Tel 850.444.6111





May 14, 2002

Ms. Blanca S. Bayo, Director Division of Records and Reporting Florida Public Service Commission 101 East Gaines Street Tallahassee FL 32399-0870

Dear Ms. Bayo:

RE: Docket No. 020002-EG

Enclosed for official filing in the above docket are an original and ten (10) copies of Michael J. McCarthy's testimony.

Sincerely,

Susan D. Ritenour

Assistant Secretary and Assistant Treasurer

usan D. Ritenaus

lw

**Enclosures** 

Beggs and Lane CC: J. A. Stone, Esq.

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OPC MMS \_\_

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#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Conservation Cost Recovery	)	
	)	Docket No. 020002-EG

#### Certificate of Service

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Pensacola FL 32576
(850) 432-2451
Attorneys for Gulf Power Company

# BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

# ENERGY CONSERVATION COST RECOVERY CLAUSE

**DOCKET NO. 020002-EG** 

# PREPARED DIRECT TESTIMONY AND EXHIBIT OF MICHAEL J. MCCARTHY

Final True-up JANUARY - DECEMBER 2001

May 15, 2002



1		Gulf Power Company
2		Before the Florida Public Service Commission Prepared Direct Testimony and Exhibit of
3		Michael J. McCarthy Docket No. 020002-EG May 15, 2002
5		May 13, 2002
6	Q.	Will you please state your name, business address,
7		employer and position?
8	A.	My name is Michael J. McCarthy and my business address
9		is One Energy Place, Pensacola, Florida 32520. I am
10		employed by Gulf Power Company as the Economic
11		Evaluation and Market Reporting Team Leader.
12		
13	Q.	Mr. McCarthy, for what purpose are you appearing before
14		this Commission today?
15	Α.	I am testifying before this Commission on behalf of Gulf
16		Power Company regarding matters related to the Energy
17		Conservation Cost Recovery Clause, specifically the
18		approved programs and related expenses for
19		January, 2001, through December, 2001.
20		
21	Q.	Are you familiar with the documents concerning the
22		Energy Conservation Cost Recovery Clause and its related
23	•	true-up and interest provisions?
24	Α.	Yes, I am.

- 1 Q. Have you verified, that to the best of your knowledge
- 2 and belief, this information is correct?
- 3 A. Yes, I have.
- 4 Counsel: We ask that Mr. McCarthy's exhibit consisting
- of 6 Schedules, CT-1 through CT-6, be marked
- 6 for identification as:
- 7 Exhibit No. \_\_\_\_(MJM-1)

8

- 9 Q. Would you summarize for this Commission the deviations
- 10 resulting from the actual expenditures for this recovery
- period and the original estimates of expenses?
- 12 A. The estimated true-up net expenses for the entire
- recovery period January, 2001, through December, 2001,
- were \$5,189,333, while the actual costs were \$4,864,076
- resulting in a variance of \$325,257 or 6.3% under the
- 16 estimated true-up.

17

- 18 Q. Mr. McCarthy, would you explain the January, 2001,
- through December, 2001, variance?
- 20 A. Yes, the reasons for this variance are a decrease in
- 21 expenses in Residential Energy Audits, under \$41,181;
- 22 Gulf Express Loan Program, under \$837; Geothermal Heat
- 23 Pump Program, under \$22,002; GoodCents Select, under
- 24 \$133,437; GoodCents Commercial Buildings, under
- 25 \$39,666; Commercial/Industrial Energy Audits and

Technical Assistance Audits, under \$28,460; Commercial 1 2 Mail-in Audit, under \$4,220; Green Pricing, under 3 \$1,910; Conservation Demonstration and Development, under \$45,750; and Residential Mail-in Audit, under 4 \$8,222. These programs are off-set by Duct Leakage 5 being over \$427 resulting in a net variance of \$325,257 under the estimated/actual program expenses reported in 8 September, 2001. A more detailed description of the deviations is contained in Schedule CT-6. 9 10 Mr. McCarthy, what was Gulf's adjusted net true-up for 11 Q. the period January, 2001 through December, 2001? 12 13 There was an over-recovery of \$365,595 as shown on 14 Schedule CT-1, page 1. 15 16 Would you describe the results of your programs during the January, 2001 through December, 2001, recovery 17 18 period? A more detailed review of each of the programs is 19 20 included in my Schedule CT-6. The following is a synopsis of the accomplishments during this recovery 21 22 period. 23 Residential Energy Audits - During this period, we 24 (A)

25

projected to audit 1,600 structures. We actually

completed 1,347.

- 2 (B) Residential Mail-In Audits During this period, 3 1,500 audits were projected and 224 audits were 4 completed.
- (C) Gulf Express Loan Program No loans were completed
   during this period. The program stopped accepting
   new loans in June, 1997.
  - (D) Duct Leakage Program This program was available to any customer desiring it, but the company no longer promotes it as a stand alone program. During this recovery period, 19 units were completed.
- 12 (E) Geothermal Heat Pump During this recovery period, a
  13 total of 265 geothermal heat pumps were installed
  14 compared to a projection of 500.
  - (F) GoodCents Select (Advanced Energy Management) During this recovery period, 1,227 units were installed for a total of 2,173 units program-to-date.

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When the original projection (2000 Demand Side

Management Plan)was submitted for this period, Gulf

expected 12,100 customers to participate in this

program by the end of the projection period. However,

the program has been delayed due to several factors

and the anticipated participation rates were revised.

The program-to-date projection for the year 2001 was

ı		revised in September, 2000, to be 4,500 units. The
2		details of this revision were submitted in Michael J.
3		McCarthy's testimony, Docket No. 000002-EG,
4		September 27, 2000.
5		
6		Additional details of the issues related to the delay
7		in the implementation of the program are found in
8		M. D. Neyman testimony, Docket No. 980002-EG,
9		January 13, 1998.
10	(G)	GoodCents Commercial Buildings - During this recovery
11		period a total of 153 buildings were built or improved
12		to Good Cents standards, compared to a projection of
13		212.
14	(H)	Commercial/Industrial Energy Audits and Technical
15		Assistance Audits - During this recovery period, a
16		total of 123 EA/TAA were completed compared to a
17		projection of 127.
18	(I)	Commercial Mail-in Audit - 1,050 mail-in audits were
19		projected compared to 377 mail-in audits being
20		completed.
21	(J)	Green Pricing - This program is designed to
22		encompass a variety of voluntary renewable and
23		green energy programs. The current programs are
24		Solar for Schools, Photovoltaic Optional Rate Rider
25		(PV), Photovoltaic Solar Demonstration and

1		Education Project (EarthCents), and GoodCents
2		Environmental Home. A more detailed description of
3		these programs is included in Schedule CT-6.
4		(K) Conservation Demonstration and Development - Twenty-
5		one research or demonstration projects have been
6		identified and are detailed in Schedule CT-6.
7		
8	Q.	Mr. McCarthy, does this conclude your testimony?
9	Α.	Yes, it does.
10		
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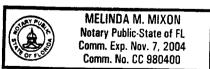
#### AFFIDAVIT

STATE OF	FLORIDA	)				
		)		Docket	No.	020002-EG
COUNTY OF	FESCAMBIA	)				

Before me the undersigned authority, personally appeared Michael J. McCarthy, who being first duly sworn, deposes and says that he is the Economic Evaluation and Marketing Reporting Team Leader of Gulf Power Company, a Maine Corporation, that the foregoing is true and correct to the best of his knowledge, information and belief. He is personally known to me.

Michael J. McCarthy
Economic Evaluation and Marketing
Reporting Team Leader

Sworn to and subscribed before me this  $10^{\frac{1}{2}}$  day of  $10^{\frac{1}{2}}$ , 2002.



Melinda M. Miyon Notary Public, State of Florida at Large

Florida Public Service Commission Docket No. 020002-EG Gulf Power Company Witness: M. J. McCarthy Exhibit No. \_\_\_ (MJM-1)

# INDEX

Schedule N	Jumber	Title	Pá	age	es
CT-1		Adjusted net True-Up, January, 2001, through December, 2001		1	
CT-2		Analysis of Energy Conservation Program Costs		2	
CT-3		Energy Conservation Adjustment	3	-	7
CT-4		Schedule of Capital Investments, Depreciation and Return		8	
CT-5		Reconciliation and Explanation of Differences Between Filing and Audit		9	
CT-6		Program Descriptions and Progress Reports	10	_	24

Florida Public Service Commission
Docket No. 020002-EG
GULF POWER COMPANY
Witness: Michael J. McCarthy
Exhibit No.\_\_\_\_(MJM-1)
Schedule CT-1
Page 1 of 1

# GULF POWER COMPANY ENERGY CONSERVATION COST RECOVERY ADJUSTED NET TRUE-UP

For the Period: January, 2001 Through December, 2001

		\$	\$
	Actual	<del></del>	
1.	Principal	(655,611)	
2.	Interest	(23,708)	
3.	Actual Under Recovery Ending Balance	ce	(679,319)
	Estimated/Actual October 5, 2001		
4.	Principal	(1,016,171)	
5.	Interest	(28,743)	
6.	Total Estimated/Actual Under Recove	ry	(1,044,914)
7.	Adjusted Net True-up, Amount to be F	Refunded	365,595

Florida Public Service Commission Docket No. 020002-EG GULF POWER COMPANY Witness: Michael J. McCarthy Exhibit No.\_\_\_\_\_(MJM-1) Schedule CT-2 Page 1 of 1

# GULF POWER COMPANY ENERGY CONSERVATION COST RECOVERY ANALYSIS OF ENERGY CONSERVATION PROGRAM COSTS ACTUAL compared to ESTIMATED/ACTUAL For the Period: January, 2001 Through December, 2001

	Actual	Est/Actual	Difference
1. Depreciation, Return & Property Tax	\$ 539,872.36	\$ 530,065.00	\$ 9,807.36
2. Payroll & Benefits	1,601,437.36	1,746,119.00	(144,681.64)
3. Materials & Supplies	2,378,702.85	2,495,068.00	(116,365.15)
4. Outside Services	0.00	0.00	0.00
5. Advertising	464,276.70	553,969.00	(89,692.30)
6. Incentives	0.00	0.00	0.00
7. Adjustments	0.00	0.00	0.00
8. Other	0.00	0.00	0.00
9. SUBTOTAL	4,984,289.27	5,325,221.00	(340,931.73)
10. Program Revenues	120,213.44	135,888.00	(15,674.56)
11. TOTAL PROGRAM COSTS	4,864,075.83	5,189,333.00	(325,257.17)
12. Less: Payroll Adjustment	0.00	0.00	0.00
13. Amounts Inc. in Base Rate	0.00	0.00	0.00
<ol> <li>Conservation Adjustment Revenues</li> </ol>	5,075,687.18	5,040,384.81	35,302.37
15. Rounding Adjustment	5,075,687.00	5,040,385.00	35,302.00
16. True-up Before Adjustment	211,611	(148,948)	360,559
17. Interest Provision	(23,707)	(28,743)	5,036
18. Prior Period True-up	(867,223)	(867,223)	0
19. Other	0	0	0
20. End of Period True-up	(679,319)	(1,044,914)	365,595

#### w

#### **GULF POWER COMPANY**

#### CONSERVATION COSTS Per PROGRAM VARIANCE ACTUAL VS ESTIMATED/ACTUAL For the Period: January, 2001 Through December, 2001

	Program	Depr/Amort & Return	Payroll & Benefits	Materials & Expenses	Advertising	Incentives	Outside Services	Other	Sub-Total	Program Revenues	Total
1.	Residential Energy Audit	0.00	(30,266.02)	(4,046.66)	(6,867.82)	0.00	0.00	0.00	(41,180.50)	0.00	(41,180.50)
2.	Gulf Express	0.00	0.00	(837.33)	0.00	0.00	0.00	0.00	(837.33)	0.00	(837.33)
3. a.	Green Pricing Good Cents Environmental	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b.	Solar for Schools	0.00	(67.29)	(0.49)	0.00	0.00	0.00	0.00	(67.78)	0.00	(67.78)
C.	Earth Cents	0.00	371.56	2,285.95	(3,722.85)	0.00	0.00	0.00	(1,065.34)	0.00	(1,065.34)
d.	Green Pricing	0.00	0.00	(777.12)	0.00	0.00	0.00	0.00	(777.12)	0.00	(777.12)
e.	Total	0.00	304.27	1,508.34	(3,722.85)	0.00	0.00	0.00	(1,910.24)	0.00	(1,910.24)
4.	Duct Leakage	0.00	(230.72)	658.15	0.00	0.00	0.00	0.00	427.43	0.00	427.43
5.	Geothermal Heat Pump	0.00	3,435.81	(5,560.62)	(19,877.22)	0.00	0.00	0.00	(22,002.03)	0.00	(22,002.03)
6.	Good Cents Select	9,807.36	(73,457.37)	(52,147.69)	(33,313.57)	0.00	0.00	0.00	(149,111.27)	(15,674.56)	(133,436.71)
7.	Comm/Ind Good Cents Building	0.00	(20,012.13)	(3,825.95)	(15,827.53)	0.00	0.00	0.00	(39,665.61)	0.00	(39,665.61)
8.	Comm/Ind E.A. & T.A.A.	0.00	(18,502.65)	(5,613.91)	(4,343.31)	0.00	0.00	0.00	(28,459.87)	0.00	(28,459.87)
9.	Commercial Mail In Audit	0.00	(3,245.94)	(973.71)	0.00	0.00	0.00	0.00	(4,219.65)	0.00	(4,219.65)
10.	Research & Development	0.00	0.00	(45,750.50)	0.00	0.00	0.00	0.00	(45,750.50)	0.00	(45,750.50)
11.	Residential Mail In Audit	0.00	(2,706.89)	224.73	(5,740.00)	0.00	0.00	0.00	(8,222.16)	0.00	(8,222.16)
12.	Total	9,807.36	(144,681.64)	(116,365.15)	(89,692.30)	0.00	0.00	0.00	(340,931.73)	(15,674.56)	(325,257.17)

Florida Public Service Commission Docket No. 020002-EG GULF POWER COMPANY

Witness: Michael J. McCarthy

Exhibit No.\_\_\_\_(MJM-3)

Schedule CT-3 Page 1 of 5

#### **GULF POWER COMPANY**

# CONSERVATION COSTS Per PROGRAM ACTUAL EXPENSES

For the Period: January, 2001 Through December, 2001

		Depre/Amort	Payroll &	Materials &			Outside	- · · · · · · · · · · · · · · · · · · ·		Program	
	Program	& Return	Benefits	Expenses	Advertising	Incentives	Services	Other	Sub-Total	Revenues	Total
1.	Residential Energy Audit	0.00	246,940.98	33,047.34	79,546.18	0.00	0.00	0.00	359,534.50	0.00	359,534.50
2.	Gulf Express	0.00	0.00	1,162.67	0.00	0.00	0.00	0.00	1,162.67	0.00	1,162.67
3.	Green Pricing										
a.	Good Cents Environmental	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b.	Solar for Schools	0.00	2,819.71	1,636.51	0.00	0.00	0.00	0.00	4,456.22	0.00	4,456.22
C.	Earth Cents	0.00	20,571.56	4,285.95	3,777.15	0.00	0.00	0.00	28,634.66	0.00	28,634.66
d. e.	Green Pricing Total	0.00	0.00 23,391.27	532.88 6,455.34	0.00 3,777.15	0.00	0.00	0.00	532.88 33,623.76	0.00	532.88 33,623.76
e.	rotai	0.00	23,391.27	6,455.54	3,777.15	0.00	0.00	0.00	33,023.70	0.00	33,023.76
4.	Duct Leakage	0.00	69.28	1,258.15	0.00	0.00	0.00	0.00	1,327.43	0.00	1,327.43
5.	Geothermal Heat Pump	0.00	83,963.81	48,163.38	63,318.78	0.00	0.00	0.00	195,445.97	0.00	195,445.97
6.	Good Cents Select	539,872.36	485,057.63	2,154,471.31	311,920.43	0.00	0.00	0.00	3,491,321.73	120,213.44	3,371,108.29
7.	Comm/Ind Good Cents Building	0.00	314,458.87	41,129.05	2,797.47	0.00	0.00	0.00	358,385.39	0.00	358,385.39
8.	Comm/Ind E.A. & T.A.A.	0.00	400,626.35	53,111.09	156.69	0.00	0.00	0.00	453,894.13	0.00	453,894.13
9.	Commercial/Industrial Mail In Audit	0.00	27,674.06	6,891.29	0.00	0.00	0.00	0.00	34,565.35	0.00	34,565.35
10.	Research & Development									}	
a.	Aquatic Pools	0.00	0.00	12,095.58	0.00	0.00	0.00	0.00	12,095.58	0.00	12,095.58
b.	Bay Co. Schools	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
C.	Boardwalk	0.00	0.00	515.02	0.00	0.00	0.00	0.00	515.02	0.00	515.02
ď.	Burger King	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
e.	Closed Loop (Dentist)	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
f. g.	Dunes Energy Education	0.00 0.00	0.00 0.00	6.60 3.30	0.00 0.00	0.00 0.00	0.00 0.00	0.00	6.60 3.30	0.00	6.60 3.30
y. h.	End Use	0.00	0.00	43.30	0.00	0.00	0.00	0.00	43.30	0.00	43.30
1,	Geothermal	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
i.	Groovin Hwy 29	0.00	0.00	1,379.02	0.00	0.00	0.00	0.00	1,379.02	0.00	1,379.02
k.	Hampton	0.00	0.00	1,531.40	0.00	0.00	0.00	0.00	1,531.40	0.00	1,531.40
1.	Jim Day	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
m.	Joe Ridge	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
n.	Low Income Multi-Fam	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
o. p.	OakRidge-Milton OakRidge-Pensacola	0.00 0.00	0.00 0.00	623.41 732.14	0.00 0.00	0.00	0.00 0.00	0.00	623.41	0.00	623.41
p. a.	Pine Forest	0.00	0.00	662.83	0.00	0.00	0.00	0.00	732.14 662.83	0.00	732.14 662.83
ч. г.	Slinky Loop	0.00	0.00	3.30	0.00	0.00	0.00	0.00	3.30	0.00	3.30
s.	Triggers	0.00	0.00	3,801.74	0.00	0.00	0.00	0.00	3,801.74	0.00	3,801.74
t.	Water Furnace	0.00	0.00	578.76	0.00	0.00	0.00	0.00	578.76	0.00	578.76
	_	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
u.	Total	0.00	0.00	21,999.50	0.00	0.00	0.00	0.00	21,999.50	0.00	21,999.50
11.	Residential Mail In Audit	0.00	19,255.11	11,013.73	2,760.00	0.00	0.00	0.00	33,028.84	0.00	33,028.84
12.	Total	539,872.36	1,601,437.36	2,378,702.85	464,276.70	0.00	0.00	0.00	4,984,289.27	120,213.44	4,864,075.83

#### IJ

#### GULF POWER COMPANY

and the same

#### CONSERVATION COSTS Per PROGRAM SUMMARY OF ACTUAL EXPENSES BY PROGRAM BY MONTH For the Period: January, 2001 Through December, 2001

PROGRAMS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
Residential Energy Audits	24,379.75	27,690.21	26,045.90	22,444.98	26,270.85	28,455.46	49,113.00	27,815.87	27,515.93	19,944.71	33,627.80	46,230.04	359,534.50
2. Gulf Express	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1,162.67	1,162.67
Green Pricing													
a. Good Cents Environmental	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
b. Solar for Schools c. Earth Cents	569.36	1,500.36	242.92	240.23	283.04	197.20	278.90	210.87	218.78	213.04	237.52	264.00	4,456.22
d. Green Pricing	2,143.01 0.00	8,502.33 0.00	9,128.85 0.00	9,336.96 0.00	9,543.54 0.00	9,809.43 0.00	9,456.10 309.19	13,198.70 0.00	-51,784.52	1,770.76	2,024.23	5,505.27	28,634.66 532.88
e. Total	2,712.37	10,002.69	9,371.77	9,577.19	9,826.58	10,006.63	10,044.19	13,409.57	-51,565.74	223.69 2,207.49	2,261.75	0.00 5,769.27	33,623.76
4. Duct Leakage	0.00	21.25	35.19	0.00	62.54	132.48	851.13	69.27	29.64	129.47	-22.72	19.18	1,327.43
5 October 111 of Born				0.4.004.70	44.050.00								
Geothermal Heat Pump	11,880.68	7,242.18	8,801.50	34,884.72	11,053.26	9,402.28	9,904.28	9,279.61	8,896.82	19,254.32	42,868.99	21,977.33	195,445.97
6. Good Cents Select	84,075.04	65,730.71	93,635.44	308,173.37	543,246.66	171,732.50	394,515.93	284.507.57	226.756.57	187.556.96	342,128.43	249.390.19	2,951,449,37
Amortization & Return on Investment	32,127.79	33,189.61	34,985.13	37,081.75	38,530.30	39,977.12	61,533.85	46,368.96	49,399.61	50,789.21	55,254.26	60,634.77	539,872.36
7. Comm/Ind Good Cents Bldg	27,252.25	25,626.95	29,640.29	28,106.28	33,445.54	33,034.65	30,377.57	29,633.48	30,185.38	27,948.43	30,613.59	32,520.98	358,385.39
8. Comm/Ind E.A. & T.A.A	36,018.99	39,122.13	39,747.78	40,621.87	40,385.64	37,962.64	39,151.15	34,998.69	36,690.20	34,239.87	39,341.76	35,613.41	453,894.13
9. Commercial Mail In Audit	2,874.19	2,556.05	3,532.31	2,989.16	3,581.98	3,180.53	3,244.15	3,427.82	2,240.09	2,231.66	2,259.33	2,448.08	34,565.35
10. Research & Development													
<ul> <li>a. Aquatic Pools</li> </ul>	0.00	38.50	7.48	4.37	4.18	4.48	3.70	3.63	194 24	480.39	11,294.44	60.17	12,095.58
b. Bay Co. Schools	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
c. Boardwalk d. Burger King	0.00 0.00	37.50 0.00	5.81 3.30	4.32 0.00	455.66 0.00	4.40 0.00	3.70 0.00	3.63 0.00	0.00 0.00	0.00	0.00	0.00 0.00	515.02 3.30
e. Closed Loop (Dentist)	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
f. Dunes	0.00	0.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.60
g. Energy Education	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
h. End Use	0.00	0.00	43.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.30
I. Geothermal	0.00	0.00	3.30	0.00	0.00 56.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
j. Groovin Hwy 29 k. Hampton	0.00 65.62	75.79 180.11	11.62 76.99	349.56 291.21	50.45 522.80	105.20 111.97	103.78 121.66	103.64 -11.38	102.96 81.27	128.00 0.00	221.66 91.15	120.36 0.00	1,379.02 1,531.40
k. Hampton I. Jim Day	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
m. Joe Ridge	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
n. Low Income Multi-Fami	0.00	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.30
<ol> <li>OakRidge-Milton</li> </ol>	0.00	38.50	5.81	4.32	4.14	192.12	46.77	46.70	51.22	63.75	110.24	59.84	623.41
<ul> <li>p. OakRidge-Pensacola</li> </ul>	0.00	38.50	5.81	4.32	4.14	214.42	47.02	72.92	51.34	17.14	110.83	165.70	732.14
q. Pine Forest	0.00	37.50	5.81	150.57	64.39	52.60	51.89	50.31	51.53	17.16	120.89	60.18	662.83
r. Slinky Loop	0.00	0.00	3.30	0.00	0.00 1,053.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00 60.18	3.30 3,801.74
s. Triggers t. Water Furnace	0.00 0.00	38.50 38.50	5.81 5.81	262.32 4.32	4.14	1,963.98 4.40	51.89 256.04	50.55 45.62	139.84 4.53	64.00 59.20	110.83 101.03	55.17	578.76
u. Total	65.62	523.40	210.55	1,075.31	2,169.74	2,653.57	686.45	365.62	676.93	829.64	12,161.07	581.60	21,999.50
11. Residential Mail In Audit	3,264.62	2,742.52	2,994.59	2,992.85	2,684.73	3,176.50	2,935.27	3,157.97	2,245.04	2,204.70	2,257.16	2,372.89	33,028.84
12. Recoverable Conservation Expenses	224,651.30	214,447.70	249,000.45	487,947.48	711,257.82	339,714.36	602,356.97	453,034.43	333,070.47	347,336.46	562,751.4 <u>2</u>	458,720.41	4,984,289.27

Florida Public Service Commission

Docket No. 020002-EG GULF POWER COMPANY

Witness: Michael J. McCarthy

Exhibit No.\_\_\_\_(MJM-1) Schedule CT-3

Schedule CT-Page 3 of 5

#### **GULF POWER COMPANY**

#### ENERGY CONSERVATION ADJUSTMENT For the Period: January, 2001 through December, 2001

Conservation Revenues	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
1. Good Cents Select RSVP Fees	5,618.53	5,608.69	6,517.50	6,840.67	8,971.65	11,623.15	12,841.50	13,122.56	13,930.97	12,669.29	11,307.98	11,160.95	120,213.44
2. Conservation Adjustment Revenues	447,178.16	328,703.71	364,934.66	371,607.86	433,120.16	489,687.18	531,243.00	511,930.84	449,172.69	386,779.70	352,837.69	408,491.53	5,075,687.18
3. Total Revenues	452,796.69	334,312.40	371,452.16	378,448.53	442,091.81	501,310.33	544,084.50	525,053.40	463,103.66	399,448.99	364,145.67	419,652.48	5,195,900.62
4. Adjustment not Applicable to Period - Prior True Up	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.83)	(78,837.87)	(946,054.00)
5. Conservation Revenues Applicable to Period	373,958.86	255,474.57	292,614.33	299,610.70	363,253.98	422,472.50	465,246.67	446,215.57	384,265.83	320,611.16	285,307.84	340,814.61	4,249,846.62
6. Conservation Expenses (Form CT-3 Page 8)	224,651.32	214,447.70	249,000.45	487,947.48	711,257.82	339,714.36	602,356.97	453,034.43	333,070.46	347,336.46	562,751.41	458,720.41	4,984,289.27
7. True Up this Period (Line 5 minus Line 6)	149,307.54	41,026.87	43,613.88	(188,336.78)	(348,003.84)	82,758.14	(137,110.30)	(6,818.86)	51,195.37	(26,725.30)	(277,443.57)	(117,905.80)	(734,442.65)
8. Interest Provision this Period (Page 10, Line 10)	(3,781.44)	(2,598.88)	(1,963.89)	(1,795.35)	(2,254.03)	(2,280.14)	(2,697.66)	(1,965.84)	(1,418.35)	(946.93)	(956.62)	(1,048.49)	(23,707.62)
9. True Up & Interest Provision Beginning of Month	(867,222.69)	(642,858.76)	(525,592.94)	(405, 105.12)	(516,399.42)	(787,819.46)	(628,503.63)	(689,473.76)	(619,420.63)	(490,805.78)	(439,640.18)	(639,202.54)	(867,222.69)
10. Prior True Up Collected or Refunded	78,837.83	78,837.83	78,837.83	78,837.83	78,837.83	78,837.83	78,837.83	78,837.83	78,837.83	78,837.83	78,837.83	78,837.87	946,054.00
11. End of Period- Net True Up	(642,858.76)	(525,592.94)	(405,105.12)	(516,399.42)	(787,819.46)	(628,503.63)	(689,473.76)	(619,420.63)	(490,805.78)	(439,640.18)	(639,202.54)	(679,318.96)	(679,318.96)

July Includes 16,686.80 of Audit Adjustment Expenses and (655.08) of Audit Adjustment Interest

#### GULF POWER COMPANY COMPUTATION OF INTEREST EXPENSE ENERGY CONSERVATION ADJUSTMENT For the Period: January, 2001 through December, 2001

Interest Provision	JANUARY	FEBRUARY	MARCH	APRIL.	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
1. Beginning True up Amount	(867,222.69)	(642,858.76)	(525,592.94)	(405,105.12)	(516,399.42)	(787,819.46)	(628,503.63)	(689,473.76)	(619,420.63)	(490,805.78)	(439,640.18)	(639,202.54)	
2. Ending True up before Interest	(639,077.32)	(522,994.06)	(403,141.23)	(514,604.07)	(785,565.43)	(626,223.49)	(686,776.10)	(617,454.79)	(489,387.43)	(438,693.25)	(638,245.92)	(678,270.47)	
3. Total beginning & ending	(1,506,300.01)	(1,165,852.82)	(928,734.17)	(919,709.19)	(1,301,964.85)	(1,414,042.95)	(1,315,279.73)	(1,306,928.55)	(1,108,808.06)	(929,499.03)	(1,077,886.10)	(1,317,473.01)	
4. Average True up Amount	(753,150.01)	(582,926.41)	(464,367.09)	(459,854.60)	(650,982.43)	(707,021.48)	(657,639.87)	(653,464.28)	(554,404.03)	(464,749.52)	(538,943.05)	(658,736.51)	
Interest Rate First Day     Reporting Business Month	6.5000	5.5500	5.1500	5.0000	4.3700	3.9400	3.8000	3.7500	3.4700	2.6700	2.2200	2.0400	
Interest Rate First Day     Subsequent Business Month	5.5500	5.1500	5.0000	4.3700	3.9400	3.8000	3.7500	3.4700	2.6700	2.2200	2.0400	1.7800	
7. Total of Lines 5 and 6	12.0500	10.7000	10.1500	9.3700	8.3100	7.7400	7.5500	7.2200	6.1400	4.8900	4.2600	3.8200	
Average Interest rate     (50% of Line 7)	6.0250	5.3500	5.0750	4.6850	4.1550	3.8700	3.7750	3.6100	3.0700	2.4450	2.1300	1.9100	
9. Monthly Average Interest Rate	0.005021	0.004458	0.004229	0.003904	0.003463	0.003225	0.003146	0.003008	0.002558	0.002038	0.001775	0.001592	
Line 8 \ 12  10. Interest Provision (line 4 X 9)	(3,781.44)	(2,598.88)	(1,963.89)	(1,795.35)	(2,254.03)	(2,280.14)	(2,697.66)	(1,965.84)	(1,418.35)	(946.93)	(956.62)	(1,048.49)	(23,707.62)

July Includes (655.08) Audit Adjustment Interest

#### SCHEDULE OF CAPITAL INVESTMENT, DEPRECIATION AND RETURN Good Cents Select For the Period January, 2001 Through December, 2001

Line <u>No</u>	Description	Beginning of Period	January	February	March	April	Мау	June	July	August	September	October	November	Dec	Total
1.	Investments (Net of Retirements)	1,612,212.62	0.00	0.00	0.00	15,190.83	1,216.41	0.00	3,190.75	615.51	839.97	0.00	2,271.93	42,038.77	
2.	Amortization Base	_	1,612,212.62	1,612,212.62	1,612,212.62	1,627,403.45	1,628,619.86	1,628,619.86	1,631,810.61	1,632,426.12	1,633,266.09	1,633,266.09	1,635,538.02	1,677,576.79	
3.	Depreciation Expense (A)	_	4,029.81	4,030.53	4,030.53	4,030.53	4,049.52	4,070.03	4,071.55	4,075.54	4,080.30	4,082.12	4,083.17	4,086.01	48,719.64
4.	Cumulative Investment	1,612,212.62	1,612,212.62	1,612,212.62	1,612,212.62	1,627,403.45	1,628,619.86	1,628,619.86	1,631,810.61	1,632,426.12	1,633,266.09	1,633,266.09	1,635,538.02	1,677,576.79	
5.	Less: Accumulated Depreciation	36,215.45	40,245.26	44,275.79	48,306.31	52,336.83	56,386.35	60,456.38	64,527.93	68,603.47	72,683.77	76,765.89	80,849.05	84,935.06	
6.	Net Investment	1,575,997.17	1,571,967.36	1,567,936.83	1,563,906.31	1,575,066.62	1,572,233.51	1,568,163.48	1,567,282.68	1,563,822.65	1,560,582.32	1,556,500.20	1,554,688.97	1,592,641.73	
7.	Net Additions/Reductions to CWIP	22,934.16	0.00	252,441.43	169,142.39	306,596.31	14,318.40	321,074.54	113,857.46	633,356.28	70,232.67	256,706.92	777,283.94	425,099.14	
8.	CWIP Balance	1,661,621.23	1,661,621.23	1,914,062.66	2,083,205.05	2,389,801.36	2,404,119.76	2,725,194.30	2,839,051.76	3,472,408.04	3,542,640.71	3,799,347.63	4,576,631.57	5,001,730.71	
9.	Average Net Investment	3,227,623.19	3,235,603.49	3,357,794.04	3,564,555.42	3,805,989.67	3,970,610.62	4,134,855.52	4,349,846.11	4,721,282.56	5,069,726.86	5,229,535.43	5,743,584.18	6,362,846.49	
10.	10. Rate of Return / 12 (Including Income Taxes) (B)		0.008684	0.008684	0.008684	0.008684	0.008684	0.008684	0.008684	0.008684	0.008684	0.008684	0.008684	0.008684	İ
11.	11. Return Requirement on Average Net Investment		28,097.98	29,159.08	30,954.60	33,051.22	34,480.78	35,907.09	37,774.06	40,999.62	44,025.51	45,413.29	49,877.29	55,254.96	464,995.48
12.	12. Property Tax		0.00	0.00	0.00	0.00	0.00	0.00	1,293.80	1,293.80	1,293.80	1,293.80	1,293.80	1,293.80	7,762.80
13 Audit Adjustment Property Taxes (Jan 2000 - June 2001)											18,394.44				
14	Total Amortization & Return (Line 3 +	9) _	32,127.79	33,189.61	34,985.13	37,081.75	38,530.30	39,977.12	43,139.41	46,368.96	49,399.61	50,789.21	55,254.26	60,634.77	539,872.36

(A) AEM Property Additions Depreciated at 3% per year
 (B) Revenue Requirement Return is 10.4209

# GULF POWER COMPANY

Reconciliation and Explanation of Differences Between Filing and FPSC Audit Report for Months, January, 2000 through December, 2000

(If no differences exist, please state.)

NO DIFFERENCES

Program Title: Residential Energy Audits

Program Description: This program consists of two types of audits: (1) Class A Energy Conservation Audits and (2) Centsable Energy Checks, a walk-through audit. Both of these audits are performed on-site and involve assisting the customer in upgrading the thermal and equipment efficiencies in their homes as well as lifestyle measures and low or no cost improvements.

<u>Program Accomplishments</u>: 1,600 residential energy audits were forecasted to be completed compared to 1,347 actual audits completed for a difference of 253 audits under projection.

Program Fiscal Expenditures: Forecasted expenses were \$400,715 compared to actual expenses of \$359,534 resulting in a deviation of \$41,181 under budget. The deviation is the result of less labor time being required on each audit. The audits required less time per audit than anticipated.

<u>Program Progress Summary</u>: Since the approval of this program, Gulf has performed 129,563 residential energy audits. This is a result of Gulf's promotional campaign to solicit energy audits as well as the overall rapport established with its customers as the "energy experts" in Northwest Florida.

Program Title: Residential Mail-In Audits

Program Description: The Residential Mail-In Audit Program is a direct mail energy auditing program. This program is designed to supplement Gulf's existing Residential Energy Audit program and assists in the evaluation of the specific energy requirements of a residential dwelling. Homeowners complete an audit questionnaire on their own or may request the assistance of a Gulf Power representative. This questionnaire asks customers about their energy consuming equipment or appliances, square footage, and other details regarding their lifestyles. The audit results package is returned to the customer and includes targeted, timely information about energy conservation opportunities specific to that dwelling.

<u>Program Accomplishments</u>: 224 audits were conducted using this process during the reporting period compared to a projection of 1,500. This program is under projection due to a lower than expected participation rate in the program.

Gulf Power is undertaking two steps to increase participation in the mail-in audit program. The first step has been to contact customer service representatives and local offices to encourage company representatives to provide mail-in audits to customers who contact the company about bill inquires or other company services. The second approach to increased participation will be target mailings.

<u>Program Fiscal Expenditures</u>: The program had actual expenses of \$33,029 compared to a projection of \$41,251 for a difference of \$8,222 under budget. This deviation is due to fewer audits conducted and a reduction in advertising for the period.

Program Progress Summary: This program was approved on August 5, 1997. There have been 856 mail-in audits completed program-to-date.

Program Title: Gulf Express Loan Program

<u>Program Description</u>: The objective of this program has been to encourage and achieve energy conservation. The program provided below market interest rates by participating banks to customers as an incentive to install energy conservation features in their homes.

<u>Program Accomplishments</u>: New loans were discontinued as of second quarter, 1997.

<u>Program Fiscal Expenditures</u>: Forecasted expenses were \$2,000 compared to actual expenses of \$1,163. All expenses are for the administration of existing loans and defaults.

<u>Program Progress Summary</u>: Since the approval of the program, Gulf has completed 1,953 Gulf Express Loans.

Program Title: Duct Leakage Repair

Program Description: The program provides the customer with a means to identify house air duct leakage and repairs are recommended that can reduce customer kWh energy usage and kW demand.

Program Accomplishments: During this recovery period, 19
Duct Leakage Repair units were completed. Gulf Power made the program available to its builders and customers and incurred minor expenses to answer customer inquires.

<u>Program Fiscal Expenditures</u>: Projected expenses for the period were \$900. However, \$1,327 was spent for the program resulting in the program being \$427 over projection.

Program Progress Summary: Program-to-date, 32 Duct Leakage Repair units have been completed. Program activities have related to education, training, and program development.

Program Title: Geothermal Heat Pump

<u>Program Description</u>: The objective of this 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.

<u>Program Accomplishments</u>: During this recovery period, 265 Geothermal Heat Pump units were installed compared to a goal of 500 units. This program is under projection due to a lower than expected participation rate in the program.

<u>Program Fiscal Expenditures</u>: Projected expenses for the period were \$217,448 compared to actual expenses of \$195,446 for a deviation of \$22,002 under budget. This program is under budget due to a reduction in materials and advertising expenses for the period.

<u>Program Progress Summary</u>: Education and training continue as vital components of this program. Since the inception, 1,599 geothermal systems have been installed.

Program Title: GoodCents Select (Advanced Energy Management)

Program Description: This program was field tested through the TranstexT Advanced Energy Management Pilot Program in Gulf Breeze, Florida. The program is designed to provide the customer with a means of conveniently and automatically controlling and monitoring his/her energy purchases in response to prices that vary during the day and by season in relation to the Company's cost of producing or purchasing energy.

Program Accomplishments: A total of 1,227 units have been installed during this period bringing the total installations to 2,173. Implementation of this program continues to progress. As development issues have been resolved, the rate of installations has increased and is expected to continue to increase to a rate of 3,000 new installations per year.

<u>Program Fiscal Expenditures</u>: Total recoverable costs for this program were revised in September, 2001, to be \$3,504,545. However, actual costs of \$3,371,108 were incurred in 2001 for a deviation of \$133,437 under budget. This program includes capital expenditures as well as O&M expenses. This program is under budget due to fewer installations than anticipated.

<u>Program Progress Summary</u>: A total of 2,173 units have been installed program-to-date.

Program Title: GoodCents Commercial Buildings

<u>Program Description</u>: This program is designed to educate non-residential customers on the most cost-effective methods of designing new and improving existing buildings. The program stresses efficient heating and cooling equipment, improved thermal envelope, operation and maintenance, lighting, cooking and water heating. Field representatives work with architects, engineers, consultants, contractors, equipment suppliers and building owners and occupants to encourage them to make the most efficient use of all energy sources and available technologies.

<u>Program Accomplishments</u>: The goal during the current period was 212 installations compared to actual installations of 153.

Program Fiscal Expenditures: Forecasted expenses were \$398,051 compared to actual expenses of \$358,385 for a deviation of \$39,666 under budget. The expenses are under budget due to fewer units being completed than originally projected.

<u>Program Progress Summary</u>: A total of 8,070 commercial/industrial buildings have qualified for the Good Cents designation since the program was developed in 1977.

<u>Program Title</u>: Commercial/Industrial Energy Audits and Technical Assistance Audits

Program Description: This program is designed to provide professional advice to our existing commercial and industrial customers on how to reduce and make the most efficient use of energy. This program covers the smallest commercial customer, requiring only a walk-through survey, to the use of computer programs which will simulate several design options for very large energy intensive customers. The program is designed to include six month and annual follow-ups with the customer to verify any conservation measures installed and to reinforce the need to continue with more conservation efforts.

<u>Program Accomplishments</u>: During the period ending December, 2001, our goal was 127 audits while actual results were 123. This program is essentially on budget.

Program Fiscal Expenditures: Forecasted expenses were \$482,354 compared to actual expenses of \$453,894 for a deviation of \$28,460 or 5.9% under budget. This program is essentially on budget.

<u>Program Progress Summary</u>: A total of 11,264 EA/TAA's have been completed since the program started in January, 1981. These audits have ranged from basic walk-through type for some commercial customers to sophisticated technical assistance audits for other commercial and industrial customers.

Program Title: Commercial Mail-In Audit Program

Program Description: The Commercial Mail-In Audit Program is a direct mail energy auditing program. This program is supplementing Gulf's existing Commercial/Industrial Energy Audit program and is assisting in the evaluation of the specific energy requirements of a given business type. Businesses complete an audit questionnaire on their own or may request the assistance of a Gulf Power representative. This questionnaire asks customers about their energy consuming equipment or appliances, square footage, hours of operation and other details regarding their business operations. The audit results package is returned to the customer and includes targeted, timely information about energy conservation opportunities specific to each business type and geographic area.

<u>Program Accomplishments</u>: In this period, 377 mail-in audits have been completed compared to a projection of 1,050 audits.

<u>Program Fiscal Expenditures</u>: Projected expenses for the period were \$38,785 compared to actual expenses of \$34,565 resulting in a deviation of \$4,220 under budget.

<u>Program Progress Summary</u>: To-date, 4,244 mail-in audits have been completed.

Program Title: Green Pricing Programs

Program Description: The Green Pricing Program is designed to encompass a variety of voluntary renewable and green energy programs under development by Gulf Power Company. The voluntary pricing options for customers include, but are not limited to Photovoltaic Rate Rider Tariff and Solar for Schools. Additionally, this program includes research and administrative costs to study the cost effectiveness of additional green pricing offerings utilizing wind or other renewable energy sources.

#### Program Accomplishments:

#### Solar for Schools

The principle objective of the Solar for Schools program is to implement cost-effective solar education and demonstration projects at local educational facilities by means of voluntary contributions. The program also seeks to increase renewable energy and energy awareness among students, parents and contributors. Solar for Schools is a program that uses voluntary contributions to fund materials for energy education, permanent demonstration displays, rewards for science contests, and teacher education. Voluntary contributions are solicited from customers interested in renewable energy and/or helping to improve the quality of schools in the Gulf Power Company service area. Funds are collected through a "check-off" mechanism on the utility bill or through a direct contribution and accumulated in an interest bearing account. When contributions reach an adequate level, they are directed to an educational facility for implementation of various solar educational programs and for the installation of solar equipment. Contributions are not used for administrative costs, program research or for promotion costs.

#### Photovoltaic Optional Rate Rider (EarthCents)

The PV Rate Rider is an optional rate for Gulf Power Company customers. Customers may purchase photovoltaic energy in 100-watt blocks. Multiple blocks may be purchased. Power purchased or produced from photovoltaic facilities may not be specifically delivered to the customer, but will displace power that would have otherwise been produced from traditional generating facilities. The construction of the photovoltaic facility or power purchased from photovoltaic

facilities will begin upon the attainment of sufficient commitments from all participants across the Southern Company electric system where the option is available and, as necessary, after obtaining FPSC approval. Customer billing will begin the second month following the date in which power is purchased from photovoltaic generating facilities or in which a photovoltaic generating facility of the Southern Company begins commercial operation.

Gulf Power Company has installed and is monitoring a 4 kW PV solar system at the Junior Museum of Bay County. This PV system operates computer equipment and other electrical items within the museum itself to demonstrate the capabilities of solar energy to the youth of Bay County and the surrounding counties.

#### GoodCents Environmental Home Program

This program provides residential customers with guidance concerning energy and environmental efficiency in new construction. The program promotes energy-efficient and environmentally sensitive home construction techniques by evaluating over 500 components in six categories of design construction practices.

During the recovery period, no GoodCents Environmental Homes were constructed. Gulf Power has maintained the availability of this program to our builders and customers; however, we have not advertised and promoted this program in an active manner during this recovery period.

#### Other Green Initiatives

The other green initiatives will encompass a variety of voluntary renewable and green energy programs under development by Gulf Power Company. Additionally, this program includes research and administrative costs to study the cost effectiveness of additional green pricing offerings utilizing wind or other renewable energy sources.

Program Fiscal Expenditures: Projected expenses for the period were: Solar for Schools, \$4,524; Photovoltaic Optional Rate Rider, \$1,310; EarthCents, \$29,700. Actual expenses were: Solar for Schools, \$4,456; Photovoltaic Optional Rate Rider, \$533; and EarthCents, \$28,635. For the Green Pricing Program, actual expenses totaled \$35,534 versus projected expenses of \$33,624 for the program year, for a deviation of \$1,910 under budget.

Program Title: Conservation Demonstration and Development

Program Description: A package of conservation programs was approved by the FPSC in Order No. 23561 for Gulf Power Company to explore the development of a program to pursue research, development, and demonstration projects designed to promote energy efficiency and conservation. This program serves as an umbrella program for the identification, development, demonstration and evaluation of new or emerging end-use technologies.

#### Completed Program Accomplishments:

Aquatic Pool - The project involves the installation of an air source heat pump water heater/dehumidification system. The system capacity is 22.5 tons. The pool is  $75 \times 42$  square feet, holding 116,550 gallons and heated by a 400,000 btuh natural gas pool heater.

Bay County Schools - Lucille Moore Elementary - Geothermal Heat Pump and Air Source Heat Pump Comparison - This project has been completed and a final report has been submitted.

Boardwalk - The Boardwalk Laundry Room is a research site designed to study the effectiveness of the triple function Nordyne heat pump. The project is complete and a final report has been submitted.

Burger King - Was a comparative study between gas fryers and electric fryers and the effects on the cooking environment and energy consumption. This project has been completed and a final report has been submitted.

Closed Loop - Schwartz Dentist Office - Geothermal Heat Pump and Air Source Heat Pump Comparison - This project has been completed and a final report has been submitted.

Dunes - This project monitored two heat pump water heaters in a hotel. This project has been completed and a final report has been submitted.

The Efficiency Store - Energy Education
This program intended to provide customers with improved
interest, awareness, and understanding of energy efficient

technologies. This project has been completed and a final report has been submitted.

End-Use Profiling - The purpose of this 3-year project was to develop and provide detailed end use data for the major customer classes (Residential, Commercial and Industrial) as a baseline database for use in forecasting models and for analyzing the effectiveness of demand side management (DSM) programs. This project has been completed and a final report has been submitted.

Geothermal Heat Pump - A water furnace geothermal heat pump (AT034) with heat recovery for domestic hot water was monitored on a 2333 sq. ft. GoodCents home. In addition, the builder installed a heat pump swimming pool heater using the same loop system as the house heat pump. This project has been completed and a final report has been submitted.

Groovin' Noovin' - Gulf Power Company will be monitoring two pieces of cooking equipment at two different store locations. Energy usage will be monitored over the next year and a comparison report will be prepared at that time.

Hampton Inn - The Hampton Inn is being used to study geothermal heat pump water heaters for their laundry and pool heating requirements. The laundry room is cooled and the water heated with geo-thermal heat pump water heaters. The hotel pool is heated with a geo-thermal heat pump water heater.

Jim Day Project - This project was a geothermal system which provided heating and cooling in a residential environment. This project also included a geothermal heat pump water heater. This project has been completed and a final report has been submitted.

Joe Ridge Project - This project was a residential study which included a geothermal heat pump with a built in heat recovery unit, a geothermal pool heater and a conventional air to air heat pump. This project has been completed and the final report has been submitted.

Low Income Multi-Family Housing Project - This was the first low income CDD project associated with Gulf Power Company. This project was designed to illustrate the efficiency of the geothermal systems compared to the existing heating and cooling systems. This project has been completed and a final report has been submitted.

Oak Ridge - This project is a real life application of a new product to overcome market barriers to heat pump water heaters such as ease of installation and cost and performance. This new product has the refrigeration system built-in and a plumber can install the system just like any other electric water heater. All parts are standard reliable components that are proven in the refrigeration market.

Pine Forest - Gulf Power Company will be monitoring several pieces of equipment at the culinary arts department of a local high school. Energy usage will be monitored over the next year and a comparison report will be prepared at that time.

Slinky Mat Loop Heat Pump - This type of ground loop design, "slinky loop" or sometimes referred to as a "slinky mat loop", has not previously been installed in Florida to our knowledge. This project, conducted in Panama City, Florida, has been completed and a final report has been submitted.

Solar Light - Gulf Power Company has tested a solar Photovoltaic light at our Pine Forest facility. The solar light was monitored for energy consumption and demand savings as well as the actual lumen for the security light. A successful test would result in using this light in our Solar for Schools program. This particular light did not use funding from the Solar for Schools Program, however, we did use funds from the Conservation Demonstration and Development program. The project has been completed, and the final report is being prepared.

Triggers - Triggers is a research site designed to study the effectiveness of a heat pump water heater. This project will be monitored for the next year and a report will be prepared at that time.

Van Norman Project - Geothermal Home - This project was a triple function Nordyne heat pump providing heating, cooling, and water heating on demand. The heat pump compressor has a water heating mode. The total house, water heater, air handler and compressor were being monitored. Also, monitoring included air temperatures, water temperatures, and gallons of hot water. The project has been completed and a final report has been submitted.

Water Furnace - This research project is designed to study the experimental refrigerant R410A. A comparative study will be done between this new refrigerant and present refrigerants that are due to be phased out of production due to EPA mandates.

Program Fiscal Expenditures: Program expenses were forecasted at \$67,750 compared to actual expenses of \$21,999.50 for a deviation of \$45,750.50 under budget. Project expenses were as follows: Aquatic Pools, \$12,095.58; Bay County Schools, \$3.30; Boardwalk, \$515.02; Burger King, \$3.30; Closed Loop (Dentist) \$3.30; Dunes, \$6.60; Energy Efficiency Store - Energy Education, \$3.30; End-Use, \$43.30; Geothermal Heat Pump, \$3.30; Groovin' Noovin', \$1,379.02; Hampton, \$1,531.40; Jim Day, \$3.30; Joe Ridge, \$3.30; Low-Income Multi-Family, \$3.30; Oak Ridge, \$1,355.55; Pine Forest, \$662.83; Slinky Mat Loop Heat Pump, \$3.30; Triggers, \$3,801.74; Water Furnace, \$578.76.