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ORIGINAL
FILE COPY

Charles A. Guyton
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May 6, 1997

By Hand Delivery

Blanca S. Bayo, Director
Records and Reporting
Florida Public Service Commission
4075 Esplanade Way, Room 110
Tallahassee, Florida 32399-0850

MAY 12 1997

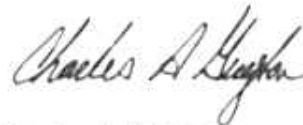
Re: Residential Heat Recovery Water Heating Program

Dear Ms. Bayo:

Enclosed for filing on behalf of Florida Power & Light Company are the original and fifteen (15) copies of Petition To Terminate Florida Power & Light Company's Residential Heat Recovery Water Heating Program

If you or your Staff have any questions regarding this filing, please contact me

Very truly yours,



Charles A. Guyton

CAG/ld
encs
LAL/19759-1

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DOCUMENT NUMBER-DATE
04481 MAY-65
FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to Terminate)
Florida Power & Light Company's)
Residential Heat Recovery Water)
Heating Program)

Docket No.
Filed: May 6, 1997

PETITION TO TERMINATE
FLORIDA POWER & LIGHT COMPANY'S
RESIDENTIAL HEAT RECOVERY WATER HEATING PROGRAM

Florida Power & Light Company ("FPL"), pursuant to Section 366.82, Florida Statutes (1995), hereby petitions the Florida Public Service Commission ("Commission") to terminate FPL's Residential Heat Recovery Water Heating Program and remove the Program from FPL's DSM Plan. In support of this petition FPL states:

1. FPL's address is 9250 West Flagler Street, Miami, Florida 33174. Correspondence, notices, orders, motions and other documents concerning this proceeding should be sent to

Charles A. Guyton
Steel Hector & Davis
Suite 601
215 S. Monroe St.,
Tallahassee, Florida 32301

William G. Walker
Vice President, Regulatory Affairs
Florida Power & Light Company
9250 West Flagler Street
Miami, Florida 33174

2. FPL is an investor-owned electric utility regulated by the Commission pursuant to Chapter 366, Florida Statutes. FPL is subject to the Florida Energy Efficiency Conservation Act ("FEECA"), and its ECCR clause is subject to the Commission's jurisdiction

DOCUMENT NUMBER-DATE

04481 MAY-65

FPSC-RECORDS/REPORTING

3. Pursuant to FEECA and the Commission rules implementing FEECA, FPL has an approved DSM plan. See, Order Nos. PSC-95-0691-FOF-EG, PSC-95-1343-S-EG, and PSC-95-1343A-S-EG. FPL has a substantial interest in its approved DSM Plan and maintaining that the programs in the Plan are cost-effective.

4. In October 1995 the Commission approved FPL's Residential Heat Recovery Water Heating Program as part of FPL's DSM Plan. Order Nos. PSC-95-1343-S-EG, and PSC-95-1343A-S-EG. The Commission approved Residential Heat Recovery Water Heating Program was a modification to FPL's Conservation Water Heating Program, which was approved as part of FPL's Demand Side Management Plan for the 90's. The Residential Heat Recovery Water Heating Program is a residential program designed to reduce FPL's summer and winter coincident peak demand and energy attributable to electric resistance water heating equipment by encouraging customers, through the use of incentives, to purchase heat recovery units.

5. As a result of evaluations of the Residential Heat Recovery Water Heating Program in FPL's planning process, FPL has determined that the Residential Heat Recovery Water Heating Program is no longer cost-effective and cannot be modified to be made cost-effective and still address the needs of FPL's customers. FPL's analysis of the cost-effectiveness of the Residential Heat Recovery Water Heating Program shows that the benefit-to-cost ratios for the Program are 67 RIM, 52 Participants, and 28 Total Resource. See Appendix A. Since the Residential Heat Recovery Water Heating Program is no longer cost-effective and FPL cannot make the Program cost-effective, FPL is petitioning for Commission approval to discontinue the Program.

6. Under the Residential Heat Recovery Water Heating Program, FPL issues incentives to customers at the time a heat recovery unit is installed by a qualifying contractor. The contractor

fills out the incentive certificate, gives it to the customer for his/her signature, and then the customer signs and returns it to the contractor as partial payment for the installation. The contractor then forwards the certificate to FPL for payment. FPL proposes to discontinue the Program by discontinuing to process any incentive certificates which are related to installations of HRU units made twenty (20) days after the date the Commission order discontinuing the Program becomes final. FPL would process for eighty (80) days after the termination order becomes final all incentive certificates received for installations of HRU units which predate the twentieth day following the day the Commission's discontinuance order becomes final. Any incentive certificates received after that eighty day period following discontinuance of the program will not be processed.

7. FPL will notify all of the Program's independent participating contractors of the Commission's decision to terminate the Residential Heat Recovery Water Heating Program by mailing to them within five (5) days of the date the order terminating the program becomes final a letter similar to the letter attached as Appendix B.

8. FPL seeks, pursuant to Section 366.82, Florida Statutes, Commission approval of the discontinuance of FPL's Residential Heat Recovery Water Heating Program and the dropping of the Program from FPL's DSM Plan. FPL further seeks to continue energy conservation cost recovery of Program costs related to the termination of the Program and processing, for eighty days following the date of the order terminating the program, incentives for installations up through the day the Commission's program termination order becomes final. FPL is not aware of any disputed issues of material facts.

WHEREFORE, FPL respectfully requests that the Commission authorize FPL to discontinue its Residential Heat Recovery Water Heating Program and drop the Residential Heat Recovery Water Heating Program from FPL's DSM Plan. FPL further requests that it be permitted to recover, through its energy conservation cost recovery clause, Residential Heat Recovery Water Heating Program costs incurred eighty days after the order approving termination of the program becomes final, as such costs will continue to be incurred in processing incentive certificates for purchases of HRU units installed prior to the twentieth day following the date the Commission's order terminating the Program becomes final.

Respectfully submitted,

Steel Hector & Davis LLP
Suite 601, 215 S. Monroe St
Tallahassee, Florida 32301

Attorneys for Florida Power
& Light Company

By 
Charles A. Guyton

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 6th day of May, 1997 a copy of the Petition To Terminate Florida Power & Light Company's Residential Heat Recovery Water Heating Program Program was served upon the following people by First Class United States Mail or hand delivery(*):

Robert V. Elias, Esq.*
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Jack Shreve, Esq.
John Roger Howe, Esq.
Office of Public Counsel
111 West Madison Street
Room 812
Tallahassee, Florida 32399-1400

By: 
Charles A. Guyton

TAL/18613-1

Appendix A

Cost-effectiveness Run

INPUT DATA - PART 1 CONTINUED
PROGRAM METHOD SELECTED: REV_REV
PROGRAM NAME: Residential Voltage Regulator

I PROGRAM DEMAND SAVINGS & LINE LOSSES

- (1) CUSTOMER KW REDUCTION AT METER 0.29 KW
- (2) GENERATOR KW REDUCTION PER CUSTOMER 0.11 KW
- (3) KW LOSS PERCENTAGE 8.32 %
- (4) GENERATOR kWh REDUCTION PER CUSTOMER 268.1 kWh
- (5) kWh LINE LOSS PERCENTAGE 6.75 %
- (6) GROUP LINE LOSS MULTIPLIER 1.2000
- (7) CUSTOMER kWh INCREASE AT METER 0.0 kWh

II ECONOMIC LIFE & K FACTORS

- (1) STUDY PERIOD FOR THE CONSERVATION PROGRAM 25 YEARS
- (2) GENERATOR ECONOMIC LIFE 30 YEARS
- (3) TLD ECONOMIC LIFE 25 YEARS
- (4) K FACTOR FOR GENERATION 1.81225
- (5) K FACTOR FOR T & D 1.44767

III UTILITY & CUSTOMER COSTS

- (1) UTILITY NON RECURRING COST PER CUSTOMER -- \$/CUST
- (2) UTILITY RECURRING COST PER CUSTOMER -- \$/CUST
- (3) UTILITY COST ESCALATION RATE -- %
- (4) CUSTOMER EQUIPMENT COST -- \$/CUST
- (5) CUSTOMER EQUIPMENT ESCALATION RATE -- %
- (6) CUSTOMER O & M COST -- \$/CUST/YR
- (7) CUSTOMER O & M COST ESCALATION RATE -- %
- (8) INCREASED SUPPLY COSTS -- \$/CUST/YR
- (9) SUPPLY COSTS ESCALATION RATES -- %
- (10) UTILITY DISCOUNT RATE 8.22 %
- (11) UTILITY AFUDC RATE 10.70 %
- (12) UTILITY NON RECURRING REBATE/INCENTIVE -- \$/CUST
- (13) UTILITY RECURRING REBATE/INCENTIVE -- \$/CUST
- (14) UTILITY REBATE/INCENTIVE ESCALATION RATE -- %

* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK
-- VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)
--- PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

IV AVOIDED GENERATOR AND TLD COSTS

- (1) BASE YEAR 1996
- (2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT 2001
- (3) IN-SERVICE YEAR FOR AVOIDED TLD 1999-2001
- (4) BASE YEAR AVOIDED GENERATING COST 285 \$/kW
- (5) BASE YEAR AVOIDED TRANSMISSION COST 70 \$/kW
- (6) BASE YEAR DISTRIBUTION COST 50 \$/kW
- (7) GEN, TRAN & DIST COST ESCALATION RATE 2.35 %
- (8) GENERATOR FIXED O & M COST 8 \$/kW/YR
- (9) GENERATOR FIXED O&M ESCALATION RATE 3.34 %
- (10) TRANSMISSION FIXED O & M COST 2.73 \$/kW
- (11) DISTRIBUTION FIXED O & M COST 13.01 \$/kW
- (12) TLD FIXED O&M ESCALATION RATE 3.34 %
- (13) AVOIDED GEN UNIT VARIABLE O & M COSTS 0.030 CENTS/kWh
- (14) GENERATOR VARIABLE O&M COST ESCALATION RATE 2.47 %
- (15) GENERATOR CAPACITY FACTOR 30% (30-service year)
- (16) AVOIDED GENERATING UNIT FUEL COST 1.88 CENTS PER kWh (30-service year)
- (17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE 5.03 %

V NON-FUEL ENERGY AND DEMAND CHARGES

- (1) NON FUEL COST IN CUSTOMER BILL -- CENTS/kWh
- (2) NON-FUEL COST ESCALATION RATE -- %
- (3) DEMAND CHARGE IN CUSTOMER BILL -- \$/kWMO
- (4) DEMAND CHARGE ESCALATION RATE -- %

* INPUT DATA - PART 1 CONTINUED
 PROGRAM METHOD SELECTED REV_REQ
 PROGRAM NAME Residential Water Heating-HRU

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$/(000)	(2) UTILITY INCENTIVES \$/(000)	(3) OTHER UTILITY COSTS \$/(000)	(4) TOTAL UTILITY PROGRAM COSTS \$/(000)	(5) ENERGY CHARGE REVENUE LOSSES \$/(000)	(6) DEMAND CHARGE REVENUE LOSSES \$/(000)	(7) PARTICIPANT EQUIPMENT COSTS \$/(000)	(8) PARTICIPANT O&M COSTS \$/(000)	(9) OTHER PARTICIPANT COSTS \$/(000)	(10) TOTAL PARTICIPANT COSTS \$/(000)
1986	0	0	0	0	0	0	0	0	0	
1987	0	0	0	0	0	0	0	0	0	
1988	65	34	0	99	5	420	4	4	424	
1989	66	34	0	100	28	430	13	0	443	
2000	68	34	0	102	46	439	22	0	461	
2001	0	0	0	0	55	0	27	0	27	
2002	0	0	0	0	55	0	28	0	28	
2003	0	0	0	0	56	0	28	0	28	
2004	0	0	0	0	57	0	29	0	29	
2005	0	0	0	0	57	0	30	0	30	
2006	0	0	0	0	58	0	31	0	31	
2007	0	0	0	0	59	0	32	0	32	
2008	0	0	0	0	61	0	33	0	33	
2009	0	0	0	0	62	0	34	0	34	
2010	0	0	0	0	67	0	35	0	35	
2011	0	0	0	0	68	0	36	0	36	
2012	0	0	0	0	70	0	37	0	37	
2013	87	34	0	131	70	630	38	0	667	
2014	100	34	0	134	73	648	39	0	687	
2015	103	34	0	137	73	658	40	0	708	
2016	0	0	0	0	74	0	41	0	41	
2017	0	0	0	0	75	0	42	0	42	
2018	0	0	0	0	76	0	44	0	44	
2019	0	0	0	0	78	0	45	0	45	
2020	0	0	0	0	79	0	46	0	46	

NOM	487	204	0	701	1,407	0	3,235	752	0	3,987
NPV	213	99	0	313	455	0	1,388	238	0	1,625

* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK
 ** NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR THE AND RIM TESTS

CALCULATION OF GEN K-FACTOR
PROGRAM NAME Residential Water Heating HRU

YEAR	(2) MID-YEAR RATE BASE \$000	(3) DEBT \$000	(4) PREFERRED STOCK \$000	(5) COMMON EQUITY \$000	(6) INCOME TAXES \$000	(7) OTHER TAXES & INSURANCE \$000	(8) DEPRECIATION \$000	(9) DEFERRED TAXES \$000	(10) TOTAL FIXED CHARGES \$000	(11) PRESENT WORTH FIXED CHARGES \$000	(12) CUMULATIVE PW FIXED CHARGES \$000
2001	111	4	0	6	5	2	4	4	22	22	22
2002	107	4	0	7	3	2	4	2	21	21	42
2003	101	4	0	7	3	2	4	1	21	17	59
2004	96	4	0	7	3	2	4	1	20	15	74
2005	91	3	0	6	3	2	4	1	19	13	88
2006	87	3	0	6	3	2	4	1	18	12	100
2007	82	3	0	6	3	2	4	1	18	10	110
2008	78	3	0	5	3	2	4	1	17	9	119
2009	73	3	0	5	3	2	4	1	16	8	127
2010	69	3	0	5	3	2	4	1	16	7	134
2011	65	2	0	4	2	2	4	1	15	6	141
2012	61	2	0	4	2	2	4	1	15	6	146
2013	56	2	0	4	2	2	4	1	14	5	151
2014	52	2	0	4	2	2	4	1	13	4	155
2015	48	2	0	3	2	2	4	1	13	4	159
2016	44	2	0	3	1	2	4	1	12	3	162
2017	39	2	0	3	1	2	4	1	11	3	165
2018	35	1	0	2	1	2	4	1	11	2	167
2019	31	1	0	2	1	2	4	1	10	2	169
2020	27	1	0	2	1	2	4	1	9	2	171
2021	23	1	0	2	1	2	4	1	9	2	173
2022	20	1	0	1	2	2	4	1	8	1	174
2023	18	1	0	1	2	2	4	1	8	1	175
2024	15	1	0	1	2	2	4	1	8	1	176
2025	13	0	0	1	2	2	4	1	7	1	177
2026	11	0	0	1	2	2	4	1	7	1	178
2027	8	0	0	1	2	2	4	1	7	1	178
2028	6	0	0	0	2	2	4	1	6	1	179
2029	4	0	0	0	2	2	4	1	6	1	180
2030	1	0	0	0	2	2	4	1	6	0	180

IN SERVICE COST (\$000)
IN SERVICE YEAR 112
BOOK LIFE (YRS) 2001
EFFECT. TAX RATE 30
DISCOUNT RATE 38.57%
OTAX & INS RATE 9.22%
1.40%

CAPITAL STRUCTURE		
SOURCE	WEIGHT	COST
DEBT	40%	7.00%
PG	0%	0.00%
CS	55%	12.50%

K-FACTOR = CPWFC / IN-SVC COST *

1.81229

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: Residential Water Heating HRU

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX SCHEDULE	TAX DEPRECIATION	ACCUMULATED TAX DEPRECIATION	BOOK DEPR. DEPRECIATION	ACCUMULATED BOOK DEPR. DEPRECIATION	BOOK DEPR. FOR DEFERRED TAX	ACCUMULATED BOOK DEPR. FOR DEFERRED TAX	DEFERRED TAX DUE TO DEPRECIATION	TOTAL EQUITY ADJUC	BOOK DEPR. RATE MINUS L.A.F.E.	(10/11) TAX RATE	SALVAGE TAX RATE	ANNUAL DEFERRED TAX (PH-12/13)	ACCUMULATED DEFERRED TAX
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)		(\$000)	(\$000)	(\$000)	(\$000)
2001	3.75%	4	4	4	4	4	4	4	6	0	0	0	0	0
2002	7.27%	8	12	4	7	4	4	7	6	0	0	0	0	2
2003	6.68%	7	19	4	11	4	4	11	6	0	0	0	1	2
2004	6.18%	7	26	4	15	4	4	14	6	0	0	0	1	3
2005	5.71%	6	32	4	19	4	4	18	6	0	0	0	1	4
2006	5.29%	6	38	4	22	4	4	21	6	0	0	0	1	4
2007	4.89%	5	44	4	26	4	4	25	6	0	0	0	1	4
2008	4.52%	5	48	4	30	4	4	28	6	0	0	0	1	4
2009	4.20%	5	53	4	33	4	4	32	6	0	0	0	1	4
2010	4.00%	5	58	4	37	4	4	35	6	0	0	0	1	4
2011	4.48%	5	63	4	41	4	4	38	6	0	0	0	1	4
2012	4.48%	5	68	4	45	4	4	42	6	0	0	0	1	4
2013	4.48%	5	73	4	48	4	4	46	6	0	0	0	1	4
2014	4.48%	5	78	4	52	4	4	49	6	0	0	0	1	4
2015	4.48%	5	83	4	56	4	4	53	6	0	0	0	1	4
2016	4.48%	5	88	4	60	4	4	56	6	0	0	0	1	4
2017	4.48%	5	92	4	63	4	4	60	6	0	0	0	1	4
2018	4.48%	5	97	4	67	4	4	63	6	0	0	0	1	4
2019	4.48%	5	102	4	71	4	4	67	6	0	0	0	1	4
2020	4.48%	5	107	4	74	4	4	70	6	0	0	0	1	4
2021	2.23%	2	110	4	78	4	4	74	6	0	0	0	1	4
2022	0.00%	0	110	4	82	4	4	77	6	0	0	0	1	4
2023	0.00%	0	110	4	86	4	4	81	6	0	0	0	1	4
2024	0.00%	0	110	4	89	4	4	84	6	0	0	0	1	4
2025	0.00%	0	110	4	93	4	4	88	6	0	0	0	1	4
2026	0.00%	0	110	4	97	4	4	91	6	0	0	0	1	4
2027	0.00%	0	110	4	100	4	4	95	6	0	0	0	1	4
2028	0.00%	0	110	4	104	4	4	98	6	0	0	0	1	4
2029	0.00%	0	110	4	108	4	4	102	6	0	0	0	1	4
2030	0.00%	0	110	4	112	4	4	105	6	0	0	0	1	4

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	20%
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	0
TOTAL EQUITY ADJUC CAPITALIZED (SEE PAGE 5)	6
BOOK DEPR RATE - 1/USEFUL LIFE	3.33%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME Reservoir Water Heating HRU

(1)	(2)	(3)	(4)	(5)	(5a)	(5b)	(6)	(7)	(8)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION	DEFERRED TAX	END OF YEAR NET PLANT IN SERVICE	ACCUMULATED DEPRECIATION	ACCUMULATED DEF TAXES	BEGINNING YEAR RATE BASE	ENDING OF YEAR RATE BASE	MID-YEAR RATE BASE
	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)	(\$'000)
2001	3.75%	4	0	108	4	(1)	113	108	111
2002	7.27%	8	2	104	7	0	108	104	107
2003	6.68%	7	1	100	11	2	104	99	101
2004	6.18%	7	1	97	15	3	99	94	96
2005	5.71%	6	1	93	19	4	94	89	91
2006	5.29%	6	1	89	22	5	89	84	87
2007	4.89%	5	1	86	26	6	84	80	82
2008	4.52%	5	1	82	30	6	80	76	78
2009	4.16%	5	1	78	33	7	76	71	73
2010	4.80%	5	1	74	37	7	71	67	69
2011	4.46%	5	1	71	41	8	67	63	65
2012	4.16%	5	1	67	45	8	63	59	61
2013	4.46%	5	1	63	48	9	59	54	56
2014	4.16%	5	1	60	52	9	54	50	52
2015	4.46%	5	1	56	56	10	50	46	48
2016	4.16%	5	1	52	60	10	46	42	44
2017	4.46%	5	1	48	63	11	42	37	39
2018	4.16%	5	1	45	67	12	37	33	35
2019	4.46%	5	1	41	71	12	33	29	31
2020	4.16%	5	1	37	74	13	29	25	27
2021	2.27%	2	(2)	33	78	12	25	21	23
2022	0.00%	0	(1)	30	82	11	21	19	20
2023	0.00%	0	(1)	26	86	9	19	17	18
2024	0.00%	0	(1)	22	89	8	17	14	15
2025	0.00%	0	(1)	19	93	7	14	12	13
2026	0.00%	0	(1)	15	97	5	12	9	11
2027	0.00%	0	(1)	11	100	4	9	7	8
2028	0.00%	0	(1)	7	104	3	7	5	6
2029	0.00%	0	(1)	4	108	1	5	2	4
2030	0.00%	0	(1)	0	112	0	2	0	1

* Column not specified in workbook

(1) YEAR	(2) NO YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE [%]	(6) ANNUAL SPENDING (\$AW)	(7) CUMULATIVE AVERAGE SPENDING (\$AW)
1996	-5	0.00%	1.000	0.00%	0.00	0.00
1997	-4	2.50%	1.028	0.00%	0.00	0.00
1998	-3	2.50%	1.052	0.00%	0.00	0.00
1999	-2	2.67%	1.080	36.77%	113.15	36.57
2000	-1	2.89%	1.111	63.23%	200.20	213.25

100.00% 213.34

(8) YEAR	(9) NO YEARS BEFORE IN-SERVICE	(10) CUMULATIVE SPENDING WITH AFUDC (\$AW)	(11) CUMULATIVE DEBT AFUDC (\$AW)	(12) CUMULATIVE DEBT AFUDC [%]	(13) YEARLY TOTAL AFUDC (\$AW)	(14) CUMULATIVE TOTAL AFUDC (\$AW)	(15) CONSTRUCTION PERIOD INTEREST (\$AW)	(16) CUMULATIVE CPI (\$AW)	(17) DEFERRED TAXES (\$AW)	(18) CUMULATIVE DEFERRED TAXES (\$AW)	(19) INCREMENTAL YEAR-END BOOK VALUE (\$AW)	(20) CUMULATIVE YEAR-END BOOK VALUE (\$AW)
1996	-5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1997	-4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	-3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	-2	36.57	2.16	2.16	6.05	6.05	4.81	4.81	(1.02)	(1.02)	118.20	118.20
2000	-1	219.30	8.43	10.58	23.57	29.63	18.53	23.34	(3.90)	(4.92)	223.77	342.87

10.58 29.63 23.34 (4.92) 342.87

	BOOK BASIS	BOOK BASIS	BOOK BASIS
	FOR DEF TAX	TAX BASIS	TAX BASIS
CONSTRUCTION CASH	102	102	102
EQUITY AFUDC	6	6	6
DEBT AFUDC	3	3	3
CPI			
TOTAL	112	105	112

IN SERVICE YEAR 2001
PLANT COSTS 285
AFUDC RATE 10.70%

* Column not specified in workbook

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
YEAR	CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	UTILITY AVERAGE SYSTEM FUEL COST (CASH)	AVOIDED MARGINAL FUEL COST (CASH)	INCREASED MARGINAL FUEL COST (CASH)	REPLACEMENT FUEL COST (CASH)	PROGRAM WY EFFECTIVENESS FACTOR	PROGRAM WY EFFECTIVENESS FACTOR
1986	0	0	0.00	2.60	2.43	0.00	1.00	1.00
1987	0	0	0.00	2.60	2.48	0.00	1.00	1.00
1988	1,000	1,000	0.00	2.76	2.36	0.00	1.00	1.30
1989	2,000	2,000	0.00	2.86	2.62	0.00	1.00	1.00
2000	3,000	3,000	0.00	3.09	2.74	0.00	1.00	1.00
2001	3,000	3,000	0.00	3.45	2.96	2.26	1.00	1.00
2002	3,000	3,000	0.00	3.36	2.95	2.50	1.00	1.00
2003	3,000	3,000	0.00	3.39	2.94	2.49	1.00	1.00
2004	3,000	3,000	0.00	3.66	3.16	2.96	1.00	1.00
2005	3,000	3,000	0.00	3.90	3.29	3.22	1.00	1.00
2006	3,000	3,000	0.00	4.03	3.49	3.45	1.00	1.00
2007	3,000	3,000	0.00	4.27	3.71	3.76	1.00	1.00
2008	3,000	3,000	0.00	4.43	3.87	3.67	1.00	1.00
2009	3,000	3,000	0.00	4.68	4.08	3.93	1.00	1.00
2010	3,000	3,000	0.00	4.97	4.19	4.38	1.00	1.00
2011	3,000	3,000	0.00	5.27	4.56	4.76	1.00	1.00
2012	3,000	3,000	0.00	5.55	4.77	4.74	1.00	1.00
2013	3,000	3,000	0.00	5.74	4.88	5.02	1.00	1.00
2014	3,000	3,000	0.00	5.95	5.04	5.08	1.00	1.00
2015	3,000	3,000	0.00	6.42	5.48	5.87	1.00	1.00
2016	3,000	3,000	0.00	6.84	5.82	5.80	1.00	1.00
2017	3,000	3,000	0.00	6.95	5.75	5.95	1.00	1.00
2018	3,000	3,000	0.00	7.17	6.02	6.33	1.00	1.00
2019	3,000	3,000	0.00	7.42	6.16	6.44	1.00	1.00
2020	3,000	3,000	0.00	7.61	6.36	6.53	1.00	1.00

* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS
 THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS

AVOIDED GENERATING BENEFITS
PROGRAM METHOD SELECTED REV_REQ
PROGRAM NAME Residential Water Heating-HRU

YEAR	(2) AVOIDED CAPACITY COST GEN UNIT \$(000)	(3) AVOIDED FIXED O&M GEN UNIT \$(000)	(4) AVOIDED VARIABLE O&M GEN UNIT \$(000)	(5) AVOIDED FUEL COST GEN UNIT \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
1996	0	0	0	0	0	0
1997	0	0	0	0	0	0
1998	0	0	0	0	0	0
1999	0	0	0	0	0	0
2000	0	0	0	0	0	0
2001	22	3	0	16	19	22
2002	21	3	0	13	18	22
2003	21	3	0	11	12	23
2004	20	4	0	12	14	21
2005	19	4	0	14	16	21
2006	18	4	0	17	18	21
2007	18	4	0	19	20	21
2008	17	4	0	20	20	22
2009	16	4	0	17	18	20
2010	16	5	0	10	12	18
2011	15	5	0	10	13	17
2012	15	5	0	19	22	16
2013	14	5	0	18	22	16
2014	13	5	0	18	21	16
2015	13	6	0	22	23	15
2016	12	6	0	16	21	15
2017	11	6	0	14	18	15
2018	11	6	0	18	21	14
2019	10	7	0	17	20	14
2020	9	7	0	16	19	14

NOM	312	96	4	319	369	361
NPV	110	27	1	96	111	122

AVOIDED T&D AND PROGRAM FUEL SAVINGS
PROGRAM METHOD SELECTED REV_REQ
PROGRAM NAME Residential Water Heating-HRU

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
YR	AVOIDED TRANSMISSION CAP COST \$ (000)	AVOIDED TRANSMISSION O&M COST \$ (000)	TOTAL AVOIDED TRANSMISSION COST \$ (000)	AVOIDED DISTRIBUTION CAP COST \$ (000)	AVOIDED DISTRIBUTION O&M COST \$ (000)	TOTAL AVOIDED DISTRIBUTION COST \$ (000)	PROGRAM FUEL SAVINGS \$ (000)	PROGRAM OFF-PEAK PAYBACK \$ (000)
1996	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
1999	1	0	1	2	1	3	1.3	4
2000	3	1	4	2	3	5	2.3	0
2001	4	1	5	3	5	8	3.2	0
2002	4	1	5	3	5	8	3.1	0
2003	4	1	5	3	5	8	3.1	0
2004	4	1	5	3	5	8	3.4	0
2005	4	1	5	3	5	8	3.5	0
2006	3	1	4	2	6	8	3.7	0
2007	3	1	4	2	6	8	4.0	0
2008	3	1	4	2	6	8	4.1	0
2009	3	1	4	2	6	8	4.4	0
2010	3	2	5	2	7	9	4.7	0
2011	3	2	5	2	7	9	4.9	0
2012	3	2	5	2	7	9	5.2	0
2013	3	2	5	2	7	9	5.4	0
2014	2	2	4	2	8	10	5.6	0
2015	2	2	4	1	9	10	6.0	0
2016	2	2	4	1	9	11	6.3	0
2017	2	2	4	1	9	11	6.5	0
2018	2	2	4	1	10	11	6.8	0
2019	2	2	4	1	10	11	7.1	0
2020	2	2	4	1	10	11	7.2	0
TOTAL	61	34	95	40	147	187	1,023	0
NPV	23	10	33	15	43	58	300	0

* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

TOTAL RESOURCE COST TEST
PROGRAM METHOD SELECTED REV_REQ
PROGRAM NAME Residential Water Heating-HRU

(1) YEAR	(2) INCREASED SUPPLY COSTS \$1000	(3) UTILITY PROGRAM COSTS \$1000	(4) PARTICIPANT PROGRAM COSTS \$1000	(5) OTHER COSTS \$1000	(6) TOTAL COSTS \$1000	(7) AVOIDED GEN UNIT BENEFITS \$1000	(8) AVOIDED TAD BENEFITS \$1000	(9) PROGRAM FUEL SAVINGS \$1000	(10) OTHER BENEFITS \$1000	(11) TOTAL BENEFITS \$1000	(12) NET BENEFITS \$1000	(13) CUMULATIVE DISCOUNTED NET BENEFITS \$1000
1996	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0	0
1998	0	65	424	0	489	0	0	4	0	4	4	(426)
1999	0	68	443	0	509	0	4	13	0	17	17	(794)
2000	0	68	461	0	529	0	8	23	0	32	32	(1,133)
2001	0	0	27	0	27	22	13	31	0	67	67	(1,107)
2002	0	0	28	0	28	22	13	31	0	65	37	(1,365)
2003	0	0	28	0	28	23	13	31	0	67	38	(1,365)
2004	0	0	29	0	29	21	13	34	0	67	38	(1,346)
2005	0	0	30	0	30	21	13	35	0	68	38	(1,329)
2006	0	0	31	0	31	21	13	37	0	71	40	(1,312)
2007	0	0	32	0	32	21	13	40	0	73	41	(968)
2008	0	0	33	0	33	22	13	41	0	76	43	(862)
2009	0	0	34	0	34	20	13	44	0	78	44	(863)
2010	0	0	35	0	35	14	13	47	0	78	44	(844)
2011	0	0	36	0	36	17	13	49	0	80	44	(823)
2012	0	0	37	0	37	16	13	52	0	82	45	(804)
2013	0	97	667	0	764	16	14	54	0	84	84	(701)
2014	0	100	687	0	787	16	14	56	0	86	86	(701)
2015	0	103	708	0	811	15	14	60	0	90	90	(721)
2016	0	0	41	0	41	15	14	63	0	92	51	(1,354)
2017	0	0	42	0	42	15	15	65	0	94	52	(1,346)
2018	0	0	44	0	44	14	15	68	0	97	54	(1,326)
2019	0	0	45	0	45	14	15	71	0	100	55	(1,321)
2020	0	0	46	0	46	14	16	72	0	102	56	(1,314)

NOM	0	497	3,967	0	4,464	261	282	1,003	0	1,667	0	(2,818)
NPV	0	213	1,625	0	1,838	123	92	300	0	514	0	(1,354)

8.22 %

Discount Rate
Benefit/Cost Ratio (Col(11) / Col(5))

PARTICIPANT COSTS AND BENEFITS
PROGRAM METHOD SELECTED REV_REQ
PROGRAM NAME Residential Water Heating-PRU

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEA	SAVINGS IN PARTICIPANTS BILLS \$ (000)	TAX CREDITS \$ (000)	UTILITY REMATES \$ (000)	OTHER BENEFITS \$ (000)	TOTAL BENEFITS \$ (000)	CUSTOMER EQUIPMENT COSTS \$ (000)	CUSTOMER OAM COSTS \$ (000)	OTHER COSTS \$ (000)	TOTAL COSTS \$ (000)	NET BENEFITS \$ (000)	CUMULATIVE DISCOUNTED NET BENEFITS \$ (000)
1996	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0	0	0	0
1998	15	0	34	0	49	420	4	0	424	(375)	(315)
1999	46	0	34	0	80	430	13	0	443	(303)	(583)
2000	76	0	34	0	110	439	22	0	461	(352)	(942)
2001	91	0	0	0	91	0	27	0	118	64	(798)
2002	91	0	0	0	91	0	28	0	119	63	(762)
2003	91	0	0	0	91	0	29	0	120	63	(728)
2004	93	0	0	0	93	0	29	0	122	64	(697)
2005	96	0	0	0	96	0	30	0	126	65	(669)
2006	97	0	0	0	97	0	31	0	128	65	(642)
2007	97	0	0	0	97	0	32	0	130	65	(617)
2008	100	0	0	0	100	0	33	0	133	67	(594)
2009	102	0	0	0	102	0	34	0	136	69	(572)
2010	111	0	0	0	111	0	35	0	146	76	(550)
2011	112	0	0	0	112	0	36	0	152	76	(529)
2012	114	0	0	0	114	0	37	0	159	77	(510)
2013	116	0	34	0	150	630	38	0	667	(518)	(626)
2014	119	0	34	0	153	648	39	0	687	(534)	(725)
2015	119	0	34	0	153	668	42	0	708	(555)	(825)
2016	121	0	0	0	121	0	41	0	162	80	(813)
2017	123	0	0	0	123	0	42	0	174	81	(801)
2018	126	0	0	0	126	0	44	0	188	82	(790)
2019	127	0	0	0	127	0	45	0	193	83	(780)
2020	130	0	0	0	130	0	46	0	199	84	(760)

ICM	2,307	0	204	0	2,311	3,235	752	0	3,987	(1,477)	
NPV	748	0	90	0	845	1,308	226	0	1,625	(785)	

In Service of Own Unit
Discount Rate 3.22 %
*Weighted Ratio (Cuel) / Ccol(10) 6.83

RATE IMPACT TEST
PROGRAM METHOD SELECTED REV. REQ.
PROGRAM NAME: Residential Water Heating (R)U

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YR	INCREASED SUPPLY COSTS \$/000	UTILITY PROGRAM COSTS \$/000	INCENTIVES \$/000	REVENUE LOSSES \$/000	OTHER COSTS \$/000	TOTAL COSTS \$/000	AVOIDED EN URNT & FUEL BENEFITS \$/000	AVOIDED TAD BENEFITS \$/000	REVENUE GAINS \$/000	OTHER BENEFITS \$/000	TOTAL BENEFITS \$/000	NET BENEFITS \$/000	CUMULATIVE DISCOUNTED NET BENEFITS \$/000
1996	0	0	0	0	0	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	128	0	0	0	0	0	0	(87)
1998	0	65	34	9	0	129	4	0	0	0	4	(104)	(87)
1999	0	66	34	28	0	148	13	4	0	0	17	(111)	(172)
2000	0	68	34	46	0	148	23	8	0	0	32	(116)	(254)
2001	0	0	0	55	0	55	54	13	0	0	67	12	(46)
2002	0	0	0	55	0	55	53	13	0	0	66	10	(40)
2003	0	0	0	56	0	56	54	13	0	0	67	11	(234)
2004	0	0	0	57	0	57	55	13	0	0	68	10	(229)
2005	0	0	0	57	0	57	56	13	0	0	68	12	(224)
2006	0	0	0	58	0	58	56	13	0	0	71	13	(224)
2007	0	0	0	59	0	59	58	13	0	0	73	14	(219)
2008	0	0	0	61	0	61	63	13	0	0	76	15	(208)
2009	0	0	0	62	0	62	63	13	0	0	78	16	(204)
2010	0	0	0	62	0	62	65	13	0	0	80	17	(198)
2011	0	0	0	66	0	66	67	13	0	0	82	18	(192)
2012	0	0	0	70	0	70	68	13	0	0	84	19	(185)
2013	0	87	34	70	0	201	70	14	0	0	84	20	(178)
2014	0	100	34	73	0	207	72	14	0	0	86	21	(171)
2015	0	103	34	73	0	209	76	14	0	0	90	22	(160)
2016	0	0	0	74	0	74	78	14	0	0	92	23	(152)
2017	0	0	0	75	0	75	80	15	0	0	94	24	(144)
2018	0	0	0	76	0	76	82	15	0	0	97	25	(136)
2019	0	0	0	78	0	78	85	15	0	0	100	26	(128)
2020	0	0	0	79	0	79	88	16	0	0	102	27	(120)

NOM	0	487	204	1,407	0	2,108	1,384	262	0	0	1,967	(442)
NPV	0	213	88	455	0	768	423	82	0	0	514	(252)

Discount Rate: 9.22 %
Benefit/Cost Ratio: (Cost/12) / Cost(7) = 0.87

APPENDIX B

(Date)

(HRU Participating Independent Contractor)

RE: Phase Out of Residential Heat Recovery Water Heating Program

This is to inform you that the Florida Public Service Commission has approved the discontinuance of FPL's Residential Heat Recovery Water Heating Program effective (date final order becomes effective).

Consequently, your Demand Side Management Program Contract with FPL for participation in the FPL Residential Heat Recovery Water Heating Program will no longer be effective.

Installations of qualifying heat recovery units after (date final order becomes effective + 20 days) are not eligible for an incentive. Incentive certificates for installations prior to (date final order becomes effective + 20 days) must be redeemed on or before (date final order becomes effective + 80 days). After (date final order becomes effective + 80 days) no further incentive certificates will be honored.

I would like to take this opportunity to thank all of you for participating in this program.

(Name)

Residential Water Heating Program Manager