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PATRICK R MALOY AMY J YOUNG

September 2, 1998

Ms. Blanca S. Bayo, Director Division of Records and Reporting Florida Public Service Commission 2540 Shumard Oak Boulevard Betty Easley Conference Center Room 110 Tallahassee, FL 32399-0850 HAND DELIVERY

RECEIVED-HPSC

Re: Docket No. 980002-EG

Dear Ms. Bayo:

Enclosed herewith for filing in the above-referenced docket on behalf of Florida Public Utilities Company are the following documents:

Original and fifteen copies of the Direct Testimony of Michael A. Peacock; and

Original and fifteen copies of the Composite Exhibit MAP-2 containing True-Up
 Calculations and Schedules CT-1 through CT-6 for the October 1997 through March 1998 time
 period.

AFA

APP

Please acknowledge receipt of these documents by stamping the extra copy of this letter

"filed" and returning the same to me. Thank you for your assistance with this filing.

Sincerely,

Kenneth A. Hoffman

CMU ____

AG S

IN 3 KAH/rl

OPC ____cc:

All Parties of Record
Mr. Michael A. Peacock

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OTH _____FP8C-BUREAU OF RECORDS

U9586 SEP-22

FASC-READ DE ABEPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION DOCKET NO. 980002-EG DETERMINATION OF CONSERVATION COSTS RECOVERY FACTOR

Direct Testimony of MICHAEL A. PEACOCK

On Behalf of FLORIDA PUBLIC UTILITIES COMPANY

- 1 Q. Please state your name and business address.
- 2 A. Michael A. Peacock: my business address is P.O. Box 610
- 3 Marianna, Florida 32446.
- 4 Q. By whom are you employed and in what capacity?
- 5 A. I am employed by Florida Public Utilities Company as
- 6 Manager of Customer Relations.
- 7 Q. What is the purpose of your testimony at this time?
- 8 A. To Advise the Commission of the actual over/under
- 9 recovery of the Conservation Program costs for the period
- 10 October 1, 1997 through March 31, 1998 as compared to the
- II true-up amounts previously reported for that period which
- 12 were based on two months actual and four months estimated
- 13 data.
- 14 Q. Please state the actual amounts of over/under recovery of
- 15 Conservation Program costs for both divisions of Florida
- 16 Public Utilities Company for October 1, 1997 through
- 17 March 31, 1998.
- 18 A. The Company over-recovered \$112,506 in the Marianna

- l Division during that period. In the Fernandina Beach
- 2 Division we over-recovered \$137,457. These amounts are
- 3 substantiated on Schedule CT-3, page 2 of 3, Energy
- 4 Conservation Adjustment.
- 5 Q. How do these amounts compare with the estimated true-up
- 6 amounts which were allowed by the Commission during the
- 7 February 1998 hearing?
- 8 A. We had estimated that we would over-recover \$85,285 in
- 9 Marianna. In Fernandina Beach we had estimated an over-
- 10 recovery of \$99,460 as of March 31, 1998.
- 11 O. Have you prepared any exhibits at this time?
- 12 A. We have prepared and pre-filed Schedules CT-1, CT-2,
- 13 CT-3, CT-4, CT-5 and CT-6 (Composite Exhibit MAP-2).
- 14 Q. Does this conclude your testimony?
- 15 A. Yes.

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- 17 Disk Conservation 11-97
- 18 Peacocktest.898

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Exhibit No. _____ Docket No. 980002-EG Florida Public Utilities Company (MAP-2)

True-up Calculations October 1997 - March 1998

Schedule CT-1	True-up Calculations
Schedule CT-2	Analysis of Energy Conservation Program Costs
Schedule CT-3	Energy Conservation Adjustment Calculation of True-up and Interest Provision
Schedule CT-4	Schedule of Capital Investment, Depreciation & Return
chedule CT-5	Reconciliation and Explanation of Differences Between Filing and PSC Audit Report
Schedule CT-6	Program Summaries

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - MARIANNA

SCHEDULE CT-1 PAGE 1 OF 1

CONSERVATION ADJUSTMENT TRUE-UP

FOR MONTHS October-97 THROUGH

March-98

ADJUSTED END OF PERIOD TOTAL NET TRUE-UP FOR MONTHS October-97 THROUGH March-P8 2 END OF PERIOD NET TRUE-UP 3 (110,126) PRINCIPAL 4 (2,380)(112,506) 5. INTEREST LESS PROJECTED TRUE-UP (DATE) HEARINGS 7 February-98 PRINCIPAL (23,131) 8 INTEREST (2,154)(85,285) 9 10 ADJUSTED END OF PERIOD TOTAL TRUE-UP (27, 221)

> EXHIBIT NO _ DOCKET NO. 980002-FG FLORIDA PUBLIC UTILITIES COMPANY (MAP-2) PAGE 1 OF 38

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - MARIANNA

SCHEDULE CT-2 PAGE 1 OF 3

ANALYSIS OF ENERGY CONSERVATION PROGRAM COSTS ACTUAL VS PROJECTED

	FOR MONTHS	October-97	THROUGH	March-08	
		ACTUAL		PROJECTED*	DIFFERENCE
1.	LABOR/PAYROLL	22,626		30,101	(7,475)
2.	ADVERTISING	10,567		9,967	600
3	LEGAL	1,490		2,005	(515)
4.	OUTSIDE SERVICES/CONTRACT	3,204		15,617	(12,413)
5.	VEHICLE COST	4,005		5,440	(1,435)
6.	MATERIAL & SUPPLIES	5,015		3,859	1,160
7.	TRAVEL	1,999		2,760	(761)
8.	GENERAL & ADMIN	2,079		2,218	(139)
9.	INCENTIVES	71		0	71
10.	OTHER	649		6,900	(6,251)
11.	SUB-TOTAL	51,705		78,867	(27,162)
12.	PROGRAM REVENUES				
13.	TOTAL PROGRAM COSTS	51,705		78,867	(27,162)
14.	LESS: PRIOR PERIOD TRUE-UP	56,065		56,065	0
15	AMOUNTS INCLUDED IN RATE BASE				
16.	CONSERVATION ADJ REVENU	105,766		105,933	(167)
17.	ROUNDING ADJUSTMENT				
18.	TRUE-UP BEFORE INTEREST	(110,126)		(83,131)	(26,995)
19	ADD INTEREST PROVISION	(2,380)		(2.154)	(226)
20	END OF PERIOD TRUE-UP	(112,506)		(85,285)	(27,221)

() REFLECTS OVERRECOVERY

*2 MONTHS ACTUAL AND 4 MONTHS PROJECTED

COMPANY; PLORIDA PUBLIC UTILITIES COMPANY - MARIANNA

ACTUAL CONSERVATION PROGRAM COSTS PER PROGRAM

FOR MONTHS October-97 THROUGH March-98

100000	LABOR LABOR	LABOR	100	OUTSIDE	VEHICLE	MATERIALS		CENERAL			808	PROGRAM	į
200	TATROCK	PAGE I FOLLOW	renur	96741669	1000	SUFFUES	Taker	Victor I	MACCA IIAES	1	TOLVE	REVENUES	TOTAL
In Concert with the Environment	1,238	0	0	3,065	0	0	9	0	7.	0	4.374		4374
Direct Leakage Repair	1,440		0	0	0	604	0	0	0	0	3254		3.254
Residential Geothermal Heat Pump	1,191		0	0	0	0	0	0	0	0	1,191		1,191
Residential Energy Audits	2,286	3.046	0	0	0	0	118	0	•	0	5.453		5.453
Low Income Customer Energy Audits	1,071		0	0	0	٥	0	٥	0	0	1,071		1,071
FPU Express	1,471		0	0	0	0	2	٥	•	0	4.276		4.276
Enhanced Good Cants Home	1,483		0	78	0	2.459	(353)	5	•	0	6,190		6.190
Commercial/Industrial Good Cents Building	913	109	0	0	0	1,437	0	0	0	0	2.959		2.959
Commercial Profit & Lech. Ass.	198	\$	0	7	0	0	1,992	2	0	0	3,086		3.00%
Common	10,565	152	1.480	0	4 005	780	Ž,	2,007		Î	19,851		19,651

EXHIBIT NO. BROSS EG. FLORES PUBLIC UTLITES COMPANY (MAN-2). PAGE 3 OF 38

\$1,705

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2,079

5,015

4 805

3,204

1,490

10,567

22,626

TOTAL ALL PROGRAMS

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - MARIANNA

CONSERVATION COSTS PER PROGRAM-VARIANCE ACTUAL VS PROJECTED VARIANCE ACTUAL VS PROJECTED

October-37 THROUGH

FOR MONTHS.

an and was a second	LABOR A A	ADVENTIONO	18041	OUTSIDE	VEHICLE	A ATERALS	TBANE	GENERAL	SUCCESTRATES.	others	Sub	PROGRAM	10741
	1	- Control of the Cont	-	-	-	-	1	-		4	1	No. of Contract of	1
in Concert with the Environment	SW		0	(3,740)	(300)	•	-	0	E	•	(5.816)	0	(5.616)
Direct Leakage Repair	25		0	(1300)	(000)	100	0	0	0	(009)	1,296	0	(1,296)
Residential Geotharmal Heat Pump	107		0	(1,100)	(300)	(200)	(300)	0000	0	(000)	(3,093)	0	(3,003)
Residental Energy Audita	1941		0	0	(300)	(000)	(300)	000	0	(000)	(2.666)	0	(2.090)
Low Income Customer Energy Audits	144		0	(000)	(000)	(000)	0	(000)	0	(1,100)	(3.045)	0	(3,045)
FPU Express	613		0	(000)	(3000)	1000	0	600	0	1001	(1.786)	0	C 7865
Enhanced Good Cants Home	71.545		•	(1,000)	6000	1.169	Coch	(1961)	0	100	(3.518)	0	C1.5185
Commercial/Industrial Good Certs Building	7.83		o	(000)	(300)	1,137	000	5000	0	CO	(1.515)	0	(1.815)
Commercial/Industrial Energy Audits & Tech. As			0		1000	(000)	100	(178)	0	1100	(2,792)	0	CO TROD
Common	(5,116)	281	(818)	0	1,285	241	3	1206	0	3	(1,835)	0	(1,835)

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EXHEIT NO DOCKET NO MODICA EG CACHARAST PAGE 4 OF 28

(27,162)

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(1,435)

(12,413)

(7,473)

TOTAL ALL PRODRAMS

TOTAL

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - MARIANNA

ENERGY CONSERVATION A DUUSTMENT CALCULATION OF TRUE-UP AND INTEREST PROVISION SUMMARY OF EXPENSES BY PROGRAM BY MONTH

March-98

October-87 THROUGH

FOR MONTHS

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COMPANY: PLORIDA PUBLIC UTILITIES COMPANY - MARIANNA

CALCULATION OF TRUE-UP AND INTEREST PROVISION

FOR MONTHS October-87 THROUGH March-88

sá	B. CONSERVATION REVENUES	остовея	NOVEMBER	DECEMBER	JANUARY	JANUARY FEBRUARY	MARCH	APPEL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	
	RESIDENTIAL CONSERVATION													
*	CONSERVATION ADJ. REVENUES	20,036	15.64	17,898	18,520	17,498	16,380	0	0	0	0	0	0	- 1
•	TOTAL REVENUES	30,036	15.654	17,868	18,520	17,498	16,380	0	0	0	0	•	•	
*	PRICH PERICO TRUELIP ADJ NOT APPLICABLE TO THIS PERICO	467	487	467	4872	497	467							- 1
100	CONSERVATION REVENUE APPLICABLE	34.708	20,136	22.540	23,152	22,170	21,062	0	•	0	0	0	۰	168,181
	CONSERVATION EXPENSES (FROM CT.3, PAGE 1, LINE 23)	7,855	1103	11.693	7.679	9,000	1901	0	0	0	0		0	\$1,705
	TRUE UP THIS PERIOD (LINE 5 - 6)	16.853	13.225	10,847	15,513	13,110	12,545	0	0	0	0	0	۰	110,128
	INTEREST PROMISION THIS PERIOD (FROM CT.3, PAGE 3, LINE 10)	×	338	×	ŧ	457	8	0	0	0	0		۰	
	TRUE UP AND INTEREST PROVISON BEGINNING OF MONTH	56.065	68,532	527	67.973	95,239	10 X							
1	DEFERRED TRUE LIP RECINANG OF PERIOD													
2	PRICH TRUELIP COLLECTED (REFUNDED)	(5.67)	(4.872)	(4.872)	(4.677)	E1970	(50)	0	0	0	0	0	0	- 1
:	1014, NET TRUE UP (LNES 7-8-9-84-12)	225.89	77,433	63.63	86,238	N. W.	112,508	0	0	٥	6	٥	0	112,508

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COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - MARIANNA

CALCULATION OF TRUE-UP AND INTEREST PROVISION

FOR MONTHS October-87 THROUGH March-88

INTEREST PROMISION	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APPEL	MAY	JUNE	JULY	AUGUST	SEPTEMBER .	TOTAL
BEGINNING TRUE-UP (LINE B-8)	\$6.065	68,532	77,423	63,979	95,230	104,134	•	0	0	۰	•	0	0
ENDING TRUE JP BEFORE INTEREST (JAKIS 87-884-810)	68.246	77,085	61.590	PA.820	179,677	112,007	0		٥	0		0	110,126
TOTAL BEG. AND ENDING TRUE UP	126311	145.817	161,021	178,780	198,918	218,141	o	0	0	0	0	0	110,128
AVERAGE TRUE-LIP (LINE C-3 X 50%)	62,158	72.809	115,08	89,400	99,458	108,071	0	0	0	0	0	0	56,063
INTEREST BATE - PRIST DAY OF PEPOPTHIC BUSINESS MONTH	3 53%	8.53%	\$ 60%	8738	1,50	8038	4000	600	\$000	0000	9000	0000	
INTEREST RATE - FIRST DAY OF SUBSECUENT BUSINESS MONTH	1554	8608	8738	8808	1554	1598	*000	6000	\$000	6000	9000	0000	
TOTAL RINE CIS + CI-8)	11 00%	11.13%		11.25%		11.08%	9,000	6000	0000	1000	1000	14000	
AVG INTEREST RATE (C.7 X 50%)	2 52%	255	2.60%	8.63%	Š.	1	9,000	6000	6000	6000	0.00%		
MONTHLY AVERAGE INTEREST RATE	\$1000	20.00	D473%	0.460%	0	0.462%	0.000	5000	0.0000	90000	0 0000	9,000 0	
NATEREST PROVISION (LINE C-A X C-B)	286	339	Ŕ	419	9	400		6	٥	0	0	0	2,360

EXHIBIT NO DECORATION TO DECORATIVE SCOMPANY (MARKA) PAGE 7 OF 38

COMPANY: PLORIDA PUBLIC UTILITIES COMPANY - MARIANNA SCHEDULE OF CAPITAL INVESTMENT, DEPRECATION A RETURN

FOR MONTHS October-87 THROUGH March-88

INVESTMENT	DECENNING OF PERSOD	OCTOBER	BECOMMING OCTOBER HOVEMBER DECEMBER JANUARY FEBRUARY MARCH	JANUARY	FEBRUARY	MARCH	APPR	¥	JUNE	JULY	AUGUST SEPTEMBER TOTAL	TOTAL
DEPRECATION BASE												
DEPRECIATION EXPENSE												
CUMULATIVE INVESTMENT												
LESS ACCUMULATED DEPRECATION												
NET INVESTMENT												
AVERAGE INVESTMENT												
RETURN ON AVERAGE INVESTMENT												
RETURN REQUIREMENTS												
TOTAL DEPRECIATION AND RETURN												MONE

EXHBIT NO COCKET NO WOODS-EG FLORIDA PUBLIC UTILITIES COMPANY (MARP-2) PACIE 6 OF 28 COMPANY: FLORIDA FUNLIC LITILITIES COMPANY - MARIANNA

PAGE 1 OF 1

RECONCILIATION AND EXPLANATION OF DIFFERENCES BETWEEN FR.ING AND PSC AUDIT

FOR MORTHS Goldber 97 THROUGH March-

AUDIT EXCEPTION

TO GUN KNOWLEDGE, NONE EXIST

COMPANY RESPONSE

SCHEDULE CT-6 PAGE 1 OF 10

- 1. IN CONCERT WITH THE ENVIRONMENT
- 2. DUCT LEAKAGE REPAIR
- 3. RESIDENTIAL GEOTHERMAL HEAT PUMP
- 4. RESIDENTIAL ENERGY AUDITS
- 5. LOW INCOME CUSTOMER ENERGY AUDITS
- 6. FPU EXPRESS LOAN
- 7. ENHANCED GOOD CENTS HOME
- 8. COMMERCIAL/INDUSTRIAL GOOD CENTS BUILDING
- 9. COMMERCIAL/INDUSTRIAL ENERGY AUDITS AND TECHNICAL ASSISTANCE

SCHEDULE CT-6 PAGE 2 OF 10

PROGRAM TITLE: In Concert With the Environment

PROGRAM DESCRIPTION: In Concert With the Environment® is an environmental and energy awareness program that is being implemented in the 8th and 9th grade science classes in Florida Public Utilities Company's service area. The program will show students how everyday energy use impacts the environment and how using energy wisely increases environmental quality. In Connert With the Environment® is brought to students who are already making decisions which impact our country's energy supply and the environment. Wise energy use today can best be achieved by linking environmental benefits to wise energy-use activities and by educating both present and future consumers on how to live "in concert with the environment".

The "in Concert" program was designed for teachers and students from the ground up. "In Concert" comes complete with suggestions for implementation and evaluation, with quality materials designed to accentuate distinctive teaching styles. The program is flexible enough to be used as a stand-alone learning unit, or it can be integrated into existing lessons.

PROGRAM ACCOMPLISHMENTS: The offering of this program is currently being implemented in cooperation with area school board members, administrators, and teachers. The program itself will continue during the current school year for 9th grade students in schools within our service area. The schools which will be taking part are the three county school systems located in Calhoun, Liberty, and Jackson counties (Marianna Division). Teachers and administrators alike have embraced the program with great enthusiasm.

PROGRAM FISCAL EXPENDITURES: The expenditures October 1997 through March 30, 1998 were \$4,374.

PROGRAM PROGRESS SUMMARY: This program was instituted for the first time during the 1997 school year with 288 students participating thus far. We received an enthusiastic response from both teachers and students which will continue to make this program a great success.

SCHEDULE CT-6 PAGE 3 OF 10

PROGRAM TITLE: Duct Leakage Repair

PROGRAM DESCRIPTION: The objective of the Duct Leakage Repair Program is to provide FPUC's residential customers a means to identify house air duct leakage and recommend repairs that can reduce customer energy usage and demand.

FPUC will identify program participants through the Residential Energy Audit Program as well as through promotional activities. Blower Door testing required to identify and quantify the duct leakage will be performed by a contractor. After identification of the leakage sites and quantities, the customer will be given a written summary of the test findings and the potential savings, along with a list of approved repair contractors. Testing will be done on new construction duct systems to ensure maximum efficiency and comfort in these new homes also. This testing will be available to the Builder, HVAC contractor, or homeowner. FPUC will utilize duct testing and supertise for the purpose of educating Builders and HVAC contractors by identifying problem areas and improvement methodologies or techniques.

Additionally, FPUC will offer two approved continuing education courses for building contractors licensed by the Florida Construction Industry Licensing Board (CILB). The two courses are: "Duct Leakage in Homes: Consequences, Control, and Code Requirements" and "Repairing Duct Leakage".

PROGRAM ACCOMPLISHMENTS: The program goal for the current year is fourteen participants. As of the end of this reporting period we have a total of 22 participants.

PROGRAM FISCAL EXPENDITURES: The expenditures October 1997 through March 30, 1998 were \$3,254.

PROGRAM PROGRESS SUMMARY: In order to ensure that we continue to meet future goals FPUC will be sponsoring continuing education courses for building and HVAC contractors which will provide training in the areas of duct leakage identification and repair solutions. Contractors will then be in a better position to provide quality duct repair/installation services to FPUC customers. This training will be offered to area contractors in both service areas. The Marianna Division will be cosponsoring this training along with Griff Power and West Florida Electric Cooperative. As with the Enhanced Good Cents Program we are offering these training seminars in cooperation with other utilities in order to allow us to offer these courses to local contractors at a much lower cost to us.

BCHEDULE CT-6 PAGE 4 OF 10

PROGRAM TITLE: Residential Geothermal Heat Pump

PROGRAM DESCRIPTION: The objective of the Residential Geothermal Heat Pump Program is to reduce the demand and energy requirements of new and existing residential customers through the promotion and installation of advanced and emerging geothermal systems. Geothermal heat pumps also provide significant benefits to participating customers in the form of reduced operating costs and increased comfort levels, and are superior to other available heating and cooling technologies with respect to source efficiency and environmental impacts. FPUC's proposed Geothermal Heat Pump program is designed to overcome existing market barriers, specifically, lack of consumer awareness, knowledge, and acceptance of this technology.

This program will promote efficiency levels well above current market conditions, specifically those units with an Energy Efficiency Ratio (EER) of 13.0 or higher. The Department of Energy (DOE) is touting genthermal technology as the most energy-efficient and environmentally clean space-conditioning system available today. Additionally, a recent DOE study indicates that geothermal systems have the lowest life-cycle cost of any HVAC system today.

PROGRAM ACCOMPLISHMENTS: This current year we have not had a geothermal installation in our service area. Several customers have inquired about this technology, therefore, we are confident that we will see a number of geothermal installations by the end of the current year.

PROGRAM FISCAL EXPENDITURES: The expenditures October 1997 through March 30, 1998 were \$1,191.

PROGRAM PROGRESS SUMMARY: Even though there is not a goal for this particular program we feel confident that by our efforts to promote this technology we will see a number of geothermal installations in our service areas. We will continue to educate customers and strive to develop a network of installers in order to better promote this highly energy efficient heating and cooling source.

SCHEDULE CT-6 PAGE 5 OF 10

PROGRAM TITLE: Residential Energy Audits

PROGRAM DESCRIPTION: The objective of the Residential Energy Audit Program is to provide FPUC's residential customers with energy conservation advice that will encourage the implementation of efficiency measures resulting in energy savings for the customer. FPUC views this program as a vehicle to promote the installation of cost-effective conservation features. During the audit process, the customer is provided with specific whole-house recommendations. Through follow-up audit work, FPUC monitors and tracks the implementation of the measures.

The "Appliance Efficiency Education" DSM program from JEA's DSM Plan will be incorporated into these residential energy audits. The customer will be educated on the expense of operating a second refrigerator or freezer and on the value of a high efficiency pool pump. The resulting increase in operating efficiencies will provide for a reduction in weather-sensitive peak demand, as well as a reduction in energy consumption.

PROGRAM ACCOMPLISHMENTS: The gos! for this program is 141 participants. This has been a successful program to date. Audits have been conducted for 108 customers at the end of this reporting period.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1997 through March 30, 1998 were \$5,453.

PROGRAM PROGRESS SUMMARY: We feel confident that by our efforts to promote this program through radio, newspaper, bill stuffers and cable TV that we will see increased participation in this program.

EXHIBIT NO. DOCKET NO. 980002-EG FLORIDA PUBLIC UTILITIES CO. (MAP-2) PAGE 14 OF 38

SCHEDULE CT-6 PAGE 6 OF 10

PROGRAM TITLE: Low Income Customer Energy Audits

PROGRAM DESCRIPTION: FPUC has provided low income customers benefits through its energy conservation programs for many years. Although programs are offered to customers without discrimination, the company recognizes that a customer may be less likely to participate in a particular program due to various circumstances, including lack of disposable income. FPUC does not directly identify low income participants, but base on experience and observations, it is apparent that low income customers are participating at levels similar to the overall residential population.

Every FPUC customer is eligible for an FPUC residential energy audit, but the audit recommendations usually require the customer to spend money replacing or adding energy conservation measures. Low income persons may not have the discretionary income to make these changes. In an effort to further assist FPUC's low income customers, FPUC will work with a local weatherization agency to provide weatherization energy audits for low income customers. FPUC will pay for these weatherization energy audits for any FPUC customer through the state weatherization program. The estimated cost per audit is \$50.

PROGRAM ACCOMPLISHMENTS: Eighty-three low income customer audits have been completed to date.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1997 through March 30, 1998 were \$1,071.

PROGRAM PROGRESS SUMMARY: The i rogram goal is twenty participants per year. The audits that have been done were completed in the first quarter of the year. We will continue to make contacts with low income agencies in order to stay up to date on their progress and needs.

EXHIBIT NO. DOCKET NO. 980002-EG FLORIDA PUBLIC UTILITIES CO. (MAP-2) PAGE 15 OF 38

SCHEDULE CT-6 PAGE 7 OF 10

PROGRAM TITLE: FPU Express Loan Program

PROGRAM DESCRIPTION: The objective of the FPU Express Loan Program is to provide FPUC's residential customers a vehicle to encourage installation of energy conservation features in their homes. This below-market interest rate loan program provides financing from participating banks in FPUC's service area for up to \$5,000 for a period of 5 years (\$7,500 and 7 years if a closed loop heat pump is installed) to customers that choose to install energy conservation features in their existing homes.

The program provides FPUC a financing option to offer customers who wish to install conservation features in their homes. The program is designed to work in conjunction with FPUC's approved Residential Energy Audit Program. During the audit process, the customer is provided with specific whole-house recommendations. An FPUC representative will submit a completed loan application to a perticipating bank once the customer decides to install the conservation features. Along with the application, the FPUC representative will also provide the bank with a copy of the energy audit and a list of the specific energy conservation features recommended. After the application has been approved, the customer will contact a licensed contractor of their choice to install the recommended conservation features. After the work is completed, an inspection is performed by FPUC to ensure all energy conservation features covered by the loan are installed. Confirmation of the installed features is provided to the participating bank. The increased operating efficiencies of the installed features provide a reduction in weather sensitive peak demand as well as a reduction in overall energy consumption.

PROGRAM ACCOMPLISHMENTS: This year's goal is ten program participants. To date, we have completed four FPU Express Loans. Program participation is expected to increase as contractors, realtors and customers become more aware of the availability of the program.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1997 through March 30, 1998 were \$4,276.

PROGRAM PROGRESS SUMMARY: Full implementation of this program has now begun and we feel this program will be extremely successful due to increased advertising and our new promotional efforts. During Residential Audits we will also inform residents of the advantages of this program. We will continue to development close relationships with area realtors and contractors by providing them with program materials that will enhance their efforts to inform customers of this program.

EXHIBIT NO. DOCKET NO. 980002-EG FLORIDA PUBLIC UTILITIES CO. (MAP-2) PAGE 16 OF 38

SCHEDULE CT-6 PAGE 8 OF 10

PROGRAM TITLE: Enhanced Good Cerita Home Program

PROGRAM DESCRIPTION: The objective of the Enhanced Good Cents Home Program is to provide Florida Public Utilities Company's residential customers guidance concerning energy efficiency in new construction. The program promotes energy efficient home construction techniques by evaluating components in the categories of design and construction practices. These categories include: wall insulation, doors, windows, perimeter/floor insulation, moisture/infiltration barrier, attic/ceiling insulation, attic ventilation system, centsable duct system, centsable water heating system, and HVAC system.

The program will result in reductions in energy usage and peak demand. FPU will identify potential program participants through builder/developer relationships as well as through promotional activities. Additionally, FPUC will provide education and training to building contractors and building inspectors to encourage energy conservation. Two classes will be provided, both of which are approved continuing education courses for building contractors licensed by the Florida Construction industry Licensing Board (CILB). The two classes are: "Constructing an Energy Efficient Home" and "Load and Duct Sizing Calculations: Computer Solutions".

PROGRAM ACCOMPLISHMENTS: A total of ten Enhanced Good Cents Homes have been built to date with several more currently under construction.

PROGRAM FISCAL EXPENDITURES: Expenditure's beginning October 1997 through March 30, 1998 were \$6,100.

PROGRAM PROGRESS SUMMARY: The program goal is forty-two participants by the end of the current year. We are below our goal at this time. We've enhanced our efforts in promoting contractor participation and customer benefits. Informational presentations will be conducted to educate area builders, realtors, and suppliers. We feel these measures along with increased efforts in building partnerships with local contractors will enable us to make this program successful.

SCHEDULE CT-6 PAGE 9 OF 10

PROGRAM TITLE: Commercial/Industrial Good Cents Buildings

PROGRAM DES...tPTION: The commercial/industrial market is comprised of a wide range of diverse businesses with variable size and operational characteristics. The success of the Commercial/Industrial Good Cents Building program lies in its ability to address this diversity by focusing on the mutual characteristics of commercial buildings. The most common critical areas in commercial buildings that affect summer peak demand are the thermal efficiency of the building and HVAC equipment efficiency. The Commercial/Industrial Good Cents Building program provides requirements for these area that, if adhered to, will help reduce peak demand and energy consumption.

Promotion of the Commercial/industrial Good Centa Building program will feature a positive relationship with trade allies, the public, and local commercial/industrial customers. The program's design is sufficiently flexible to allow an architect or designer to use initiative and ingenuity to achieve results that are meaningful to both the customer and FPUC.

To provide an accurate quantitative analysis of the demand and energy savings due to the Commercial/Industrial Good Cents Building program, the Good Cents standards for our average commercial building are compared to the Florida Model Energy Code. The features used to prepare the oustomer's analysis include: wall and ceiling R-values; glass area; description of glass; and equipment used in determining the demand and energy differences for the two types of structures. The <u>AXCESS - Energy Analysis Computer Program (AXCESS)</u> is used in calculating these demand and energy differences.

PROGRAM ACCOMPLISHMENTS: To date, we have a total of two Good Cents Building qualifications.

PROGRAM FISCAL EXPENDITURES : Expenditures beginning October 1997 through March 30, 1998 were \$2,959.

PROGRAM PROGRESS SUMMARY: New construction in the commercial/industrial area is not a common occurrence in FPUC's service terroritory. The goal for this program is two Good Cents Buildings for the current year. By developing a plan of action to gain knowledge of possible projects from the architect before the design stage begins we feel that we will have further success with this program. We have laid the foundation of customer trust in this area, just as in our Commercial/Industrial Audit and Technical Assistance Program. We feel that with these changes we will exceed the program goal for the current year.

SCHEDULE CT-6 PAGE 10 OF 10

PROGRAM TITLE: Commercial/Industrial Energy Audits and Technical Assistance

PROGRAM DESCRIPTION: FPUC provides auditing services to the commercial and industrial classes to assist in the evaluation of specific energy requirements of a given structure.

FPUC's representative will be provided a prospective customer for an audit through a phone call, advertising, a complaint, or referral. In this initial contact the representative determines needs, sets an appointment, and begins to gather some basic data such as the address, account number, business type, and past energy records. At the time of the audit, the representative discusses the audit and submits an outline of the procedure to the customer. During the discussion, the representative also acquires some customer data as it relates to the

characteristics of the operation, time of operation, occupancy, and duration of the occupancy. In the audit's visual inspections, the representative observes overall layout, gathers equipment data, statistics, observes houseks eping and maintenance, checks various energy sources, and checks waste heat sources. The representative also makes

appropriate measurements of lighting, ambient air temps atures, water temperatures, and air quantities.

After the visual inspection, the representative will return to the customer to review the total energy consumption and billing of the structure, and make general suggestions for improved efficiency that will have little or no cost associated with them. The representative will also identify major items for further study in which the customer will have the option of making capital expenditures.

PROGRAM PROJECTION: Commercial/Industrial Audits have been completed for eight customers to date.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1997 through March 30, 1998 were \$3,086.

PROGRAM PROGRESS SUMMARY: The DSM plan goal is twelve participants for this particular program. Program participation has been excellent with many customers having participated thus far. We are optimistic that our commercial/industrial customers will involve us to a greater extent in future projects based upon the work we are currently doing in this area.

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA

SCHEDULE CT-1 PAGE 1 OF 1

CONSERVATION ADJUSTMENT TRUE-UP

FOR MONTHS October-87 THROUGH

March-98

1.	ADJUSTED END (OF PERIOD TOTA	L NET TRUE-UP			
2	FOR MONTHS	October-97	THROUGH	Merch-98		Y
3.	END OF PERIOD I	NET TRUE-UP				
4.	PRINCIPAL				(134,653)	
5	INTEREST				(2,604)	(137,457)
6	LESS PROJECTES	D TRUE-UP				
7.	February-98	(DATE) HEARIN	GS			
8.	PRINCIPAL				(97,178)	
9.	INTEREST				(2,282)	(99,460)
10	ADJUSTED END	OF PERIOD TOTA	L TRUE-UP			(37,997)

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA

SCHEDULE CT-2 PAGE 1 OF 3

ANALYSIS OF ENERGY CONSERVATION PROGRAM COSTS ACTUAL VS PROJECTED

	FOR MONTHS	October-87	THROUGH	March-98	
		ACTUAL		PROJECTED*	DIFFERENCE
1.	LABOR/PAYROLL	22,598		31,115	(8,517)
2.	ADVERTISING	7,662		8,525	(863)
3.	LEGAL	1,479		1,997	(518)
4.	OUTSIDE SERVICES/CONTRACT	3,682		16,122	(12,440)
5.	VEHICLE COST	3,388		4,938	(1,550)
6.	MATERIAL & SUPPLIES	4,516		3,400	1,116
7,	TRAVEL	2,472		3,470	(998)
8.	GENERAL & ADMIN	4,141		2,242	1,899
9.	INCENTIVES	0		0	0
10.	OTHER	864		6,331	(5,467)
11.	SUB-TOTAL	50,802		78,140	(27,338)
12.	PROGRAM REVENUES				
13.	TOTAL PROGRAM COSTS	50,802		78,140	(27,338)
14.	LESS: PRIOR PERIOD TRUE-UP	50,545		50,545	0
15.	AMOUNTS INCLUDED IN RATE BASE				
16.	CONSERVATION ADJ REVENU	135,110		124,773	10,337
17.	ROUNDING ADJUSTMENT				
18.	TRUE-UP BEFORE INTEREST	(134,853)	, , , , , , , , , , , , , , , , , , ,	(97,178)	(37,675)
19.	ADD INTEREST PROVISION	(2,604)		(2,282)	(322)
20	END OF PERIOD TRUE-UP	(137,457)		(99,460)	(37,997)

() REFLECTS OVERRECOVERY
*2 MONTHS ACTUAL AND 4 MONTHS PROJECTED

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA

ACTUAL CONSERVATION PROGRAM COSTS PER PROGRAM

FOR MONTHS October-57 THROUGH March-88

PROGRAM NAME	LABOR	LABOR L A PAYROLL ADVERTISING	LEGAL	SERVICES	VEHICLE	MATERIALS A SUPPLIES	TRAVEL	GENERAL ADMIN	INCENTIVES	OTHER	SUB	PROGRAM	TOTAL
In Coreat with the Environment	2.040	0	0	1001			9	0	0	0	8 104	1	30,4
Direct Leakage Recair	1275	0	0	0	0	415	0	0	0	0	1.690		1.690
Residential Geothermal Heat Pump	910		0	8	0	0	0	0	0	0	980		980
Residential Energy Audits	2730	3,904	0	•	0	178	0	0	0	0	6.810		6.810
Low Income Customer Energy Audits	751		0	0	0	•	0	0	0	0	751		757
FPU Express	874		0	0	٥	0	2	0	0	2	2,715		2.715
Enhanced Good Cants Home	1531		0	8	0	2,488	503	370	0	371	9.406		9,400
Commercial Probabilist Good Cents Building	Z,		0	0	0	1.67	200	0	0	0	2.594		2.504
Commercial Industrial Energy Audia & Tech. Ass			0		0	0	980	0	0	0	2,666		2.666
Common	8.578	8	1,479	0	3,300	0	27	3,771	0	475	10,500		18,506
TOTAL ALL PROGRAMS	22 598	7862	897	3,662	3380	5	22	4	0	ž	20.00	0	\$0.802

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PLOREA PUBLIC UTILITES COMPANY
(MAP-2)
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COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - FERNANDRIA

CONSERVATION COSTS PER PROGRAM—VARIANCE ACTUAL VS PROJECTED VARIANCE ACTUAL VS PROJECTED

FOR MONTHS October-87 THROUGH March

PROGRAM NAME	PAYROLL	ADVERTISING	LEGAL	SERVICES	VEHICLE	NATERALS SUPPLIES	TRAVEL	ADMIN.	PACENTIVES	OTHER	TOTAL	PROGRAM	TOTAL	
In Concert with the Environment	1,404		0	(4,440)	(300)		0	(1001)	•	(400)	(303.0)	0	(3.636)	
Cirect Leastage Repair	400		0	(1,000)	(000)		0	(1001)	0	(000)	(1.919)	0	(1.919)	
Residential Geothernal Heat Pump	162		0	(700)	(000)		(300)	(100)	0	(000)	(2.538)	0	CL.5385	
Residential Energy Audits	1,000		•	(00)	(000)		(000)	(100)	•	(1,000)	(2,920)	0	(2.920)	
Low Income Customer Energy Audits	(486)		0	(000)	(300)		0	(100)	0	(1,000)	(3,186)	0	(3,186)	
FPUEspress	(225)		0	(300)	(300)		-	(300)	0	(1,062)	(1.430)	•	(1.430)	
Enthanced Good Cents Home	040		•	(1,000)	(300)		(000)	(100)	0	000	0.474	0	0.00	
Commercial Probustrial Good Cents Building	(540)		0	(1,300)	000		(367)	(1001)	•	(1,100)	(2.640)	•	(2.840)	
Commercial Industrial Energy Audits & Tech. As			0	02,700)	000		600	(1001)	0	0	14 0200	0	14,0000	
Common	Ī	8	(818)	0	1,150	0	8	2,799	0	1,500	(2,366)	0	(2,386)	
antipologian and	1		4.6	100	1 4 800	1	9	1 5	1	1	100	·	-	

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COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - PERNANDINA

PAGE 1 OF 3

EMERGY COMSERVATION ADJUSTMENT CALCULATION OF TRUE-UP AND INTEREST PROVISION SUMMARY OF EXPENSES BY PROGRAM BY MONTH

FOR MONTHS October-97 THROUGH March-98

2	11	7	*******	428			9	*		*	*	*	**	-	>
RECOVERABLE CONSERVATION EXPENSES	IN RATE BASE	TOTAL ALL PROGRAMS		Constant		Commercialindustrial Energy Audits & Tech. As	Commercial/Industrial Good Cents Building	Enhanced Good Cents Home	FPU Express	Low Income Customer Energy Audits	Residental Energy Audits	Residential Geothermal Heat Pump	Direct Leakage Repair	in Concert with the Environment	BY PROGRAM
9,024		200		673	:	¥	ığı.	2.812	16	31	960	ij	229	1,833	OCTOBER
0.00		0.816		0.00		à	u	1,108	111	200	75	100	200	807	NOVEMBER
11,293		11,293		. 19		267	200	2,674	497	2	200	67	574	(4)	OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH
7,301		7,203		4,000		227		1.160	*	67	493	2	100	138	JANUARY
1,435		1,435		100	í	688	758	606	260	128	2129	2	258	ú	PEBRUARY
8,031		8,031		ž	1	477	139	1,177	1,024	210	25	¥	186		MARCH
0		0			•	0	0	0	0	0	0	0	0	9	APRIL
		0			>	0	0	0		0		0	e	0	MAY
0		0			•	0	0	0	0	0	0	0	0	0	MUL
		0			90	0	0	0	0	0	0	0	0	o.	JULY
0		0				0	0	0	0	0	0	0	0	0	AUGUST
0						0	a	0	0		0	0	0	0	AUGUST SEPTEMBE
60,802		50,802		10,000		2.666	2504	1406	2715	751	6,810	560	1,590	2.104	TOTAL

EDHIST NO. BOODS-EG
PLORICA PUBLIC UTILITIES COMPANY
(MAP-3)
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COMPANY: PLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA

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CALCULATION OF TRUE-UP AND INTEREST PROVISION

FOR MONTHS October-97 THROUGH Narch-98

#	8	2	*		4	*	*	*	•	**	*	,
TOTAL NET TRUE-LIP (LINES 7-8-9-8A-10)	PRIOR TRUE-UP COLLECTED (REFUNCED)	DEFERRED TRUE-UP BECANNING OF PERIOD	TRUE-UP AND INTEREST PROVISION BEGINNING OF MONTH	INTEREST PROVISION THIS PERIOD (FROM CT-3, PAGE 3, LINE 10)	TRUE-LIP THIS PERIOD (LINE 5 - 6)	CONSERVATION EXPENSES (FROM CT-3, PAGE 1, LINE 23)	CONSERVATION REVENUE APPLICABLE	APPLICABLE TO THIS PERICO	TOTAL REVENUES	CONSERVATION ADJ. REVENUES	RESIDENTIAL CONSERVATION	CONSERVATION REVENUES
67,663	(4.712)		80,548	13	21,068	9.024	20.002	470	25,670	25,870		OCTOBER
79.208	(4,212)		67,963	ž	15,417	6.7.6	22,233	4372	18,071	18,521		HUNTHER
90,321	B (4212)		71,350	ŝ	14 103	11,200	30 30218	120	22,008	22 008		OCTOBER NOVEMBER DECEMBER JANUARY FEBRUARY MARCH
1	D (4.212)		90,221	ŧ	ומנונ	7,200	31,534	4212	34.322	24. X2		R JANUARY
107,904 122,819	14217		107,904	5	18,366	8.400	26,833	4212	22,021	22,621		FEBRUARY
137,457	(CITA)		122.619	E	12.651	8,031	24.45	cra	22,370	22.270		MARCH
0	0			0	0	0	0		0	0		APRIL
0	0			0	0		0		0	0		MAY
0	0			0	0		o		0	0		INU
0	0			ø	0	0	0		0	0		JULY
0	0			0	o	0	0		0	0		AUGUST
0	0			0	0	0	0		0	0		AUGUST SEPTEMBER
137,457				2,904	CM HC:	100 000	185.655	20,540	136 110	011.00	0	TATOT

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COMPANY: FLORICA PUBLIC UTILITIES COMPANY - PERNANDINA

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CALCULATION OF TRUE-UP AND INTEREST PROVISION

FOR MONTHS October-87 THROUGH March-86

ø	10		*		-	•	14	**	•	n
INTEREST PROVISION (LINE C-4 X C-8)	WONTHLY AVERAGE INTEREST RATE	AVG. INTEREST RATE (C-7 x 50%)	TOTAL (LINE C-4 + C-4)	SUBSEQUENT BUSINESS MONTH	HEPORTNO BUSINESS MONTH	AVERAGE TRUE-UP (LINE C-3 K 50%)	TOTAL BEG. AND ENGING TRUE-UP	ENDING TRUE-UP BEFORE INTEREST (LINES BT+89+BIA+8NO)	BEGINNING TRUE-UP (LINE B-8)	INTEREST PROVISION
277	0.6518	5 53%	11.08%	553	4 5 3 W	58,968	117,936	100	82.54	остовся
340	0.404%	557	11.13%	3.90%	1534	73,265	140,101	78,164	67,000	OCTOBER NOVEMBER JECEMBER JANUARY FEBRUARY
ŝ	6.673%	183	11 35%	5.75%	180	N.365	188,129	89 921	79,208	ACEMBER.
ě	0.400%	1.63%	11.25%	1 50%	5.79	180.60	187,781	107 440	8 11	ANGARY
-	0.460%	153	11 03%	1 59%	1 50%	114,997	229,994	122,000	107,904	FEBRUARY
590	0.462%	5	11.08%	1.50%	159	129,739	258.477	1 M M3	122,619	MARCH
0	0.000%	0.00%	0.00%	0.00%	0 00	0	0	0	0	APRIL
0	0.000%	0.00%	0.00%	0.00	9	0	0	0		BAY
0	0.000%	0.00%	0.00%	8	8	0	0	o	o	NA.
0	W0000	0.00%	0.00%	9	9	0	0	0	0	AK.Y
	\$4000.0	0.00%	0.00%	000	000	o	0	0	o	AUGUST SEPTEMBER
	0.000%	0.00%	0.00%	989	8	0	0	0	0	RPTEMBER
3,004						87,427	5287451	CSW MC1	9	TATOR

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COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA

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SCHEDULE OF CAPITAL INVESTMENT, DEPRECIATION & RETURN

FOR MONTHS October-97 THROUGH March 88

INVESTMENT ROGRAM NAME DE-PERSON OCTOBER HOYENBER DECEMBER JANUARY FEBRUARY MARCH APRIL BWU ATOT AUGUST SEPTEMBER TOTAL

EXHIBIT NO.

DOCUSET NO. BROODZ-EG

FLORICA FUBLIC UTILITIES COMPANY
(MAP-2)

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6

TOTAL DEPRECIATION AND RETURN RETURN REQUIREMENTS

RETURN ON AVERAGE INVESTMENT

AVERAGE SWESTMENT

LESS ACCUMULATED DEPRECIATION

CUMULATIVE INVESTMENT

NET INVESTMENT

DEPRECIATION EXPENSE

DEPRECIATION BASE

COMPANY: FLORIDA PUBLIC UTILITIES COMPANY - FERNANDINA

SCHEDULE CT-4 PAGE 1 OF 1

RECONCILIATION AND EXPLANATION OF DIFFERENCES BETWEEN FILING AND PSC AUDIT

FOR MONTHS October-97 THROUGH March-98

AUDIT EXCEPTION:

TO OUR KNOWLEDGE, NONE EXIST

COMPANY RESPONSE:

EXHIBIT NO DOCKET NO 980002-EG FLORIDA PUBLIC UTILITIES COMPANY (MAP-2) PAGE 28 OF 38

PAGE 1 OF 10

- 1. IN CONCERT WITH THE ENVIRONMENT
- 2. DUCT LEAKAGE REPAIR
- 3. RESIDENTIAL GEOTHERMAL HEAT PUMP
- 4. RESIDENTIAL ENERGY AUDITS
- 5. LOW INCOME CUSTOMER ENERGY AUDITS
- 6. FU EXPRESS LOAN
- 7. ENHANCED GOOD CENTS HOME
- 8. COMMERCIAL/INDUSTRIAL GOOD CENTS BUILDING
- 9. COMMERCIALINDUSTRIAL ENERGY AUDITS AND

TECHNICAL ASSISTANCE

EXHIBIT NO. DOCKET NO. 980002-EG FLORIDA PUBLIC UTILITIES CO. (MAP-2) PAGE 29 OF 36

SCHEDULE CT-6 PAGE 2 OF 10

PROGRAM TITLE: In Concert With the Environment

PROGRAM DESCRIPTION: In Concert With the Environment® is an environmental and energy awareness program that is being implemented in the 8th and 9th grade science classes in Florida Public Utilities Company's service area. The program will show students how everyday energy use impacts the environment and how using energy wisely increases environmental quality. In Concert With the Environment® is brought to students who are already making decisions which impact our country's energy supply and the environment. Wise energy use today can best be achieved by linking environmental benefits to wise energy-use scrivities and by educating both present and future consumers on how to live "in concert with the environment".

The "In Concert" program was designed for teachers and students from the ground up. "In Concert" comes complete with suggestions for implementation and evaluation, with quality materials designed to accentuate distinctive teaching styles. The program is flexible enough to be used as a stand-alone learning unit, or it can be integrated into existing lessons.

PROGRAM ACCOMPLISHMENTS: The offering of this program has been implemented in cooperation with area school board members, administrators, and teachers. The school which will participate in the Fernandina Beach service territory is Fernandina Beach High School. Teachers and administrators alike have embraced the program with great enthusiasm. / stual participants in this program will not begin accumulating until June of 1998 in this particular area.

PROGRAM FISCAL EXPENDITURES: The expunditures October 1, 1997 through March 31, 1998 were \$5,104.

PROGRAM PROGRESS SUMMARY: Program accomplishments in this territory will fall short due to the small number of students in the Fernandina area. In the future we hope to offer in Concert to other grades to increase participation.

SCHEDULE CT-6 PAGE 3 OF 10

PROGRAM TITLE: Duct Leakage Repair

PROGRAM DESCRIPTION: The objective of the Duct Leakage Repair Program is to provide FPUC's residential customers a means to identify house air duct leakage and recommend repairs that can reduce customer energy usage and demand.

FPUC will identify program participants through the Residential Energy Audit Program as well as through promotional activities. Blower Door testing required to identify and quantify the duct leakage will be performed by a contractor. After identification of the leakage sites and quantities, the customer will be given a written summary of the test findings and the potential savings, along with a list of approved repair contractors. Testing will be done on new construction duct systems to ensure maximum efficiency and comfort in these new homes also. This testing will be available to the Builder, HVAC contractor, or homeowner. FPUC will writtee duct testing and expertise for the purpose of educating Builders and HVAC contractors by identifying problem areas and improvement methodologies or techniques.

Additionally, FPUC will offer two approved continuing education courses for building contractors licensed by the Florida Construction Industry Licensing Board (CILB). The two courses are: "Duct Leakage in Homes: Consequences, Control, and Code Requirements" and "Repairing Duct Leakage".

PROGRAM ACCOMPLISHMENTS: The program goal for the current year is 22 participants. As of the end of this reporting period we have had a total of 30 participants in the Fernandina Beach service territory...

PROGRAM FISCAL EXPENDITURES: The expenditures October 1, 1997 through March 31, 1998 were \$1,690.

PROGRAM PROGRESS SUMMARY: In order to ensure that we meet our current and future goals FPUC will be sponsoring continuing education courses for building and HVAC contractors which will provide training in the areas of duct leakage identification and repair solutions. Contractors will then be in a better position to provide quality duct repair/installation services to FPUC customers. This training will be offered to area contractors in both service areas. The Fernandina Beach Division will be cosponsoring this training along with JEA and Clay Electric Cooperative. As with the Enhanced Good Cents Program we are offering these training seminars in cooperation with other utilities in order to allow us to offer these courses to local contractors at a much lower cost to us. With this training we feel confident that we can meet our PSC approved goals now and in the future.

EXHIBIT NO. 980002-EG FLORIDA PUBLIC UTILITIES CO. (MAP-2) PAGE 31 OF 38

SCHEDULE CT-6 PAGE 4 OF 10

PROGRAM TITLE: Residential Geothermal Heat Pump

PROGRAM DESCRIPTION: The objective of the Residential Geothermal Heat Pump Program is to reduce the demand and energy requirements of new and existing residential customers through the promotion and installation of advanced and emerging geothermal systems. Geothermal heat pumps also provide significant benefits to participating customers in the form of reduced operating costs and increased comfort levels, and are superior to other available heating and cooling technologies with respect to source efficiency and environmental impacts. FPUC's proposed Geothermal Heat Pump program is designed to overcome existing market barriers, specifically, lack of consumer awareness, knowledge, and acceptance of this technology.

This program will promote efficiency levels well above current market conditions, specifically those units with an Energy Efficiency Ratio (EER) of 13.0 or higher. The Department of Energy (DOE) is touting geothermal technology as the most energy-efficient and environmentally clean space-conditioning system available today. Additionally, a recent DOE study indicates that geothermal systems have the lowest life-cycle cost of any HVAC system today.

PROGRAM ACCOMPLISHMENTS: At this time we have had no geothermal installations completed in our service area within this reporting period. Many customers are beginning to learn more about this technology, therefore, we are confident that we will see a greater number of geothermal installations in the future...

PROGRAM FISCAL EXPENDITURES: The expenditures October 1, 1997 through March 31, 1998 were \$560.

PROGRAM PROGRESS SUMMARY: Even though there is no particular goal for this program we feel confident that by our efforts to promote this technology we will see a number geothermal installations in our service areas during the current year. We will continue to educate customers and strive to develop a network of installers in order to better promote this highly energy efficient heating and cooling source.

EXHIBIT NO. DOCKET NO. 980002-EG FLORIDA PUBLIC UTILITIES CO. (MAP-2) PAGE 32 OF 38

SCHEDULE CT-6 PAGE 5 OF 10

PROGRAM TITLE: Residential Energy Audits

PROGRAM DESCRIPTION: The objective of the Residential Energy Audit Program is to provide FPUC's residential customers with energy conservation advice that will encourage the implementation of efficiency measures resulting in energy savings for the customer. FPUC views this program as a vehicle to promote the installation of cost-effective conservation features. During the audit process, the customer is provided with specific whole-house recommendations. Through follow-up audit work, FPUC monitors and tracks the implementation of the measures.

The "Appliance Efficiency Education" DSM program from JEA's DSM Plan will be incorporated into these residential energy audits. The customer will be educated on the expense of operating a second refrigerator or freezer and on the value of a high efficiency pool pump. The resulting increase in operating efficiencies will provide for a reduction in weather-sensitive peak demand, as well as a reduction in energy consumption.

PROGRAM ACCOMPLISHMENTS: The goal for this program is 141 participants. This has been a very successful program to date. Audits have been conducted for 170 customers at the end of this reporting period.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1, 1997 through March 31, 1998 were \$6,610.

PROGRAM PROGRESS SUMMARY: We feel confident that by our efforts to promote this program through newspaper and cable TV that we will see increased participation in this program in the future.

EXHIBIT NO. DOCKET NO. 980002-EG FLORIDA PUBLIC UTILITIES CO. (MAP-2) PAGE 33 OF 38

PAGE 6 OF 10

PROGRAM TITLE: Low Income Customer Energy Audits

PROGRAM DESCRIPTION: FPUC has provided low income customers benefits through its energy conservation programs for many years. Although programs are offered to customers without discrimination, the company recognizes that a customer may be less likely to participate in a particular program due to various circumstances, including lack of disposable income. FPUC does not directly identify low income participants, but base on experience and observations, it is apparent that low income customers are participating at levels similar to the overall residential population.

Every FPUC oustomer is eligible for an FPUC residential energy audit, but the audit recommendations usually require the customer to spend money replacing or adding energy conservation measures. Low income persons may not have the discretionary income to make these changes. In an effort to further assist FPUC's low income oustomers, FPUC will work with a local weatherization agency to provide weatherization energy audits for low income customers. FPUC will pay for these weatherization energy audits for any FPUC customer through the state weatherization program. The estimated cost per audit is \$50.

PROGRAM ACCOMPLISHMENTS: Six low-income customer audits have been completed to date.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1, 1997 through March 31, 1998 were \$751.

PROGRAM PROGRESS SUMMARY: The program goal is twenty participants per year. At this time the agencies that we deal with to provide these services are currently at a standstill. Whether this is due to a lack of funding or aggressiveness on their part we cannot determine. We have made the contacts we need to make and will keep in touch with these organizations in order to stay up to date on their progress and needs.

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PROGRAM TITLE: Commercial/Industrial Energy Audits and Technical Assistance

PROGRAM DESCRIPTION: FPUC provides auditing services to the commercial and industrial classes to assist in the evaluation of specific energy requirements of a given structure.

FPUC's representative will be provided a prospective customer for an audit through a phone call, advertising, a complaint, or referral. In this initial contact the representative determines needs, sets an appointment, and begins to gather some basic data such as the address, account number, business type, and past energy records. At the time of the audit, the representative discusses the audit and submits an outline of the procedure to the customer. During the discussion, the representative also acquires some customer data as it relates to the characteristics of the operation, time of operation, occupancy, and duration of the occupancy. In the audit's visual inspections, the representative observes overall layout, gathers equipment data, statistics, observes housekeeping and maintenance, checks various energy sources, and checks waste heat sources. The representative also makes appropriate measurements of lighting, ambient air temperatures, water temperatures, and air quantities.

After the visual inspection, the representative will return to the customer to review the total energy consumption and billing of the structure, and make general suggestions for improved efficiency that will have little or no cost associated with them. The representative will also identify major items for further study in which the customer will have the option of making capital expenditures.

PROGRAM PROJECTION: Commercial/Industrial Audits have been completed for thirteen customers to date.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1, 1997 through March 31, 1998 were \$2,666.

PROGRAM PROGRESS SUMMARY: The DSM plan goal is twelve participants for this particular program. Program participation has been excellent with several customers having participated thus far. This program has exceeded goal. We are optimistic that our commercial/industrial customers will involve us to a greater extent in future projects based upon the work we are currently doing in this area.

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PROGRAM TITLE: FPUC Express Loan Program

PROGRAM DESCRIPTION: The objective of the FPUC Express Loan Program is to provide FPUC's residential customers a vehicle to encourage installation of energy conservation features in their homes. This below-market interest rate loan program provides financing from participating banks in FPUC's service area for up to \$5,000 for a period of 5 years (\$7,500 and 7 years if a closed loop heat pump is installed) to customers that choose to install energy conservation features in their existing homes.

The program provides FPUC a financing option to offer customers who wish to install conservation features in their homes. The program is designed to work in conjunction with FPUC's approved Residential Energy Audit Program. During the audit process, the customer is provided with specific whole-house recommendations. An FPUC representative will submit a completed loan application to a participating bank once the customer decides to install the conservation features. Along with the application, the FPUC representative will also provide the bank with a copy of the energy audit and a list of the specific energy conservation features recommended. After the application has been approved, the customer will contact a licensed contractor of their choice to install the recommended conservation features. After the work is completed, an inspection is performed by FPUC to ensure all energy conservation features covered by the loan are installed. Confirmation of the installed features is provided to the participating bank. The increased operating efficiencies of the installed features provide a reduction in weather sensitive peak demand as well as a reduction in overall energy consumption.

PROGRAM ACCOMPLISHMENTS: This year's goal is 10 program participants. To date no FPUC Express Loans have been completed. Program participation is expected to increase as contractors, realtors and customers become more aware of the availability of the program.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1, 1997 through March 31, 1998 were \$2,715.

PROGRAM PROGRESS SUMMARY: The contract agreement that was needed to offer this program was not signed until October of 1997. Full implementation of this program has now begun. We feel this program will be extremely successful due to increased advertising and our new promotional efforts. During Residential Audita we will also inform residents of the advantages of this program. We will continue to develop close relationships with area realtors and contractors by providing them with program materials that will enhance their efforts to inform customers of this program.

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PROGRAM TITLE: Enhanced Good Cents Home Program

PROGRAM DESCRIPTION: The objective of the Enhanced Good Cents Home Program is to provide Fiorida Public Utilities Company's residential customers guidance concerning energy efficiency in new construction. The program promotes energy efficient home construction techniques by evaluating components in the categories of design and construction practices. These categories include: wall insulation, doors, windows, perimeter/floor insulation, moisture/infiltration barrier, attic/celling insulation, attic ventilation system, centsable duct system, centsable water heating system, and HVAC system.

The program will result in reductions in energy usage and peak demand. FPUC will identify potential program participants through builder/developer relationships as well as through promotional activities. Additionally, FPUC will provide education and training to building contractors and building inspectors to encourage energy conservation. Two classes will be provided, both of which are approved continuing education courses for building contractors licensed by the Florida Construction Industry Licensing Board (CILB). The two classes are: "Constructing an Energy Efficient Home" and "Losd and Duct Sizing Calculations: Computer Colutions".

PROGRAM ACCOMPLISHMENTS: A total of 13 Enhanced Good Cents Homes have been built to date with several more currently under construction.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1, 1997 through March 31, 1998 were \$9,406.

PROGRAM PROGRESS SUMMARY: The program goal is forty-two participants by the end of the current year. We are considerably below our goal at this time but we are making progress. During 1997 there were only a total of 8 Enhanced Good Cents Homes built in the Fernandina Beach service territory. Through our increased efforts this number has risen to 13 in only the first half of 1998. We will continue to build on our success with even greater creativity and better marketing efforts in order to reach our goal during the current year.

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PROGRAM TITLE: Commercial/Industrial Good Cents Buildings

PROGRAM DESCRIPTION: The commercial/industrial market is comprised of a wide range of diverse businesses with variable size and operational characteristics. The success of the Commercial/industrial Good Cents Building program lies in its ability to address this diversity by focusing on the mutual characteristics of commercial buildings. The most common critical areas in commercial buildings that affect summer peak demand are the thermal efficiency of the building and HVAC equipment efficiency. The Commercial/Industrial Good Cents Building program provides requirements for these area that, if adhered to, will help reduce peak demand and energy consumption.

Promotion of the Commercial/Industrial Good Cents Building program will feature a positive relationship with trade allies, the public, and local commercial/Industrial customers. The program's design is sufficiently flexible to allow an architect or designer to use initiative and ingenuity to achieve results that are meaningFPUCI to both the customer and FPUC.

To provide an accurate quantitative analysis of the demand and energy savings due to the Commercial/Industrial Good Cents Building program, the Good Cents standards for our average commercial building are compared to the Florida Model Energy Code. The features used to prepare the customer's analysis include: wall and celling R-values; glass area; description of glass; and equipment used in determining the demand and energy differences for the two types of structures. The <u>AXCESS - Energy Analysis Computer Program (AXCESS)</u> is used in calculating these demand and energy differences.

PROGRAM ACCOMPLISHMENTS: To date, we have had two Good Cents Building qualifications in the Fernandina Beach service territory.

PROGRAM FISCAL EXPENDITURES: Expenditures beginning October 1, 1997 through March 31, 1998 were \$2,594.

PROGRAM PROGRESS SUMMARY: The goal for this program is two Good Cents Buildings for the current year. By developing a plan of action to gain knowledge of possible projects before the design stage begins we feel that we will have greater success with this program. We have laid the foundation of customer trust in this area through our Commercial/Industrial Audit and Technical Assistance Program. We feel that with these changes the program goal will be met for the current year.