40.23	61.91	60.91		11.72	78.51	54.99		51.95	140.42	115.90	157.33
TRANSFORMERS	86.15	74.26	103.77		9.03	13.28	36.30		95.18	87.54	140.07	213.56
STORES HANDLING (c)	18.29	30.86	28.07						15.29	30.86	28.07	26.33
ENGINEERING (e)		71.72			41.68	51.51	42.45		41.68	123.23	42.45	72.87
OVERHEAD TOTAL	\$271.99	\$382.05	\$308.75		\$151.01	\$274.40	\$241.60		\$423.00	\$656.45	\$550.30	\$605.74
UNDERGROUND												
SERVICE (b)	\$73.28	\$131.25	\$112.06		\$43.31	\$111.18	\$69.82		\$116.59	\$242.43	\$181.68	\$196.06
PRIMARY	34.72	84.15	69.05		5.12	60.16	32.18		39.84	144.31	101.23	205.13
SECONDARY	72.17	31.22	24.95		23.13	12.63	14.64		95.30	43.85	39.59	113.90
TRANSFORMERS	113.02	78.60	137.83		10.17	5.19	18.08		123.19	83.79	155.91	301.91
TRENCHING												36.94
PRIMARY & SECONDARY SERVICES					69.57	53.47	65.92		69.57	53.47	65.92	30.54
STORES HANDLING (c)	20.46	36.13	34.38		50.37	86.00	123.78		50.37	86.00	123.78	130.55
ENGINEERING (e)		63.51			59.14	75.95	42.45		59.14	159.46	42.45	147.66
UNDERGROUND TOTAL	\$313.65	\$444.06	\$378.28		\$260.61	\$404.58	\$366.87		\$574.46	\$849.44	\$745.15	*****
UNDERGROUND DIFFERENTIAL	\$41.66	\$62.81	\$69.53		\$109.60	\$130.18	\$125.27		\$151.46	\$192.99	\$194.80	\$596.33

Notes: ALL NOTES ARE INDICATED ON PAGE 5 OF 5

ELECTRIC UTILITIES
OVERHEAD AND UNDERGROUND COSTS
HIGH DENSITY
GANGED METERS

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1996 TOTAL COSTS

	MATERIAL (a)				LABOR (d)				TOTAL			
	FPC	FPL	TECO	QULE	FPC	FPL	TECO	QULE	FPC	FPL	TECO	QULE
OVERHEAD												
SERVICE (b)	\$57.56	\$33.19			\$25.34	\$24.82			\$82.90	\$58.01		
PRIMARY	15.32	27.02			13.06	29.68			28.38	56.70		
SECONDARY	23.02	50.06			6.08	38.16			29.10	88.22		
INITIAL TREE TRIM					15.18				15.18			
POLES	31.82	59.84			9.95	78.71			41.57	136.55		
TRANSFORMERS	85.47	72.14			9.75	13.28			98.22	85.42		
STORES HANDLING (c)	14.02	26.58							14.52	26.58		
ENGINEERING (e)		62.13			30.68	42.21			30.68	104.34		
OVERHEAD TOTAL	\$230.01	\$330.96			\$110.04	\$224.66			\$340.05	\$555.62		
UNDERGROUND												
SERVICE (b)	\$63.60	\$24.90			\$36.07	\$12.00			\$119.67	\$36.90		
PRIMARY	31.03	102.41			4.60	78.32			35.63	180.73		
SECONDARY		53.92				21.22				75.14		
TRANSFORMERS	113.02	68.52			10.17	4.32			123.19	72.84		
TRENCHING												
PRIMARY & SECONDARY SERVICES					46.31	61.00			46.31	61.00		
STORES HANDLING (c)	13.25	27.44							13.25	27.44		
ENGINEERING (e)		64.06			32.58	40.67			32.58	104.93		
UNDERGROUND TOTAL	\$240.90	\$341.25			\$129.93	\$217.73			\$370.83	\$558.98		
UNDERGROUND DIFFERENTIAL	\$10.88	\$10.29	-	-	\$18.89	(\$7.13)	-	-	\$30.78	\$1.16		(7)

Notes: ALL NOTES ARE INDICATED ON PAGE 5 OF 5

ELECTRIC UTILITIES
OVERHEAD AND UNDERGROUND COSTS

SCHEDULE 3
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1998 NOTES

- (a) "MATERIAL" - INCLUDES SALES TAX.
- (b) "SERVICE" -
FPL - INCLUDES METER
FPC & TECO - INCLUDES METER AND METER SOCKET
- (c) "STORES HANDLING" -
FPC - 10% (1995), 11% (1994), 13% (1993, 1992) OF ALL MATERIAL EXCEPT TRANSFORMERS AND METERS.
FPL - 10.9% (1995), 9.33% (1994), 7.50% (1993), AND 10.02% (1992) OF ALL MATERIAL EXCEPT METERS.
- 4.67% (1994), 3.75% (1993), AND 5.01% (1992) OF METERS.
TECO - 10% OF ALL MATERIAL (1995, 1994, 1993, & 1992)
- (d) "LABOR" - INCLUDES ADMINISTRATIVE EXPENSES, GENERAL EXPENSES AND TRANSPORTATION.
- (e) "ENGINEERING" -
FPC - 15% (1994, 1993, AND 1992) OF ALL MATERIAL AND LABOR EXCEPT TRANSFORMERS AND METERS.
FPL - 21.81% (1995), 22.41 (1994), 19.75% (1993), AND 18.47% (1992) OF ALL MATERIAL AND LABOR
TECO - LOW DENSITY
OVERHEAD: 14% (1995), 20% (1994), 17% (1993), AND 16% (1992) OF LABOR.
UNDERGROUND: 8% (1995), 11% (1994), 9% (1993), AND 8% (1992) OF LABOR.
- HIGH DENSITY
OVERHEAD: 17% (1995), 21% (1994), 23% (1993) AND 21% (1992) OF LABOR.
UNDERGROUND: 11% (1995), 13% (1994), 12% (1993), 11% (1992) OF LABOR.
- (f) FPL HAS ROUNDED THE ACTUAL DIFFERENTIAL COST TO ZERO.

**CUMULATIVE NUMBER OF UTILITY CUSTOMERS
YEAR END 1989 - 1995**

Schedule 4

	FPC	FPL	TECO	GULF	TOTAL
A. YEAR END 1989					
OVERHEAD	568,234	1,600,316	264,123	223,631	2,656,304
UNDERGROUND	558,743	1,772,000	189,332	61,695	2,581,770
TOTAL	1,126,977	3,372,316	453,455	285,326	5,238,074
% UNDERGROUND	49.6%	52.5%	41.8%	21.6%	49.3%
B. YEAR END 1990					
OVERHEAD	576,289	1,622,506	265,142	226,880	2,690,817
UNDERGROUND	616,903	1,848,883	196,355	63,569	2,725,710
TOTAL	1,193,192	3,471,389	461,497	290,449	5,416,527
% UNDERGROUND	51.7%	53.3%	42.5%	21.9%	50.3%
C. YEAR END 1991					
OVERHEAD	578,024	1,632,984	264,682	230,755	2,706,445
UNDERGROUND	638,851	1,906,781	202,325	65,476	2,813,433
TOTAL	1,216,875	3,539,765	467,007	296,231	5,519,878
% UNDERGROUND	52.5%	53.9%	43.3%	22.1%	51.0%
D. YEAR END 1992					
OVERHEAD	579,929	1,640,872	265,760	236,862	2,723,423
UNDERGROUND	658,282	1,951,906	208,933	68,178	2,887,299
TOTAL	1,238,211	3,592,778	474,693	305,040	5,610,722
% UNDERGROUND	53.2%	54.3%	44.0%	22.4%	51.5%
E. YEAR END 1993					
OVERHEAD	595,515	1,653,891	270,084	242,534	2,762,024
UNDERGROUND	678,659	2,004,031	212,333	71,273	2,966,296
TOTAL	1,274,174	3,657,922	482,417	313,807	5,728,320
% UNDERGROUND	53.3%	54.8%	44.0%	22.7%	51.8%
F. YEAR END 1994					
OVERHEAD	596,547	1,664,240	263,310	247,576	2,771,673
UNDERGROUND	702,568	2,056,959	227,826	74,070	3,061,423
TOTAL	1,299,115	3,721,199	491,136	321,646	5,833,066
% UNDERGROUND	54.1%	55.3%	46.4%	23.0%	52.5%
G. YEAR END 1995					
OVERHEAD	575,925	1,674,431	256,122	219,649	2,756,127
UNDERGROUND	788,919	2,117,592	245,816	75,465	3,227,792
TOTAL	1,364,844	3,792,023	501,938	325,114	5,983,919
% UNDERGROUND	57.8%	55.8%	49.0%	23.2%	53.9%
H. YEAR END 1989 TO 1995					
-PERCENT INCREASE					
OVERHEAD	-3.5%	0.6%	-2.7%	0.8%	-0.6%
UNDERGROUND	12.3%	2.9%	7.9%	1.9%	5.4%
TOTAL	5.1%	1.9%	2.2%	1.1%	2.6%

Notes.

(a) FPL includes inactive meters and outdoor lighting. Many of the underground systems are supplied by overhead feeders and laterals.