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RECORDS AND  
REPORTING

July 20, 2000

Ms. Blanca Bayo, Director  
Division of Records and Reporting  
Room 110, Easley Building  
Florida Public Service Commission  
2540 Shumard Oak Blvd.  
Tallahassee, Florida 32399-0850

BY HAND DELIVERY

Re: Docket No. 000721-GU

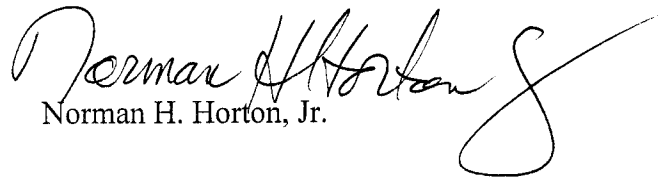
Dear Ms. Bayo:

Enclosed for filing on behalf of Florida Public Utilities Company are 15 copies of revised Exhibits A, B, C, D, E and F to accompany the Petition for Approval of Gas Conservation Programs. These schedules should replace the exhibits filed with the Petition on June 15, 2000 in the above referenced docket.

Please indicate receipt of this document by stamping the enclosed extra copy of this letter.

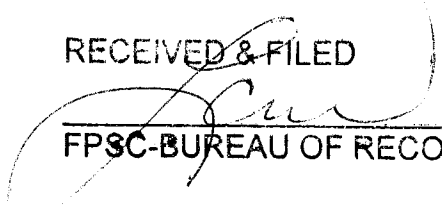
Thank you for your assistance in this matter.

Sincerely,

  
Norman H. Horton, Jr.

- APP \_\_\_\_\_ NHH:amb
- CAF \_\_\_\_\_ Enclosures
- CMP \_\_\_\_\_ cc: Mr. Robert L. Smith
- COM \_\_\_\_\_ Mr. Shevie Brown
- CTR \_\_\_\_\_
- ECR \_\_\_\_\_
- LEG    \_\_\_\_\_
- OPC \_\_\_\_\_
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FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER-DATE

08794 JUL 20 00

FPSC-RECORDS/REPORTING

FLORIDA PUBLIC UTILITIES COMPANY  
ENERGY CONSERVATION PROGRAM ANALYSIS  
Summary of Cost-Effectiveness Ratios

Residential Builder Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Water Heater	275	5.6	1.10
Furnace	275	1.91	1.45
Clothes Dryer Outlet	75	6.65	1.05
Range	75	4.79	1.06

Residential Appliance Replacement Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Water Heater	330	4.27	1.19
Furnace	330	1.76	1.13
Clothes Dryer	50	2.98	1.20
Range	50	2.55	1.23

Residential Propane Distribution Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Water Heater	275	123.8	1.11
Furnace	275	5.57	1.08
Clothes Dryer Outlet	75	33.15	1.12
Range	75	20.98	1.11

Residential Water Heater Retention Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Water Heater	150	126.55	1.58

Natural Gas Space Conditioning  
For Residential Homes Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Triathlon/Equivalent	1200	1.51	1.31

Natural Gas Space Conditioning

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Engine Dr. Chiller	50/ton	1.20	1.25

Rate Impact Measure Test Data

Gas Program: Fall House Residential New Construction Program  
 All Costs in: 2000 Dollars  
 Analysis Start Year: 2000  
 Gas Rate Number: 2000

Number of Tons: 20  
 Electric Rate Number:

Item	Electric Rate Number	Gas Rate Number
Gas Meter		
Gas Meter		
Gas Meter		
Gas Meter		
Gas Meter		

Item	Electric Rate Number	Gas Rate Number
1. Supply Man	0	0
2. Developer's Man	283	0
3. Service	620	0
4. Meter	114	0
Total Cost, Cost	81,027	0
5. Utility Allowance	1300	0
6. Program Cost	10	0
7. New Customer Admin. Cost (month	15	0
8. Main Deck Percent	7.83%	0
V. Gas Supply Cost	0	10,487
1. Load Profile Type	0	1,000
2. Conversion (Annual)	0	1,000
3. Winter Multiplier	0	1,000
4. Summer Multiplier	0	1,000
5. Transportation, Capacity, Peaking and Balancing Cost	0	0,000
System Shrinkage	0	0
VI. Therms Consumed	0	1,000
1. Energy Factor	0.88	1,000
2. Annual Gas Therms	0.0	1,000
VI. Therms Displaced	0	0
1. Energy Factor	1.00	0
2. Standard Rate	0.00	0.00
Total	81,027	10,487
VI. Therms Per Hour @ Utility Receipt Point	0.07871	0.15342
1. Consumed	0.07871	0.15342
2. Consumed Now	0.07871	0.15342
3. Consumed Existing	0.07871	0.15342
4. Displaced	0.07871	0.15342

Item	Rate	Winter	Summer	Total
1. Added Meter Annual Cost		10	0	10
2. Added On & Off Cost		0	0	0
Total Costs		10	0	10
1. Operating Data				
II. Energy Factor	0.58			
III. Therms Consumed		1010	1880	2890
2. Seasonal Rate		1010	1880	2890
Total		1010	1880	2890
IV. Gas Rates				
6. Base, Winter	10.33512			
7. Base, Summer		10.33512		
8. Seasonal, Summer			10.33512	
9. Seasonal, Winter	10.33512			
10. P&A, Winter	0.48787			
11. P&A, Summer		0.48787		
12. Customer City	18.00			
14. Rate of Therms Consumed to Total	27.83%			
15. Average Life	12			
16. Common Gas & Electric Data	0.77%			

## Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therms	Gas Customer Charge	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Facilities O&M	Gas Supply Cost	Program & Allowance Cost	Water Total Columns 5 thru 8
	Table 1	Table 2		Table 3	Table 4	Table 5		
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
2000	138	36	175	18	25	84	300	427
2001	141	36	177	18	26	86		130
2002	143	36	179	17	26	89		132
2003	146	36	182	16	27	92		135
2004	149	36	185	16	28	94		138
2005	151	36	187	15	28	97		141
2006	154	36	190	14	29	100		143
2007	157	36	193	14	30	103		146
2008	160	36	196	13	30	106		150
2009	163	36	199	12	31	109		153
2010	166	36	202	12	32	113		156
2011	170	36	206	11	33	116		160
2012	173	36	209	10	34	119		164
2013	177	36	213	10	35	123		167
2014	180	36	216	9	36	127		171
2015	184	36	220	8	36	131		175
2016	188	36	224	8	37	134		180
2017	192	36	228	7	38	138		184
2018	196	36	232	6	39	143		189
2019	200	36	236	6	41	147		193

Present Value  
of Benefits \$1,802

\$1,646

Benefit/Cost Ratio	1.10
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Table 1

Water

1	2	3	4	5	5'2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2000	168	0.33512	0.48797	0.82309	138
2001	168	0.33512	0.50761	0.83773	141
2002	168	0.33512	0.51769	0.85281	143
2003	168	0.33512	0.53322	0.86834	146
2004	168	0.33512	0.54921	0.88433	149
2005	168	0.33512	0.56569	0.90081	151
2006	168	0.33512	0.58266	0.91778	154
2007	168	0.33512	0.60014	0.93528	157
2008	168	0.33512	0.61815	0.95327	160
2009	168	0.33512	0.63669	0.97181	163
2010	168	0.33512	0.65579	0.99091	166
2011	168	0.33512	0.67546	1.01058	170
2012	168	0.33512	0.69573	1.03085	173
2013	168	0.33512	0.71680	1.05172	177
2014	168	0.33512	0.73810	1.07322	180
2015	168	0.33512	0.76024	1.09536	184
2016	168	0.33512	0.78305	1.11817	188
2017	168	0.33512	0.80654	1.14166	192
2018	168	0.33512	0.83074	1.16586	196
2019	168	0.33512	0.85566	1.19078	200

Table 2

Water

1	2	3	4	4'3
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio * Annual Cust. Chg
2000	8.00	96.00	37.83%	36
2001	8.00	96.00	37.83%	36
2002	8.00	96.00	37.83%	36
2003	8.00	96.00	37.83%	36
2004	8.00	96.00	37.83%	36
2005	8.00	96.00	37.83%	36
2006	8.00	96.00	37.83%	36
2007	8.00	96.00	37.83%	36
2008	8.00	96.00	37.83%	36
2009	8.00	96.00	37.83%	36
2010	8.00	96.00	37.83%	36
2011	8.00	96.00	37.83%	36
2012	8.00	96.00	37.83%	36
2013	8.00	96.00	37.83%	36
2014	8.00	96.00	37.83%	36
2015	8.00	96.00	37.83%	36
2016	8.00	96.00	37.83%	36
2017	8.00	96.00	37.83%	36
2018	8.00	96.00	37.83%	36
2019	8.00	96.00	37.83%	36

Table 4

Water

1	2	3	4	5	6	7	8	9	10
Year	Adm. Cost	Annual Adm. Cost	Development Man	Supply Man	Man Cost	O & M %	Ratio Therms To Total Consumed	New Customer Adm. & Man O&M	New Customer
2000	5	60	293	0	293	7.83	37.83%		25
2001	5	62	283	0	283	7.83	37.83%		26
2002	5	64	273	0	273	7.83	37.83%		26
2003	5	66	263	0	263	7.83	37.83%		27
2004	6	68	253	0	253	7.83	37.83%		28
2005	6	70	243	0	243	7.83	37.83%		28
2006	6	72	233	0	233	7.83	37.83%		28
2007	6	74	223	0	223	7.83	37.83%		30
2008	6	76	213	0	213	7.83	37.83%		30
2009	7	78	203	0	203	7.83	37.83%		31
2010	7	81	193	0	193	7.83	37.83%		32
2011	7	83	183	0	183	7.83	37.83%		33
2012	7	86	173	0	173	7.83	37.83%		34
2013	7	88	163	0	163	7.83	37.83%		35
2014	8	91	153	0	153	7.83	37.83%		36
2015	8	93	143	0	143	7.83	37.83%		38
2016	8	96	133	0	133	7.83	37.83%		37
2017	8	98	123	0	123	7.83	37.83%		36
2018	9	102	113	0	113	7.83	37.83%		39
2019	9	105	104	0	104	7.83	37.83%		41

Table 3

Water

1	2	3	4	5	6	7	8	9	10
Year	Supply Man	Development Man	Service Line	Meter	Arg Cost of Debt	Customer Cost	Ratio of Therms Consumed To Total	Carrying Chg Means & Svc	
2000	0	293	620	114	4.71%	1027	37.83%	\$18	\$64
2001	0	283	598	110	4.71%	991	37.83%	\$18	\$64
2002	0	273	576	105	4.71%	954	37.83%	\$17	\$64
2003	0	263	554	100	4.71%	917	37.83%	\$16	\$64
2004	0	253	532	95	4.71%	880	37.83%	\$16	\$64
2005	0	243	510	90	4.71%	843	37.83%	\$15	\$64
2006	0	233	488	85	4.71%	806	37.83%	\$14	\$64
2007	0	223	466	80	4.71%	769	37.83%	\$14	\$64
2008	0	213	444	75	4.71%	732	37.83%	\$13	\$64
2009	0	203	422	70	4.71%	695	37.83%	\$12	\$64
2010	0	193	400	65	4.71%	658	37.83%	\$12	\$64
2011	0	183	378	60	4.71%	621	37.83%	\$11	\$64
2012	0	173	356	55	4.71%	584	37.83%	\$10	\$64
2013	0	163	334	50	4.71%	547	37.83%	\$10	\$64
2014	0	153	312	45	4.71%	510	37.83%	\$9	\$64
2015	0	143	290	40	4.71%	473	37.83%	\$8	\$64
2016	0	133	268	35	4.71%	436	37.83%	\$8	\$64
2017	0	123	246	30	4.71%	399	37.83%	\$7	\$64
2018	0	113	224	25	4.71%	362	37.83%	\$6	\$64
2019	0	104	202	9	4.71%	315	37.83%	\$6	\$64

Table 5

Water

1	2	3	4	5	6	7	8
Year	Therms	Water Therms	Summer Therms	Commodity Gas Supply Cost	Tranp. Capacity Peaking & Bal. Cost	Water Multiplier	Gas Supply Cost
2000	168	101	67	0.4987	0.0000	1.00	\$64
2001	168	101	67	0.5137	0.0000	1.00	\$66
2002	168	101	67	0.5291	0.0000	1.00	\$68
2003	168	101	67	0.5449	0.0000	1.00	\$72
2004	168	101	67	0.5613	0.0000	1.00	\$74
2005	168	101	67	0.5781	0.0000	1.00	\$77
2006	168	101	67	0.5955	0.0000	1.00	\$100
2007	168	101	67	0.6133	0.0000	1.00	\$103
2008	168	101	67	0.6317	0.0000	1.00	\$106
2009	168	101	67	0.6507	0.0000	1.00	\$109
2010	168	101	67	0.6702	0.0000	1.00	\$113
2011	168	101	67	0.6902	0.0000	1.00	\$116
2012	168	101	67	0.7110	0.0000	1.00	\$118
2013	168	101	67	0.7324	0.0000	1.00	\$123
2014	168	101	67	0.7543	0.0000	1.00	\$127
2015	168	101	67	0.7770	0.0000	1.00	\$131
2016	168	101	67	0.8003	0.0000	1.00	\$134
2017	168	101	67	0.8243	0.0000	1.00	\$138
2018	168	101	67	0.8490	0.0000	1.00	\$143
2019	168	101	67	0.8745	0.0000	1.00	\$147

### Rate Impact Measure Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Full House Residential New Construction Program Gas Rate Number Electric Rate Number

Gas Measure:	Furnace New Customer, New Dwelling New Main	Alternate Option: Art Floor Type	Electric Measure: Electric
Allowance:	\$300		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>\$0</b>

#### II. Operating Data

##### 1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	180.0	0.0	180.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>180.0</b>	<b>0.0</b>	<b>180.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	40.55%

15. Average Life	19
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#### III. Common Gas & Electric Data

1. Discount Rate	8.77%
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#### IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$1,027</b>

#### V. Gas Supply Cost

5. Utility Allowance	\$300
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

#### V. Gas Supply Cost

1. Load Profile Type	Gas Supply Cost \$(Therm)
2. Commodity (Annual)	\$0.4987
3. Winter Multiplier	1.00
4. Summer Multiplier	1.00
5. Transportation, Capacity, Peaking and Balancing Cost	0

#### System Shrinkage

#### VI. Therms Conserved

	New	Existing
1. Energy Factor	1.00	1
2. Annual Gas Therms	0.0	0.0

#### VII. Therms Displaced

1. Energy Factor	1.00
------------------	------

Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

#### VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

### Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therms	Gas Customer Charge	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Facilities O&M	Gas Supply Cost	Program & Allowance Cost	Heating Total Columns 6 thru 9
	Table 1	Table 2		Table 3	Table 4	Table 5		
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
2000	148	39	187	20	34	90	300	443
2001	151	39	190	19	34	92		146
2002	154	39	193	18	35	95		148
2003	156	39	195	18	35	98		151
2004	159	39	198	17	36	101		153
2005	162	39	201	16	36	104		156
2006	165	39	204	15	37	107		159
2007	168	39	207	15	37	110		162
2008	172	39	211	14	38	114		165
2009	175	39	214	13	38	117		168
2010	178	39	217	13	39	121		172
2011	182	39	221	12	39	124		176
2012	186	39	225	11	40	128		179
2013	189	39	228	10	41	132		183
2014	193	39	232	10	42	136		187
2015	197	39	236	9	42	140		191
2016	201	39	240	8	43	144		196
2017	205	39	244	8	44	148		200
2018	210	39	249	7	45	153		205
2019	214	39	253	6	46	157		209

Present Value of Benefits \$2,067

\$1,428

Benefit/Cost Ratio	1.45
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Table 1

Furnace

1	2	3	4	5	5'2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2000	180	\$0.33512	\$0.48797	\$0.82309	148
2001	180	\$0.33512	\$0.50261	\$0.83773	151
2002	180	\$0.33512	\$0.51769	\$0.85281	154
2003	180	\$0.33512	\$0.53322	\$0.86834	156
2004	180	\$0.33512	\$0.54921	\$0.88433	159
2005	180	\$0.33512	\$0.56589	\$0.90081	162
2006	180	\$0.33512	\$0.58266	\$0.91778	165
2007	180	\$0.33512	\$0.60014	\$0.93526	168
2008	180	\$0.33512	\$0.61815	\$0.95327	172
2009	180	\$0.33512	\$0.63669	\$0.97181	175
2010	180	\$0.33512	\$0.65579	\$0.99091	178
2011	180	\$0.33512	\$0.67546	\$1.01058	182
2012	180	\$0.33512	\$0.69573	\$1.03085	186
2013	180	\$0.33512	\$0.71660	\$1.05172	189
2014	180	\$0.33512	\$0.73810	\$1.07322	193
2015	180	\$0.33512	\$0.76024	\$1.09536	197
2016	180	\$0.33512	\$0.78305	\$1.11817	201
2017	180	\$0.33512	\$0.80654	\$1.14166	205
2018	180	\$0.33512	\$0.83074	\$1.16586	210
2019	180	\$0.33512	\$0.85566	\$1.19078	214

Table 2

Furnace

1	2	3	4	4'2
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio * Annual Cust. Chg
2000	8.00	96.00	40.55%	\$39
2001	8.00	96.00	40.55%	\$39
2002	8.00	96.00	40.55%	\$39
2003	8.00	96.00	40.55%	\$39
2004	8.00	96.00	40.55%	\$39
2005	8.00	96.00	40.55%	\$39
2006	8.00	96.00	40.55%	\$39
2007	8.00	96.00	40.55%	\$39
2008	8.00	96.00	40.55%	\$39
2009	8.00	96.00	40.55%	\$39
2010	8.00	96.00	40.55%	\$39
2011	8.00	96.00	40.55%	\$39
2012	8.00	96.00	40.55%	\$39
2013	8.00	96.00	40.55%	\$39
2014	8.00	96.00	40.55%	\$39
2015	8.00	96.00	40.55%	\$39
2016	8.00	96.00	40.55%	\$39
2017	8.00	96.00	40.55%	\$39
2018	8.00	96.00	40.55%	\$39
2019	8.00	96.00	40.55%	\$39

Table 4

Furnace

1	2	3	4	5	6	7	8	8'7'8-3'8
Year	Adm. Cost	Annual Adm. Cost	Development Man	Supply Man	Man Cost	O & M %	Ratio Therms To Total Consumed	New Customer Adm. & Man O&M
2000	5	60	293	0	293	7.83	40.55%	34
2001	5	62	283	0	283	7.83	40.55%	34
2002	5	64	273	0	273	7.83	40.55%	35
2003	5	66	263	0	263	7.83	40.55%	35
2004	6	68	253	0	253	7.83	40.55%	36
2005	6	70	243	0	243	7.83	40.55%	36
2006	6	72	233	0	233	7.83	40.55%	37
2007	6	74	223	0	223	7.83	40.55%	37
2008	6	76	213	0	213	7.83	40.55%	38
2009	7	78	203	0	203	7.83	40.55%	38
2010	7	81	193	0	193	7.83	40.55%	38
2011	7	83	183	0	183	7.83	40.55%	38
2012	7	86	173	0	173	7.83	40.55%	40
2013	7	88	163	0	163	7.83	40.55%	41
2014	8	91	153	0	153	7.83	40.55%	42
2015	8	93	143	0	143	7.83	40.55%	42
2016	8	96	133	0	133	7.83	40.55%	43
2017	8	99	123	0	123	7.83	40.55%	44
2018	8	102	113	0	113	7.83	40.55%	45
2019	8	105	104	0	104	7.83	40.55%	46

Table 3

Furnace

1	2	3	4	5	6	7	8	7'8'8
Year	Supply Man	Development Man	Service Line	Meter	Avg Cost of Debt	Customer Cost	Ratio of Therms Consumed To Total	Carrying Chg Man & Sec
2000	0	293	620	114	4.71%	1027	40.55%	\$20
2001	0	283	598	110	4.71%	891	40.55%	\$19
2002	0	273	578	105	4.71%	854	40.55%	\$18
2003	0	263	554	100	4.71%	817	40.55%	\$18
2004	0	253	532	95	4.71%	880	40.55%	\$17
2005	0	243	510	90	4.71%	843	40.55%	\$16
2006	0	233	488	85	4.71%	806	40.55%	\$15
2007	0	223	466	80	4.71%	769	40.55%	\$15
2008	0	213	444	75	4.71%	732	40.55%	\$14
2009	0	203	422	70	4.71%	695	40.55%	\$13
2010	0	193	400	65	4.71%	658	40.55%	\$13
2011	0	183	378	60	4.71%	621	40.55%	\$12
2012	0	173	356	55	4.71%	584	40.55%	\$11
2013	0	163	334	50	4.71%	547	40.55%	\$10
2014	0	153	312	45	4.71%	510	40.55%	\$10
2015	0	143	290	40	4.71%	473	40.55%	\$9
2016	0	133	268	35	4.71%	436	40.55%	\$8
2017	0	123	246	30	4.71%	399	40.55%	\$8
2018	0	113	224	25	4.71%	362	40.55%	\$7
2019	0	104	202	9	4.71%	315	40.55%	\$6

Table 5

Furnace

1	2	3	4	5	6	7	137
Year	Therms	Water Therms	Summer Therms	Commodity Gas Supply Cost	Treasury Capacity Peaking & Bal. Cost	Water Multiple	Gas Supply Cost
2000	180	180	0	0.4887	0.0000	1.00	\$80
2001	180	180	0	0.5137	0.0000	1.00	\$82
2002	180	180	0	0.5291	0.0000	1.00	\$85
2003	180	180	0	0.5448	0.0000	1.00	\$88
2004	180	180	0	0.5613	0.0000	1.00	\$101
2005	180	180	0	0.5781	0.0000	1.00	\$104
2006	180	180	0	0.5955	0.0000	1.00	\$107
2007	180	180	0	0.6133	0.0000	1.00	\$110
2008	180	180	0	0.6317	0.0000	1.00	\$114
2009	180	180	0	0.6507	0.0000	1.00	\$117
2010	180	180	0	0.6702	0.0000	1.00	\$121
2011	180	180	0	0.6903	0.0000	1.00	\$124
2012	180	180	0	0.7110	0.0000	1.00	\$128
2013	180	180	0	0.7324	0.0000	1.00	\$132
2014	180	180	0	0.7543	0.0000	1.00	\$136
2015	180	180	0	0.7770	0.0000	1.00	\$140
2016	180	180	0	0.8003	0.0000	1.00	\$144
2017	180	180	0	0.8243	0.0000	1.00	\$148
2018	180	180	0	0.8490	0.0000	1.00	\$153
2019	180	180	0	0.8745	0.0000	1.00	\$157



### Rate Impact Measure Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Full House Residential New Construction Program Gas Rate Number Electric Rate Number

Gas Measure:	Dryer New Customer, New Dwelling New Main	Alternate Option:	Dryer
		All Fuel Types:	Electric
Allowance:	\$85		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>\$0</b>

#### II. Operating Data

##### 1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	10.81%

15. Average Life	19
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#### III. Common Gas & Electric Data

1. Discount Rate	8.77%
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#### IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$1,027</b>

5. Utility Allowance	\$85
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

#### V. Gas Supply Cost

1. Load Profile Type		Gas Supply Cost \$/Therm	
2. Commodity (Annual)			\$0.4987
3. Winter Multiplier			1.00
4. Summer Multiplier			1.00
5. Transportation, Capacity, Peaking and Balancing Cost			0.00000

#### System Shrinkage

#### VI. Therms Conserved

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual Gas Therms	0.0	0.0

#### VII. Therms Displaced

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

#### VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

### Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therms Table 1	Gas Customer Charge Table 2	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter Table 3	New Customer Admin. & Facilities O&M Table 4	Gas Supply Cost Table 5	Program & Allowance Cost	Dryer Total Columns 6 thru 9
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
2000	40	10	50	5	9	24	85	123
2001	40	10	50	5	9	25		39
2002	41	10	51	5	9	25		39
2003	42	10	52	5	9	26		40
2004	42	10	52	4	9	27		41
2005	43	10	53	4	10	28		42
2006	44	10	54	4	10	29		42
2007	45	10	55	4	10	29		43
2008	46	10	56	4	10	30		44
2009	47	10	57	4	10	31		45
2010	48	10	58	3	10	32		46
2011	49	10	59	3	11	33		47
2012	49	10	59	3	11	34		48
2013	50	10	60	3	11	35		49
2014	52	10	62	3	11	36		50
2015	53	10	63	2	11	37		51
2016	54	10	64	2	12	38		52
2017	55	10	65	2	12	40		53
2018	56	10	66	2	12	41		55
2019	57	10	67	2	12	42		56

Present Value  
of Benefits \$516

\$483

Benefit/Cost Ratio	1.07
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Table 1

Dryw

1	2	3	4	5	5'2
Year	Therms	Base Rate	PGA Rate	Total Rate	Total Rate
2000	48	\$0.33512	\$0.48797	\$0.82309	\$40
2001	48	\$0.33512	\$0.50261	\$0.83773	\$40
2002	48	\$0.33512	\$0.51769	\$0.85281	\$41
2003	48	\$0.33512	\$0.53322	\$0.86834	\$42
2004	48	\$0.33512	\$0.54821	\$0.88433	\$42
2005	48	\$0.33512	\$0.56569	\$0.90081	\$43
2006	48	\$0.33512	\$0.58266	\$0.91778	\$44
2007	48	\$0.33512	\$0.60014	\$0.93526	\$45
2008	48	\$0.33512	\$0.61815	\$0.95327	\$46
2009	48	\$0.33512	\$0.63669	\$0.97181	\$47
2010	48	\$0.33512	\$0.65579	\$0.99091	\$48
2011	48	\$0.33512	\$0.67546	\$1.01058	\$49
2012	48	\$0.33512	\$0.69573	\$1.03085	\$49
2013	48	\$0.33512	\$0.71660	\$1.05172	\$50
2014	48	\$0.33512	\$0.73810	\$1.07322	\$52
2015	48	\$0.33512	\$0.76024	\$1.09536	\$53
2016	48	\$0.33512	\$0.78305	\$1.11817	\$54
2017	48	\$0.33512	\$0.80654	\$1.14166	\$55
2018	48	\$0.33512	\$0.83074	\$1.16586	\$56
2019	48	\$0.33512	\$0.85566	\$1.19078	\$57

Table 2

Dryw

1	2	3	4	4'3
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio Annual Cust. Chg
2000	8.00	96.00	10.81%	\$10
2001	8.00	96.00	10.81%	\$10
2002	8.00	96.00	10.81%	\$10
2003	8.00	96.00	10.81%	\$10
2004	8.00	96.00	10.81%	\$10
2005	8.00	96.00	10.81%	\$10
2006	8.00	96.00	10.81%	\$10
2007	8.00	96.00	10.81%	\$10
2008	8.00	96.00	10.81%	\$10
2009	8.00	96.00	10.81%	\$10
2010	8.00	96.00	10.81%	\$10
2011	8.00	96.00	10.81%	\$10
2012	8.00	96.00	10.81%	\$10
2013	8.00	96.00	10.81%	\$10
2014	8.00	96.00	10.81%	\$10
2015	8.00	96.00	10.81%	\$10
2016	8.00	96.00	10.81%	\$10
2017	8.00	96.00	10.81%	\$10
2018	8.00	96.00	10.81%	\$10
2019	8.00	96.00	10.81%	\$10

Table 4

Dryw

1	2	3	4	5	6	7	8	8'7'8-3'8
Year	Adm. Cost	Annual Adm. Cost	Development Main	Supply Mem	Mem Cost	O & M %	Ratio Therms To Total Consumed	New Customer Adm. & Main O&M
2000	5	60	283	0	283	7.83	10.81%	8
2001	5	62	283	0	283	7.83	10.81%	8
2002	5	64	273	0	273	7.83	10.81%	8
2003	5	66	283	0	283	7.83	10.81%	8
2004	6	68	253	0	253	7.83	10.81%	8
2005	6	70	243	0	243	7.83	10.81%	10
2006	6	72	233	0	233	7.83	10.81%	10
2007	6	74	223	0	223	7.83	10.81%	10
2008	6	76	213	0	213	7.83	10.81%	10
2009	7	78	203	0	203	7.83	10.81%	10
2010	7	81	193	0	193	7.83	10.81%	10
2011	7	83	183	0	183	7.83	10.81%	11
2012	7	86	173	0	173	7.83	10.81%	11
2013	7	88	163	0	163	7.83	10.81%	11
2014	8	91	153	0	153	7.83	10.81%	11
2015	8	93	143	0	143	7.83	10.81%	11
2016	8	96	133	0	133	7.83	10.81%	12
2017	8	99	123	0	123	7.83	10.81%	12
2018	8	102	113	0	113	7.83	10.81%	12
2019	8	105	104	0	104	7.83	10.81%	12

Table 3

Dryw

1	2	3	4	5	6	7	8	7'8'8
Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer Cost	Ratio of Therms Consumed To Total	Carrying Chg Main & Svc
2000	0	293	620	114	4.71%	1027	10.81%	\$5
2001	0	283	598	110	4.71%	891	10.81%	\$5
2002	0	273	578	105	4.71%	854	10.81%	\$5
2003	0	263	554	100	4.71%	817	10.81%	\$5
2004	0	253	532	95	4.71%	880	10.81%	\$4
2005	0	243	510	90	4.71%	843	10.81%	\$4
2006	0	233	488	85	4.71%	806	10.81%	\$4
2007	0	223	468	80	4.71%	769	10.81%	\$4
2008	0	213	444	75	4.71%	732	10.81%	\$4
2009	0	203	422	70	4.71%	695	10.81%	\$4
2010	0	193	400	65	4.71%	658	10.81%	\$3
2011	0	183	378	60	4.71%	621	10.81%	\$3
2012	0	173	358	55	4.71%	584	10.81%	\$3
2013	0	163	334	50	4.71%	547	10.81%	\$3
2014	0	153	312	45	4.71%	510	10.81%	\$3
2015	0	143	290	40	4.71%	473	10.81%	\$2
2016	0	133	268	35	4.71%	436	10.81%	\$2
2017	0	123	246	30	4.71%	399	10.81%	\$2
2018	0	113	224	25	4.71%	362	10.81%	\$2
2019	0	104	202	9	4.71%	315	10.81%	\$2

Table 5

Dryw

1	2	3	4	5	6	7	137
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transep. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
2000	48	24	24	0.4887	0.0000	1.00	\$24
2001	48	24	24	0.5137	0.0000	1.00	\$25
2002	48	24	24	0.5291	0.0000	1.00	\$25
2003	48	24	24	0.5448	0.0000	1.00	\$26
2004	48	24	24	0.5613	0.0000	1.00	\$27
2005	48	24	24	0.5781	0.0000	1.00	\$28
2006	48	24	24	0.5955	0.0000	1.00	\$29
2007	48	24	24	0.6133	0.0000	1.00	\$29
2008	48	24	24	0.6317	0.0000	1.00	\$30
2009	48	24	24	0.6507	0.0000	1.00	\$31
2010	48	24	24	0.6702	0.0000	1.00	\$32
2011	48	24	24	0.6903	0.0000	1.00	\$33
2012	48	24	24	0.7110	0.0000	1.00	\$34
2013	48	24	24	0.7324	0.0000	1.00	\$35
2014	48	24	24	0.7543	0.0000	1.00	\$36
2015	48	24	24	0.7770	0.0000	1.00	\$37
2016	48	24	24	0.8003	0.0000	1.00	\$38
2017	48	24	24	0.8243	0.0000	1.00	\$40
2018	48	24	24	0.8490	0.0000	1.00	\$41
2019	48	24	24	0.8745	0.0000	1.00	\$42

### Rate Impact Measure Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Full House Residential New Construction Program Gas Rate Number Electric Rate Number

Gas Measure:	Range New Customer, New Dwelling New Main	Alternate Option: All fuel type:	Range Electric
Allowance:	\$85	Electric Utility:	Florida Power & Light Co.
Gas Utility:	Florida Public Utilities Company		

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>\$0</b>

II. Operating Data

1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate	0.0	0.0	0.0
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	10.81%
15. Average Life	19

III. Common Gas & Electric Data

1. Discount Rate	8.77%
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IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$1,027</b>
5. Utility Allowance	\$85
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

V. Gas Supply Cost

1. Load Profile Type		Gas Supply Cost \$/Therm	
2. Commodity (Annual)			\$0.4987
3. Winter Multiplier			1.00
4. Summer Multiplier			1.00
5. Transportation, Capacity, Peaking and Balancing Cost			0.00000

System Shrinkage

VI. Therms Conserved

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual Gas Therms	0.0	0.0

VII. Therms Displaced

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

# Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therms	Gas Customer Charge	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Facilities O&M	Gas Supply Cost	Program & Allowance Cost	Range Total Columns 6 thru 9
	Table 1	Table 2		Table 3	Table 4	Table 5		
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
2000	40	10	50	\$5	9	24	85	123
2001	40	10	50	\$5	9	25		39
2002	41	10	51	\$5	9	25		40
2003	42	10	52	\$5	9	26		41
2004	42	10	52	\$4	9	27		40
2005	43	10	53	\$4	10	28		41
2006	44	10	54	\$4	10	29		42
2007	45	10	55	\$4	10	29		43
2008	46	10	56	\$4	10	30		44
2009	47	10	57	\$4	10	31		45
2010	48	10	58	\$3	10	32		46
2011	49	10	59	\$3	11	33		47
2012	49	10	59	\$3	11	34		48
2013	50	10	60	\$3	11	35		49
2014	52	10	62	\$3	11	36		50
2015	53	10	63	\$2	11	37		51
2016	54	10	64	\$2	12	38		52
2017	55	10	65	\$2	12	40		53
2018	56	10	66	\$2	12	41		55
2019	57	10	67	\$2	12	42		56

Present Value  
of Benefits      \$512

Present Value  
of Costs              \$482

Benefit/Cost Ratio	1.06
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Table 1

Range

1	2	3	4	5	5'2
Year	Therma	Base Rate	PGA Rate	Total Rate	Total Rate
2000	48	\$0.33512	\$0.48797	\$0.82309	\$40
2001	48	\$0.33512	\$0.50261	\$0.83773	\$40
2002	48	\$0.33512	\$0.51769	\$0.85281	\$41
2003	48	\$0.33512	\$0.53322	\$0.86834	\$42
2004	48	\$0.33512	\$0.54921	\$0.88433	\$42
2005	48	\$0.33512	\$0.56568	\$0.90081	\$43
2006	48	\$0.33512	\$0.58266	\$0.91778	\$44
2007	48	\$0.33512	\$0.60014	\$0.93526	\$45
2008	48	\$0.33512	\$0.61815	\$0.95327	\$46
2009	48	\$0.33512	\$0.63669	\$0.97181	\$47
2010	48	\$0.33512	\$0.65579	\$0.99091	\$48
2011	48	\$0.33512	\$0.67546	\$1.01058	\$49
2012	48	\$0.33512	\$0.69573	\$1.03085	\$49
2013	48	\$0.33512	\$0.71660	\$1.05172	\$50
2014	48	\$0.33512	\$0.73810	\$1.07322	\$52
2015	48	\$0.33512	\$0.76024	\$1.09538	\$53
2016	48	\$0.33512	\$0.78305	\$1.11817	\$54
2017	48	\$0.33512	\$0.80654	\$1.14186	\$55
2018	48	\$0.33512	\$0.83074	\$1.16586	\$56
2019	48	\$0.33512	\$0.85566	\$1.19078	\$57

Table 2

Range

1	2	3	4	4'3
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therma Consumed To Total	Ratio * Annual Cust. Chg
2000	8.00	96.00	10.81%	\$10
2001	8.00	96.00	10.81%	\$10
2002	8.00	96.00	10.81%	\$10
2003	8.00	96.00	10.81%	\$10
2004	8.00	96.00	10.81%	\$10
2005	8.00	96.00	10.81%	\$10
2006	8.00	96.00	10.81%	\$10
2007	8.00	96.00	10.81%	\$10
2008	8.00	96.00	10.81%	\$10
2009	8.00	96.00	10.81%	\$10
2010	8.00	96.00	10.81%	\$10
2011	8.00	96.00	10.81%	\$10
2012	8.00	96.00	10.81%	\$10
2013	8.00	96.00	10.81%	\$10
2014	8.00	96.00	10.81%	\$10
2015	8.00	96.00	10.81%	\$10
2016	8.00	96.00	10.81%	\$10
2017	8.00	96.00	10.81%	\$10
2018	8.00	96.00	10.81%	\$10
2019	8.00	96.00	10.81%	\$10

Table 4

Range

1	2	3	4	5	6	7	8' 0783' 7 - (3' 7)
Year	Adm. Cost	Annual Adm. Cost	Development Man	Supply Man	Customer Cost	Ratio Therma To Total Consumed	New Customer Adm. & Maint O&M
2000	5	80	283	0	283	10.81%	\$9
2001	5	82	283	0	283	10.81%	\$9
2002	5	84	273	0	273	10.81%	\$9
2003	5	86	283	0	283	10.81%	\$9
2004	6	88	253	0	253	10.81%	\$9
2005	6	70	243	0	243	10.81%	\$10
2006	6	72	233	0	233	10.81%	\$10
2007	6	74	223	0	223	10.81%	\$10
2008	6	76	213	0	213	10.81%	\$10
2009	7	78	203	0	203	10.81%	\$10
2010	7	81	193	0	193	10.81%	\$10
2011	7	83	183	0	183	10.81%	\$11
2012	7	86	173	0	173	10.81%	\$11
2013	7	88	163	0	163	10.81%	\$11
2014	8	91	153	0	153	10.81%	\$11
2015	8	93	143	0	143	10.81%	\$11
2016	8	96	133	0	133	10.81%	\$12
2017	8	99	124	0	124	10.81%	\$12
2018	8	102	114	0	114	10.81%	\$12
2019	8	105	105	0	105	10.81%	\$12

Table 3

Range

1	2	3	4	5	6	7	8	9' 8' 8
Year	Supply Man	Development Man	Service Line	Meter	Avg Cost of Debt	Customer Cost	Ratio Therma Cons.	Carrying Chg Maint & Sec
2000	0	293	620	114	4.71%	1,027	10.81%	\$5
2001	0	283	588	110	4.71%	981	10.81%	\$5
2002	0	273	578	105	4.71%	954	10.81%	\$5
2003	0	263	554	100	4.71%	917	10.81%	\$5
2004	0	253	532	95	4.71%	880	10.81%	\$4
2005	0	243	510	90	4.71%	843	10.81%	\$4
2006	0	233	488	85	4.71%	806	10.81%	\$4
2007	0	223	468	80	4.71%	769	10.81%	\$4
2008	0	213	444	75	4.71%	732	10.81%	\$4
2009	0	203	422	70	4.71%	695	10.81%	\$4
2010	0	193	400	65	4.71%	658	10.81%	\$3
2011	0	183	378	60	4.71%	621	10.81%	\$3
2012	0	173	356	55	4.71%	584	10.81%	\$3
2013	0	163	334	50	4.71%	547	10.81%	\$3
2014	0	153	312	45	4.71%	510	10.81%	\$3
2015	0	143	290	40	4.71%	473	10.81%	\$2
2016	0	133	268	35	4.71%	436	10.81%	\$2
2017	0	123	246	30	4.71%	399	10.81%	\$2
2018	0	113	224	25	4.71%	362	10.81%	\$2
2019	0	104	202	9	4.71%	315	10.81%	\$2

Table 5

Range

1	2	3	4	5	6	7	137
Year	Therma	Water Therma	Summer Therma	Commodity Gas Supply Cost	Transp. Capacity Peaking & Del. Cost	Water Multiplier	Gas Supply Cost
2000	48	24	24	0.4887	0.0000	1.00	\$24
2001	48	24	24	0.5137	0.0000	1.00	\$25
2002	48	24	24	0.5281	0.0000	1.00	\$25
2003	48	24	24	0.5448	0.0000	1.00	\$26
2004	48	24	24	0.5613	0.0000	1.00	\$27
2005	48	24	24	0.5781	0.0000	1.00	\$28
2006	48	24	24	0.5955	0.0000	1.00	\$29
2007	48	24	24	0.6133	0.0000	1.00	\$29
2008	48	24	24	0.6317	0.0000	1.00	\$30
2009	48	24	24	0.6507	0.0000	1.00	\$31
2010	48	24	24	0.6702	0.0000	1.00	\$32
2011	48	24	24	0.6903	0.0000	1.00	\$33
2012	48	24	24	0.7110	0.0000	1.00	\$34
2013	48	24	24	0.7324	0.0000	1.00	\$35
2014	48	24	24	0.7543	0.0000	1.00	\$36
2015	48	24	24	0.7770	0.0000	1.00	\$37
2016	48	24	24	0.8003	0.0000	1.00	\$38
2017	48	24	24	0.8243	0.0000	1.00	\$40
2018	48	24	24	0.8490	0.0000	1.00	\$41
2019	48	24	24	0.8745	0.0000	1.00	\$42

### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Full House Residential New Construction Program Gas Rate Number Electric Rate Number

Gas Measure:	Water Heater 40 gallon New Customer, New Dwelling, New Main	Alternate Option: AH Fan Type:	Electric: Heat Loss Water Heater 50 gallon Electric
Allowance:	\$300	Electric Utility:	Florida Power & Light Co.
Gas Utility:	Florida Public Utilities Company		

**I. Installed Cost Data**

	\$
1. Equipment	\$235
2. Installation	521
<b>Total Cust. Cost</b>	<b>\$756</b>
3. Utility Rebate	\$300
4. Other Rebate	

**II. Operating Data**

1. Energy Factor			
Therms Consumed	Winter	Summer	Total
2. Standard Rate	101.0	67.0	168.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>101.0</b>	<b>67.0</b>	<b>168.0</b>

4. Electric Consumption in KWH  
5. O&M (excluding energy) \$7

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	\$8.00

14. Ratio of Therms Consumed to Total 37.83%

15. Average Life 12

**III. Common Gas & Electric Data**

1. Discount Rate 8.77%

**IV. Installed Cost Data**

	\$
1. Equipment	\$247
2. Installation	190
<b>Total Cust. Cost</b>	<b>\$437</b>
3. Utility Allowance	\$0
4. Other Allowance	

**V. Energy Conserved Data**

	New	Existing
1. Energy Factor	0.88	0.88
2. Annual KWH	3,751	3,751
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0
	Winter	Summer

5. Diversified KW  
6. Billing KW  
7. O&M (excluding energy) \$9  
8. Monthly Utility Incentive \$0  
9. Average Life in Yrs 14  
10. Existing Remaining Life in Yrs 0

11. Electric Rate per KWH \$0.0728  
12. Electric Rate per KW, Winter \$0.0000  
13. Electric Rate per KW, Summer \$0.0000  
14. Electric Taxes & Fees 18.00%  
15. Customer Chg \$5.85

**VI. Therms Displaced**

1. Energy Factor 1.00

Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

# PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric	No. 2	Fuel	Oil	Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	Cost				Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	KWH	No. 2	Fuel	Oil	Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	Cost				Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	Cost				Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	Cost				Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	Cost				Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	Cost				Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
	Cost				Consumed	-Conserved	-Displaced	Gas Therms	Table 2	Table 1	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9	Table 10	Table 11	Table 12	Table 13		
2000	\$317	\$0	\$160	\$9	\$7	\$42	\$300	\$0	\$416	\$437	\$756	\$319											
2001	\$326	\$0	\$165	\$9	\$7	\$42	\$0	\$0	\$121	\$0	\$0	\$0											
2002	\$336	\$0	\$170	\$10	\$7	\$42	\$0	\$0	\$126	\$0	\$0	\$0											
2003	\$346	\$0	\$175	\$10	\$8	\$42	\$0	\$0	\$131	\$0	\$0	\$0											
2004	\$357	\$0	\$181	\$10	\$8	\$42	\$0	\$0	\$136	\$0	\$0	\$0											
2005	\$367	\$0	\$186	\$10	\$8	\$42	\$0	\$0	\$141	\$0	\$0	\$0											
2006	\$378	\$0	\$192	\$11	\$8	\$42	\$0	\$0	\$147	\$0	\$0	\$0											
2007	\$390	\$0	\$197	\$11	\$9	\$42	\$0	\$0	\$153	\$0	\$0	\$0											
2008	\$401	\$0	\$203	\$11	\$9	\$42	\$0	\$0	\$158	\$0	\$0	\$0											
2009	\$413	\$0	\$209	\$12	\$9	\$42	\$0	\$0	\$164	\$0	\$0	\$0											
2010	\$426	\$0	\$216	\$12	\$9	\$42	\$0	\$0	\$171	\$0	\$0	\$0											
2011	\$438	\$0	\$222	\$12	\$10	\$42	\$0	\$0	\$177	\$0	\$0	\$0											
2012	\$452	\$0	\$229	\$13	\$10	\$42	\$0	\$0	\$184	\$0	\$0	\$0											
2013	\$465	\$0	\$236	\$13	\$10	\$42	\$0	\$0	\$190	\$0	\$0	\$0											
2014	\$479	\$0	\$243	\$14	\$11	\$42	\$0	\$0	\$197	\$0	\$0	\$0											
2015	\$494	\$0	\$250	\$14	\$11	\$42	\$0	\$0	\$205	\$0	\$0	\$0											
2016	\$508	\$0	\$257	\$14	\$11	\$42	\$0	\$0	\$212	\$0	\$0	\$0											
2017	\$524	\$0	\$265	\$15	\$12	\$42	\$0	\$0	\$220	\$0	\$0	\$0											
2018	\$539	\$0	\$273	\$15	\$12	\$42	\$0	\$0	\$227	\$0	\$0	\$0											
2019	\$555	\$0	\$281	\$16	\$12	\$42	\$0	\$0	\$236	\$0	\$0	\$0											
											Present Value	\$1,578											
											Present Value		\$282										
											of Benefits		of Costs										
											Benefit/Cost	5.60	Ratio										

Docket No.

Exhibit A

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Year	Therm	Annual	Cost	Year	Therm	Annual	Cost
1	2	3	4	1	2	3	4
2000	\$0.8231	168	\$160	2000	\$0.8231	168	\$160
2001	\$0.8478	168	\$165	2001	\$0.8478	168	\$165
2002	\$0.8732	168	\$170	2002	\$0.8732	168	\$170
2003	\$0.8994	168	\$175	2003	\$0.8994	168	\$175
2004	\$0.9264	168	\$181	2004	\$0.9264	168	\$181
2005	\$0.9542	168	\$186	2005	\$0.9542	168	\$186
2006	\$0.9828	168	\$192	2006	\$0.9828	168	\$192
2007	\$1.0123	168	\$197	2007	\$1.0123	168	\$197
2008	\$1.0427	168	\$203	2008	\$1.0427	168	\$203
2009	\$1.0739	168	\$209	2009	\$1.0739	168	\$209
2010	\$1.1062	168	\$216	2010	\$1.1062	168	\$216
2011	\$1.1393	168	\$222	2011	\$1.1393	168	\$222
2012	\$1.1735	168	\$229	2012	\$1.1735	168	\$229
2013	\$1.2087	168	\$236	2013	\$1.2087	168	\$236
2014	\$1.2450	168	\$243	2014	\$1.2450	168	\$243
2015	\$1.2823	168	\$250	2015	\$1.2823	168	\$250
2016	\$1.3208	168	\$257	2016	\$1.3208	168	\$257
2017	\$1.3604	168	\$265	2017	\$1.3604	168	\$265
2018	\$1.4013	168	\$273	2018	\$1.4013	168	\$273
2019	\$1.4433	168	\$281	2019	\$1.4433	168	\$281

TABLE 2 Consumed-Displaced-Conserved - Therms

Year	KWH	Annual	Cost	Year	KWH	Annual	Cost
1	2	3	4	1	2	3	4
2000	\$0.0728	3,751	\$317	2000	\$0.0728	3,751	\$317
2001	\$0.0750	3,751	\$326	2001	\$0.0750	3,751	\$326
2002	\$0.0772	3,751	\$336	2002	\$0.0772	3,751	\$336
2003	\$0.0796	3,751	\$346	2003	\$0.0796	3,751	\$346
2004	\$0.0819	3,751	\$357	2004	\$0.0819	3,751	\$357
2005	\$0.0844	3,751	\$367	2005	\$0.0844	3,751	\$367
2006	\$0.0869	3,751	\$378	2006	\$0.0869	3,751	\$378
2007	\$0.0895	3,751	\$390	2007	\$0.0895	3,751	\$390
2008	\$0.0922	3,751	\$401	2008	\$0.0922	3,751	\$401
2009	\$0.0950	3,751	\$413	2009	\$0.0950	3,751	\$413
2010	\$0.0978	3,751	\$426	2010	\$0.0978	3,751	\$426
2011	\$0.1008	3,751	\$438	2011	\$0.1008	3,751	\$438
2012	\$0.1038	3,751	\$452	2012	\$0.1038	3,751	\$452
2013	\$0.1069	3,751	\$465	2013	\$0.1069	3,751	\$465
2014	\$0.1101	3,751	\$479	2014	\$0.1101	3,751	\$479
2015	\$0.1134	3,751	\$494	2015	\$0.1134	3,751	\$494
2016	\$0.1168	3,751	\$508	2016	\$0.1168	3,751	\$508
2017	\$0.1203	3,751	\$524	2017	\$0.1203	3,751	\$524
2018	\$0.1239	3,751	\$539	2018	\$0.1239	3,751	\$539
2019	\$0.1277	3,751	\$555	2019	\$0.1277	3,751	\$555

TABLE 1 Electric KW Cost WATER

Year	Monthly	Annual	Wtr Htr	Ratio Therms	Customer	Charge
1	2	3	4	5	6	7
2000	\$8.00	\$96.00	168	444	37.84%	\$42
2001	\$8.00	\$96.00	168	444	37.84%	\$42
2002	\$8.00	\$96.00	168	444	37.84%	\$42
2003	\$8.00	\$96.00	168	444	37.84%	\$42
2004	\$8.00	\$96.00	168	444	37.84%	\$42
2005	\$8.00	\$96.00	168	444	37.84%	\$42
2006	\$8.00	\$96.00	168	444	37.84%	\$42
2007	\$8.00	\$96.00	168	444	37.84%	\$42
2008	\$8.00	\$96.00	168	444	37.84%	\$42
2009	\$8.00	\$96.00	168	444	37.84%	\$42
2010	\$8.00	\$96.00	168	444	37.84%	\$42
2011	\$8.00	\$96.00	168	444	37.84%	\$42
2012	\$8.00	\$96.00	168	444	37.84%	\$42
2013	\$8.00	\$96.00	168	444	37.84%	\$42
2014	\$8.00	\$96.00	168	444	37.84%	\$42
2015	\$8.00	\$96.00	168	444	37.84%	\$42
2016	\$8.00	\$96.00	168	444	37.84%	\$42
2017	\$8.00	\$96.00	168	444	37.84%	\$42
2018	\$8.00	\$96.00	168	444	37.84%	\$42
2019	\$8.00	\$96.00	168	444	37.84%	\$42

TABLE 3 Gas Customer Charge

### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Full House Residential New Construction Program

Gas Rate Number		Electric Rate Number	
Gas Measure:	Florida New Customer: New Dwelling, New Main	Alternate Option:	Electric: Florida State Fuels Electric
Allowance:	\$300	Electric Utility:	Florida Power & Light Co.
Gas Utility:	Florida Public Utilities Company		

I. Installed Cost Data

	\$
1. Equipment	\$1,549
2. Installation	629
<b>Total Cust. Cost</b>	<b>\$2,178</b>
3. Utility Rebate	\$300
4. Other Rebate	

II. Operating Data

1. Energy Factor			
Therms Consumed	Winter	Summer	Total
2. Standard Rate	180.0	0.0	180.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>180.0</b>	<b>0.0</b>	<b>180.0</b>

4. Electric Consumption in KWH  
5. O&M (excluding energy) \$14

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	18.00%
13. Customer Chg	\$8.00

14. Ratio of Therms Consumed to Total 40.55%

15. Average Life 18

III. Common Gas & Electric Data

1. Discount Rate 8.77%

IV. Installed Cost Data

	\$
1. Equipment	\$578
2. Installation	654
<b>Total Cust. Cost</b>	<b>\$1,230</b>
3. Utility Allowance	\$0
4. Other Allowance	

V. Energy Conserved Data

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual KWH	4,082	4,082
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0

	Winter	Summer
5. Diversified KW		
6. Billing KW		
7. O&M (excluding energy)		\$9
8. Monthly Utility Incentive		\$0
9. Average Life in Yrs		18
10. Existing Remaining Life in Yrs		0

11. Electric Rate per KWH	\$0.0728
12. Electric Rate per KW, Winter	\$0.0000
13. Electric Rate per KW, Summer	\$0.0000
14. Electric Taxes & Fees	18.00%
15. Customer Chg	\$5.65

VI. Therms Displaced

1. Energy Factor	1.00	
Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

# PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	\$345	\$0	\$172	\$9	\$14	\$45	\$300	\$0	\$423	\$1,159	\$2,178	\$1,019
2001	\$355	\$0	\$177	\$9	\$14	\$45	0	0	\$128	0	0	0
2002	\$366	\$0	\$182	\$10	\$15	\$45	0	0	\$133	0	0	0
2003	\$377	\$0	\$188	\$10	\$15	\$45	0	0	\$138	0	0	0
2004	\$388	\$0	\$193	\$10	\$16	\$45	0	0	\$144	0	0	0
2005	\$400	\$0	\$199	\$10	\$16	\$45	0	0	\$149	0	0	0
2006	\$412	\$0	\$205	\$11	\$17	\$45	0	0	\$155	0	0	0
2007	\$424	\$0	\$211	\$11	\$17	\$45	0	0	\$161	0	0	0
2008	\$437	\$0	\$218	\$11	\$18	\$45	0	0	\$167	0	0	0
2009	\$450	\$0	\$224	\$12	\$18	\$45	0	0	\$174	0	0	0
2010	\$463	\$0	\$231	\$12	\$19	\$45	0	0	\$180	0	0	0
2011	\$477	\$0	\$238	\$12	\$19	\$45	0	0	\$187	0	0	0
2012	\$491	\$0	\$245	\$13	\$20	\$45	0	0	\$194	0	0	0
2013	\$506	\$0	\$252	\$13	\$21	\$45	0	0	\$201	0	0	0
2014	\$521	\$0	\$260	\$14	\$21	\$45	0	0	\$209	0	0	0
2015	\$537	\$0	\$268	\$14	\$22	\$45	0	0	\$216	0	0	0
2016	\$553	\$0	\$276	\$14	\$22	\$45	0	0	\$224	0	0	0
2017	\$570	\$0	\$284	\$15	\$23	\$45	0	0	\$232	0	0	0
2018	\$587	\$0	\$293	\$15	\$24	\$45	0	0	\$241	0	0	0
2019	\$604	\$0	\$301	\$16	\$25	\$45	0	0	\$249	0	0	0

Present Value  
of Benefits

\$1,788

Present Value  
of Costs

\$937

Benefit/Cost Ratio	1.91
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TABLE 1 Electric KW Cost HEAT

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	\$0.0728	4,082	16.00%	\$345
2001	\$0.0750	4,082	16.00%	\$355
2002	\$0.0772	4,082	16.00%	\$366
2003	\$0.0796	4,082	16.00%	\$377
2004	\$0.0819	4,082	16.00%	\$388
2005	\$0.0844	4,082	16.00%	\$400
2006	\$0.0869	4,082	16.00%	\$412
2007	\$0.0895	4,082	16.00%	\$424
2008	\$0.0922	4,082	16.00%	\$437
2009	\$0.0950	4,082	16.00%	\$450
2010	\$0.0978	4,082	16.00%	\$463
2011	\$0.1008	4,082	16.00%	\$477
2012	\$0.1038	4,082	16.00%	\$491
2013	\$0.1069	4,082	16.00%	\$506
2014	\$0.1101	4,082	16.00%	\$521
2015	\$0.1134	4,082	16.00%	\$537
2016	\$0.1168	4,082	16.00%	\$553
2017	\$0.1203	4,082	16.00%	\$570
2018	\$0.1239	4,082	16.00%	\$587
2019	\$0.1277	4,082	16.00%	\$604

TABLE 3 Gas Customer Charge

1	2	3	4	5	6	3*6+16.0%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Furnace Annual Therms	Total Annual Therms	Ratio Therms Consumerd to Total	Gas Customer Charge
2000	\$8.00	\$96.00	180	444	40.55%	\$45
2001	\$8.00	\$96.00	180	444	40.55%	\$45
2002	\$8.00	\$96.00	180	444	40.55%	\$45
2003	\$8.00	\$96.00	180	444	40.55%	\$45
2004	\$8.00	\$96.00	180	444	40.55%	\$45
2005	\$8.00	\$96.00	180	444	40.55%	\$45
2006	\$8.00	\$96.00	180	444	40.55%	\$45
2007	\$8.00	\$96.00	180	444	40.55%	\$45
2008	\$8.00	\$96.00	180	444	40.55%	\$45
2009	\$8.00	\$96.00	180	444	40.55%	\$45
2010	\$8.00	\$96.00	180	444	40.55%	\$45
2011	\$8.00	\$96.00	180	444	40.55%	\$45
2012	\$8.00	\$96.00	180	444	40.55%	\$45
2013	\$8.00	\$96.00	180	444	40.55%	\$45
2014	\$8.00	\$96.00	180	444	40.55%	\$45
2015	\$8.00	\$96.00	180	444	40.55%	\$45
2016	\$8.00	\$96.00	180	444	40.55%	\$45
2017	\$8.00	\$96.00	180	444	40.55%	\$45
2018	\$8.00	\$96.00	180	444	40.55%	\$45
2019	\$8.00	\$96.00	180	444	40.55%	\$45

TABLE 2 Consumed-Displaced-Conserved - Therms

1	2	3	4	3*2*4
Year	Therm Cost	Annual Therms	Tax Fees	Gas Cost
2000	\$0.8231	180	16.00%	\$172
2001	\$0.8478	180	16.00%	\$177
2002	\$0.8732	180	16.00%	\$182
2003	\$0.8994	180	16.00%	\$188
2004	\$0.9264	180	16.00%	\$193
2005	\$0.9542	180	16.00%	\$199
2006	\$0.9828	180	16.00%	\$205
2007	\$1.0123	180	16.00%	\$211
2008	\$1.0427	180	16.00%	\$218
2009	\$1.0739	180	16.00%	\$224
2010	\$1.1062	180	16.00%	\$231
2011	\$1.1393	180	16.00%	\$238
2012	\$1.1735	180	16.00%	\$245
2013	\$1.2087	180	16.00%	\$252
2014	\$1.2450	180	16.00%	\$260
2015	\$1.2823	180	16.00%	\$268
2016	\$1.3208	180	16.00%	\$276
2017	\$1.3604	180	16.00%	\$284
2018	\$1.4013	180	16.00%	\$293
2019	\$1.4433	180	16.00%	\$301

### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Full House Residential New Construction Program

Gas Rate Number		Electric Rate Number	
Gas Meter:	Dryer New Customer, New Dwelling, New Main	Alternative Option:	Dryer
		Air Fuel Type:	Electric
Appliance:	\$85		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$425
2. Installation	202
<b>Total Cust. Cost</b>	<b>\$627</b>
3. Utility Rebate	\$85
4. Other Rebate	

II. Operating Data

1. Energy Factor			
Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

4. Electric Consumption in KWH	
5. O&M (excluding energy)	\$10

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg	\$8.00
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14. Ratio of Therms Consumed to Total	10.81%
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15. Average Life	13
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III. Common Gas & Electric Data

1. Discount Rate	8.77%
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IV. Installed Cost Data

	\$
1. Equipment	\$375
2. Installation	113
<b>Total Cust. Cost</b>	<b>\$488</b>
3. Utility Allowance	\$0
4. Other Allowance	

V. Energy Conserved Data

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual KWH	1,404	1,404
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0

	Winter	Summer
5. Diversified KW		
6. Billing KW		

7. O&M (excluding energy)	\$14
8. Monthly Utility Incentive	\$0
9. Average Life in Yrs	13
10. Existing Remaining Life in Yrs	0

11. Electric Rate per KWH	\$0.0728
12. Electric Rate per KW, Winter	\$0.0000
13. Electric Rate per KW, Summer	\$0.0000
14. Electric Taxes & Fees	16.00%
15. Customer Chg	\$5.65

VI. Therms Displaced

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

# PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
	2	3	4	5	6	7	8	9	10	11	12	13
2000	\$119	\$0	\$46	\$14	\$10	\$12	\$85	\$0	\$150	\$488	\$627	\$139
2001	\$122	\$0	\$47	\$14	\$10	\$12	0	0	\$67	0	0	0
2002	\$126	\$0	\$49	\$15	\$11	\$12	0	0	\$69	0	0	0
2003	\$130	\$0	\$50	\$15	\$11	\$12	0	0	\$72	0	0	0
2004	\$133	\$0	\$52	\$16	\$11	\$12	0	0	\$74	0	0	0
2005	\$137	\$0	\$53	\$16	\$12	\$12	0	0	\$77	0	0	0
2006	\$142	\$0	\$55	\$17	\$12	\$12	0	0	\$80	0	0	0
2007	\$146	\$0	\$56	\$17	\$12	\$12	0	0	\$82	0	0	0
2008	\$150	\$0	\$58	\$18	\$13	\$12	0	0	\$85	0	0	0
2009	\$155	\$0	\$60	\$18	\$13	\$12	0	0	\$88	0	0	0
2010	\$159	\$0	\$62	\$19	\$13	\$12	0	0	\$91	0	0	0
2011	\$164	\$0	\$63	\$19	\$14	\$12	0	0	\$94	0	0	0
2012	\$169	\$0	\$65	\$20	\$14	\$12	0	0	\$97	0	0	0
2013	\$174	\$0	\$67	\$21	\$15	\$12	0	0	\$101	0	0	0
2014	\$179	\$0	\$69	\$21	\$15	\$12	0	0	\$104	0	0	0
2015	\$185	\$0	\$71	\$22	\$16	\$12	0	0	\$108	0	0	0
2016	\$190	\$0	\$74	\$22	\$16	\$12	0	0	\$111	0	0	0
2017	\$196	\$0	\$76	\$23	\$17	\$12	0	0	\$115	0	0	0
2018	\$202	\$0	\$78	\$24	\$17	\$12	0	0	\$119	0	0	0
2019	\$208	\$0	\$80	\$25	\$18	\$12	0	0	\$123	0	0	0

Present Value  
of Benefits

\$849

Present Value  
of Costs

\$128

Benefit/Cost Ratio	6.65
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TABLE 1 Electric KW Cost DRYER

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	\$0.0728	1,404	16.00%	\$119
2001	\$0.0750	1,404	16.00%	\$122
2002	\$0.0772	1,404	16.00%	\$126
2003	\$0.0796	1,404	16.00%	\$130
2004	\$0.0819	1,404	16.00%	\$133
2005	\$0.0844	1,404	16.00%	\$137
2006	\$0.0869	1,404	16.00%	\$142
2007	\$0.0895	1,404	16.00%	\$146
2008	\$0.0922	1,404	16.00%	\$150
2009	\$0.0950	1,404	16.00%	\$155
2010	\$0.0978	1,404	16.00%	\$159
2011	\$0.1008	1,404	16.00%	\$164
2012	\$0.1038	1,404	16.00%	\$169
2013	\$0.1069	1,404	16.00%	\$174
2014	\$0.1101	1,404	16.00%	\$179
2015	\$0.1134	1,404	16.00%	\$185
2016	\$0.1168	1,404	16.00%	\$190
2017	\$0.1203	1,404	16.00%	\$196
2018	\$0.1239	1,404	16.00%	\$202
2019	\$0.1277	1,404	16.00%	\$208

TABLE 2 Consumed-Displaced-Conserved - Therms

1	2	3	4	3*2*4
Year	Therm Cost	Annual Therms	Tax Fees	Gas Cost
2000	\$0.8231	48	16.00%	\$46
2001	\$0.8478	48	16.00%	\$47
2002	\$0.8732	48	16.00%	\$49
2003	\$0.8994	48	16.00%	\$50
2004	\$0.9264	48	16.00%	\$52
2005	\$0.9542	48	16.00%	\$53
2006	\$0.9828	48	16.00%	\$55
2007	\$1.0123	48	16.00%	\$56
2008	\$1.0427	48	16.00%	\$58
2009	\$1.0739	48	16.00%	\$60
2010	\$1.1062	48	16.00%	\$62
2011	\$1.1393	48	16.00%	\$63
2012	\$1.1735	48	16.00%	\$65
2013	\$1.2087	48	16.00%	\$67
2014	\$1.2450	48	16.00%	\$69
2015	\$1.2823	48	16.00%	\$71
2016	\$1.3208	48	16.00%	\$74
2017	\$1.3604	48	16.00%	\$76
2018	\$1.4013	48	16.00%	\$78
2019	\$1.4433	48	16.00%	\$80

TABLE 3 Gas Customer Charge

1	2	3	4	5	6	3*6*16.00%
Year	Cust. Chrg	Annual Cust. Chrg	Dryer Annual Therms	Total Annual Therms	Ratio Therms Consumed to Total	Gas Customer Charge
2000	\$8.00	\$96.00	48	444	10.81%	12
2001	\$8.00	\$96.00	48	444	10.81%	12
2002	\$8.00	\$96.00	48	444	10.81%	12
2003	\$8.00	\$96.00	48	444	10.81%	12
2004	\$8.00	\$96.00	48	444	10.81%	12
2005	\$8.00	\$96.00	48	444	10.81%	12
2006	\$8.00	\$96.00	48	444	10.81%	12
2007	\$8.00	\$96.00	48	444	10.81%	12
2008	\$8.00	\$96.00	48	444	10.81%	12
2009	\$8.00	\$96.00	48	444	10.81%	12
2010	\$8.00	\$96.00	48	444	10.81%	12
2011	\$8.00	\$96.00	48	444	10.81%	12
2012	\$8.00	\$96.00	48	444	10.81%	12
2013	\$8.00	\$96.00	48	444	10.81%	12
2014	\$8.00	\$96.00	48	444	10.81%	12
2015	\$8.00	\$96.00	48	444	10.81%	12
2016	\$8.00	\$96.00	48	444	10.81%	12
2017	\$8.00	\$96.00	48	444	10.81%	12
2018	\$8.00	\$96.00	48	444	10.81%	12
2019	\$8.00	\$96.00	48	444	10.81%	12

### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Full House Residential New Construction Program

Gas Rate Number		Electric Rate Number	
Gas Measure:	Range New Customer, New Dwelling, New Main	Alternate Option:	Range Electric
Allowance:	\$85	Electric Utility:	Florida Power & Light Co.
Gas Utility:	Florida Public Utilities Co.		

I. Installed Cost Data

	\$
1. Equipment	\$840
2. Installation	196
<b>Total Cust. Cost</b>	<b>\$836</b>
3. Utility Rebate	\$85
4. Other Rebate	

II. Operating Data

1. Energy Factor			
Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

4. Electric Consumption in KWH	
5. O&M (excluding energy)	\$8

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	18.00%
13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	10.81%
15. Average Life	19

III. Common Gas & Electric Data

1. Discount Rate	8.77%
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IV. Installed Cost Data

	\$
1. Equipment	\$530
2. Installation	113
<b>Total Cust. Cost</b>	<b>\$643</b>
3. Utility Allowance	\$0
4. Other Allowance	

V. Energy Conserved Data

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual KWH	1,404	1,404
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0

	Winter	Summer
5. Diversified KW		
6. Billing KW		
7. O&M (excluding energy)		\$12
8. Monthly Utility Incentive		\$0
9. Average Life in Yrs		19
10. Existing Remaining Life in Yrs		0

11. Electric Rate per KWH	\$0.0728
12. Electric Rate per KW, Winter	\$0.0000
13. Electric Rate per KW, Summer	\$0.0000
14. Electric Taxes & Fees	18.00%
15. Customer Chg	\$5.85

VI. Therms Displaced

1. Energy Factor	1.00	
Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0.0</b>	<b>0.0</b>



# PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2000	\$119	\$0	\$46	\$12	\$8	\$12	\$85	\$0	\$150	\$643	\$836	\$193	
2001	\$122	\$0	\$47	\$12	\$8	\$12	0	0	\$67	0	0	0	
2002	\$126	\$0	\$49	\$13	\$8	\$12	0	0	\$69	0	0	0	
2003	\$130	\$0	\$50	\$13	\$9	\$12	0	0	\$72	0	0	0	
2004	\$133	\$0	\$52	\$14	\$9	\$12	0	0	\$74	0	0	0	
2005	\$137	\$0	\$53	\$14	\$9	\$12	0	0	\$77	0	0	0	
2006	\$142	\$0	\$55	\$14	\$10	\$12	0	0	\$80	0	0	0	
2007	\$146	\$0	\$56	\$15	\$10	\$12	0	0	\$82	0	0	0	
2008	\$150	\$0	\$58	\$15	\$10	\$12	0	0	\$85	0	0	0	
2009	\$155	\$0	\$60	\$16	\$10	\$12	0	0	\$88	0	0	0	
2010	\$159	\$0	\$62	\$16	\$11	\$12	0	0	\$91	0	0	0	
2011	\$164	\$0	\$63	\$17	\$11	\$12	0	0	\$94	0	0	0	
2012	\$169	\$0	\$65	\$17	\$11	\$12	0	0	\$97	0	0	0	
2013	\$174	\$0	\$67	\$18	\$12	\$12	0	0	\$101	0	0	0	
2014	\$179	\$0	\$69	\$18	\$12	\$12	0	0	\$104	0	0	0	
2015	\$185	\$0	\$71	\$19	\$12	\$12	0	0	\$108	0	0	0	
2016	\$190	\$0	\$74	\$19	\$13	\$12	0	0	\$111	0	0	0	
2017	\$196	\$0	\$76	\$20	\$13	\$12	0	0	\$115	0	0	0	
2018	\$202	\$0	\$78	\$20	\$14	\$12	0	0	\$119	0	0	0	
2019	\$208	\$0	\$80	\$21	\$14	\$12	0	0	\$123	0	0	0	

Present Value  
of Benefits \$849

Present Value  
of Costs \$177

Benefit/Cost Ratio	4.79
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**TABLE 1** Electric KW Cost RANGE

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	\$0.0728	1,404	16.00%	\$119
2001	\$0.0750	1,404	16.00%	\$122
2002	\$0.0772	1,404	16.00%	\$126
2003	\$0.0796	1,404	16.00%	\$130
2004	\$0.0819	1,404	16.00%	\$133
2005	\$0.0844	1,404	16.00%	\$137
2006	\$0.0869	1,404	16.00%	\$142
2007	\$0.0895	1,404	16.00%	\$146
2008	\$0.0922	1,404	16.00%	\$150
2009	\$0.0950	1,404	16.00%	\$155
2010	\$0.0978	1,404	16.00%	\$159
2011	\$0.1008	1,404	16.00%	\$164
2012	\$0.1038	1,404	16.00%	\$169
2013	\$0.1069	1,404	16.00%	\$174
2014	\$0.1101	1,404	16.00%	\$179
2015	\$0.1134	1,404	16.00%	\$185
2016	\$0.1168	1,404	16.00%	\$190
2017	\$0.1203	1,404	16.00%	\$196
2018	\$0.1239	1,404	16.00%	\$202
2019	\$0.1277	1,404	16.00%	\$208

**TABLE 3** Gas Customer Charge

1	2	3	4	5	6	3*6+16.00%
Year	Cust. Chrg	Annual Cust. Chrg	Range Annual Therms	Total Annual Therms	Ratio Therms Consumerd to Total	Gas Customer Charge
2000	\$8.00	\$96.00	48	444	10.81%	12
2001	\$8.00	\$96.00	48	444	10.81%	12
2002	\$8.00	\$96.00	48	444	10.81%	12
2003	\$8.00	\$96.00	48	444	10.81%	12
2004	\$8.00	\$96.00	48	444	10.81%	12
2005	\$8.00	\$96.00	48	444	10.81%	12
2006	\$8.00	\$96.00	48	444	10.81%	12
2007	\$8.00	\$96.00	48	444	10.81%	12
2008	\$8.00	\$96.00	48	444	10.81%	12
2009	\$8.00	\$96.00	48	444	10.81%	12
2010	\$8.00	\$96.00	48	444	10.81%	12
2011	\$8.00	\$96.00	48	444	10.81%	12
2012	\$8.00	\$96.00	48	444	10.81%	12
2013	\$8.00	\$96.00	48	444	10.81%	12
2014	\$8.00	\$96.00	48	444	10.81%	12
2015	\$8.00	\$96.00	48	444	10.81%	12
2016	\$8.00	\$96.00	48	444	10.81%	12
2017	\$8.00	\$96.00	48	444	10.81%	12
2018	\$8.00	\$96.00	48	444	10.81%	12
2019	\$8.00	\$96.00	48	444	10.81%	12

**TABLE 2** Consumed-Displaced-Conserved - Therms

1	2	3	4	3*2*4
Year	Therm Cost	Annual Therms	Tax Fees	Gas Cost
2000	\$0.8231	48	16.00%	\$46
2001	\$0.8478	48	16.00%	\$47
2002	\$0.8732	48	16.00%	\$49
2003	\$0.8994	48	16.00%	\$50
2004	\$0.9264	48	16.00%	\$52
2005	\$0.9542	48	16.00%	\$53
2006	\$0.9828	48	16.00%	\$55
2007	\$1.0123	48	16.00%	\$56
2008	\$1.0427	48	16.00%	\$58
2009	\$1.0739	48	16.00%	\$60
2010	\$1.1062	48	16.00%	\$62
2011	\$1.1393	48	16.00%	\$63
2012	\$1.1735	48	16.00%	\$65
2013	\$1.2087	48	16.00%	\$67
2014	\$1.2450	48	16.00%	\$69
2015	\$1.2823	48	16.00%	\$71
2016	\$1.3208	48	16.00%	\$74
2017	\$1.3604	48	16.00%	\$76
2018	\$1.4013	48	16.00%	\$78
2019	\$1.4433	48	16.00%	\$80

**FLORIDA PUBLIC UTILITIES COMPANY  
ENERGY CONSERVATION PROGRAM ANALYSIS  
Summary of Cost Effectiveness Ratios**

**Residential Appliance Replacement Program**

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Water Heater	330	4.27	1.19
Furnace	330	1.76	1.13
Clothes Dryer	50	2.98	1.20
Range	50	2.55	1.23

Rate Impact Measure Test Data

Gas Program:	Residential Appliance Replacement
Gas Measure:	Water Heater
Allowance:	\$130
Gas Utility:	Florida Public Utilities Company
Program:	Water Heater
Water Heater:	40 gallon
Alternative Option:	Alternative
Electric Resistance Water Heater:	50 gallon
Electric Utility:	Florida Power & Light Co
Electric Rate Number:	
Analysis Start Year:	2000
Number of Years:	20

1. Avoided Meter Removal Cost	\$
2. Avoided Cut & Cap Cost	\$0
Total Costs	\$0
II. Operating Data	
1. Energy Factor	0.56
Therms Consumed	Winter 101.0 Summer 67.0 Total 168.0
2. Standard Rate	168.0
3. Seasonal Rate	0.0
Total	168.0

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	18.00%
13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	37.83%
15. Average Life	12
III. Common Gas & Electric Data	
1. Discount Rate	8.77%

IV. New Customer Installation Costs	
1. Supply Main	0
2. Development Main	0
3. Service	114
4. Meter	114
Total Cust. Cost	\$734
5. Utility Allowance	\$330
6. Program Cost	\$0
7. New Customer Adm. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%
V. Gas Supply Cost	
1. Load Profile Type	
Gas Supply Cost \$/Therm	\$0.4987
2. Commodity (Annual)	1.00
3. Winter Multiplier	1.00
4. Summer Multiplier	1.00
5. Transportation, Capacity, Peaking and Balancing Cost	0.00000
Systems Shrinkage	
VI. Therms Conserved	
Existing	New
1. Energy Factor	0.90
2. Annual Gas Therms	0.0
VII. Therms Displaced	
1. Energy Factor	1.00
Therms Displaced	Winter 0.00 Summer 0.00 Total 0.00
2. Standard Rate	0.00
VIII. Therms Per Hour @ Utility Receipt Point	
Therms per Hour	Winter 0.07671 Summer 0.07671 Total 0.15342
1. Consumed	
2. Consumed New	
3. Consumed Existing	
4. Displaced	

## Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therm	Gas Customer Charge	Meter & Service Line Removal	Total Columns 2 thru 4	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Main O&M	Gas Supply Cost	Other Cost	Program & Allowance Cost	Total Columns 6 thru 10	
	Table 1	Table 2			Table 3	Table 4	Table 5				
	1	2	3	4	5	6	7	8	9	10	11
2000	\$138	\$36	\$0	\$174	\$13	\$23	\$84	\$0	\$330	\$449	
2001	\$142	\$36	\$0	\$178	\$12	\$23	\$86	\$0		\$122	
2002	\$147	\$36	\$0	\$183	\$12	\$24	\$89	\$0		\$125	
2003	\$151	\$36	\$0	\$187	\$12	\$25	\$92	\$0		\$128	
2004	\$156	\$36	\$0	\$192	\$11	\$26	\$94	\$0		\$131	
2005	\$160	\$36	\$0	\$196	\$11	\$26	\$97	\$0		\$134	
2006	\$165	\$36	\$0	\$201	\$10	\$27	\$100	\$0		\$137	
2007	\$170	\$36	\$0	\$206	\$10	\$28	\$103	\$0		\$141	
2008	\$175	\$36	\$0	\$211	\$9	\$29	\$106	\$0		\$144	
2009	\$180	\$36	\$0	\$216	\$9	\$30	\$109	\$0		\$148	
2010	\$186	\$36	\$0	\$222	\$8	\$31	\$113	\$0		\$151	
2011	\$191	\$36	\$0	\$227	\$8	\$31	\$116	\$0		\$155	
2012	\$197	\$36	\$0	\$233	\$8	\$32	\$119	\$0		\$159	
2013	\$203	\$36	\$0	\$239	\$7	\$33	\$123	\$0		\$163	
2014	\$209	\$36	\$0	\$245	\$6	\$34	\$127	\$0		\$167	
2015	\$215	\$36	\$0	\$251	\$6	\$35	\$131	\$0		\$172	
2016	\$222	\$36	\$0	\$258	\$6	\$36	\$134	\$0		\$177	
2017	\$229	\$36	\$0	\$265	\$5	\$38	\$138	\$0		\$181	
2018	\$235	\$36	\$0	\$271	\$5	\$39	\$143	\$0		\$186	
2019	\$242	\$36	\$0	\$278	\$4	\$40	\$147	\$0		\$191	

Present Value  
of Benefits

\$1,924

Present Value  
of Costs

\$1,619

Benefit/Cost  
Ratio

1.19

Table 1

Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2019	168	\$0.3512	\$0.85666	\$1.44329	\$242
2018	168	\$0.3512	\$0.8074	\$1.40126	\$235
2017	168	\$0.3512	\$0.80654	\$1.36044	\$229
2016	168	\$0.3512	\$0.78305	\$1.32082	\$222
2015	168	\$0.3512	\$0.76024	\$1.28235	\$215
2014	168	\$0.3512	\$0.73810	\$1.24500	\$209
2013	168	\$0.3512	\$0.71650	\$1.20874	\$203
2012	168	\$0.3512	\$0.69573	\$1.17353	\$197
2011	168	\$0.3512	\$0.67546	\$1.13935	\$191
2010	168	\$0.3512	\$0.65579	\$1.10616	\$186
2009	168	\$0.3512	\$0.63659	\$1.07395	\$180
2008	168	\$0.3512	\$0.61815	\$1.04267	\$175
2007	168	\$0.3512	\$0.60014	\$1.01230	\$170
2006	168	\$0.3512	\$0.58266	\$0.98281	\$165
2005	168	\$0.3512	\$0.56569	\$0.95419	\$160
2004	168	\$0.3512	\$0.54921	\$0.92640	\$156
2003	168	\$0.3512	\$0.53322	\$0.89941	\$151
2002	168	\$0.3512	\$0.51769	\$0.87322	\$147
2001	168	\$0.3512	\$0.50261	\$0.84776	\$142
2000	168	\$0.3512	\$0.48797	\$0.82309	\$138

Rim

Water

Table 2

Year	Customer Annual Charge/Cust Chg	Ratio of Therms Consumed to Total	Ratio * Annual Cust Chg
2019	\$8.00	37.83%	\$96
2018	\$8.00	37.83%	\$61
2017	\$8.00	37.83%	\$60
2016	\$8.00	37.83%	\$58
2015	\$8.00	37.83%	\$56
2014	\$8.00	37.83%	\$54
2013	\$8.00	37.83%	\$53
2012	\$8.00	37.83%	\$51
2011	\$8.00	37.83%	\$50
2010	\$8.00	37.83%	\$48
2009	\$8.00	37.83%	\$47
2008	\$8.00	37.83%	\$46
2007	\$8.00	37.83%	\$44
2006	\$8.00	37.83%	\$43
2005	\$8.00	37.83%	\$42
2004	\$8.00	37.83%	\$41
2003	\$8.00	37.83%	\$39
2002	\$8.00	37.83%	\$38
2001	\$8.00	37.83%	\$37
2000	\$8.00	37.83%	\$36

Rim

Water

Table 3

Year	Supply	Development	Service	Meter	Avg Cost	Customer	Carrying Chg
2019	0	0	202	32	4.71%	\$234	\$4
2018	0	0	224	35	4.71%	\$259	\$5
2017	0	0	246	39	4.71%	\$285	\$5
2016	0	0	268	43	4.71%	\$311	\$6
2015	0	0	290	47	4.71%	\$337	\$6
2014	0	0	312	51	4.71%	\$363	\$6
2013	0	0	334	55	4.71%	\$389	\$7
2012	0	0	356	59	4.71%	\$415	\$8
2011	0	0	378	63	4.71%	\$441	\$8
2010	0	0	400	67	4.71%	\$467	\$8
2009	0	0	422	71	4.71%	\$493	\$9
2008	0	0	444	75	4.71%	\$519	\$9
2007	0	0	466	79	4.71%	\$545	\$10
2006	0	0	488	84	4.71%	\$572	\$10
2005	0	0	510	88	4.71%	\$598	\$11
2004	0	0	532	92	4.71%	\$624	\$11
2003	0	0	554	97	4.71%	\$651	\$12
2002	0	0	576	101	4.71%	\$677	\$12
2001	0	0	598	106	4.71%	\$704	\$12
2000	0.00	620	110	110	4.71%	\$730	\$13

Rim

Water

Table 4

Year	1	2	3	4	5	6	7
2019	9	9	105	0	0	105	37.83%
2018	9	9	102	0	0	102	37.83%
2017	8	8	99	0	0	99	37.83%
2016	8	8	96	0	0	96	37.83%
2015	8	8	93	0	0	93	37.83%
2014	8	8	91	0	0	91	37.83%
2013	7	7	88	0	0	88	37.83%
2012	7	7	85	0	0	85	37.83%
2011	7	7	83	0	0	83	37.83%
2010	7	7	80	0	0	81	37.83%
2009	6	6	78	0	0	78	37.83%
2008	6	6	76	0	0	76	37.83%
2007	6	6	74	0	0	74	37.83%
2006	6	6	72	0	0	72	37.83%
2005	6	6	70	0	0	70	37.83%
2004	6	6	68	0	0	68	37.83%
2003	5	5	66	0	0	66	37.83%
2002	5	5	64	0	0	64	37.83%
2001	5	5	62	0	0	62	37.83%
2000	5	5	60	0	0	60	37.83%

Rim

Water

Table 5

Year	Therms	Winter	Summer	Commodity Ca	Temp. Capacity	Winter	Gas Supply
2019	168	101	67	0.8745	0.0000	1.00	\$147
2018	168	101	67	0.8490	0.0000	1.00	\$143
2017	168	101	67	0.8243	0.0000	1.00	\$138
2016	168	101	67	0.8003	0.0000	1.00	\$134
2015	168	101	67	0.7770	0.0000	1.00	\$131
2014	168	101	67	0.7543	0.0000	1.00	\$127
2013	168	101	67	0.7324	0.0000	1.00	\$123
2012	168	101	67	0.7110	0.0000	1.00	\$119
2011	168	101	67	0.6903	0.0000	1.00	\$116
2010	168	101	67	0.6702	0.0000	1.00	\$113
2009	168	101	67	0.6507	0.0000	1.00	\$109
2008	168	101	67	0.6317	0.0000	1.00	\$106
2007	168	101	67	0.6133	0.0000	1.00	\$103
2006	168	101	67	0.5955	0.0000	1.00	\$100
2005	168	101	67	0.5781	0.0000	1.00	\$97
2004	168	101	67	0.5613	0.0000	1.00	\$94
2003	168	101	67	0.5449	0.0000	1.00	\$92
2002	168	101	67	0.5291	0.0000	1.00	\$89
2001	168	101	67	0.5137	0.0000	1.00	\$86
2000	168	101	67	0.4987	0.0000	1.00	\$84

Rim

Water

### Rate Impact Measure Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Appliance Replacement Program Gas Rate Number Electric Rate Number

<b>Gas Measure:</b> Furnace	<b>Alternate Option:</b> Electric
<b>Allowance:</b> \$330	
<b>Gas Utility:</b> Florida Public Utilities Company	<b>Electric Utility:</b> Florida Power & Light Company

	\$
1. Avoided Meter Removal Cost	0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>0</b>

II. Operating Data

1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	180.0	0.0	180.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>180.0</b>	<b>0.0</b>	<b>180.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	40.55%
15. Average Life	19

III. Common Gas & Electric Data

1. Discount Rate	8.77%
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IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	0
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$734</b>

5. Utility Allowance	\$330
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

V. Gas Supply Cost

1. Load Profile Type	
2. Commodity (Annual)	\$0.4987
3. Winter Multiplier	1.00
4. Summer Multiplier	1.00
5. Transportation, Capacity, Peaking and Balancing Cost	0.00000

System Shrinkage

VI. Therms Conserved			
		New	Existing
1. Energy Factor		0.90	.88
2. Annual Gas Therms		0.0	0.0

VII. Therms Displaced

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

**Rate Impact Measure Test Data**

	Consumed Conserved Displaced Gas Therms Table 1	Gas Customer Charge Table 2	Meter & Service Line Removal 4	Total Columns 2 thru 4 5	Carrying Chg. On Main, Svc & Meter Table 3	New Customer Admin. & Main O&M Table 4	Gas Supply Cost Table 5	Other Cost Table 6	Program & Allowance Cost Table 7	Total Columns 6 thru 10 11
1	2	3	4	5	6	7	8	9	10	11
2000	\$148	\$39	\$0	\$187	\$14	\$24	\$90	\$0	\$330	\$458
2001	\$151	\$39	\$0	\$190	\$13	\$25	\$92	\$0		\$131
2002	\$154	\$39	\$0	\$193	\$13	\$26	\$95	\$0		\$134
2003	\$156	\$39	\$0	\$195	\$13	\$27	\$98	\$0		\$137
2004	\$159	\$39	\$0	\$198	\$12	\$27	\$101	\$0		\$141
2005	\$162	\$39	\$0	\$201	\$11	\$28	\$104	\$0		\$144
2006	\$165	\$39	\$0	\$204	\$11	\$29	\$107	\$0		\$147
2007	\$168	\$39	\$0	\$207	\$11	\$30	\$110	\$0		\$151
2008	\$172	\$39	\$0	\$211	\$10	\$31	\$114	\$0		\$155
2009	\$175	\$39	\$0	\$214	\$10	\$32	\$117	\$0		\$159
2010	\$178	\$39	\$0	\$217	\$9	\$33	\$121	\$0		\$162
2011	\$182	\$39	\$0	\$221	\$9	\$34	\$124	\$0		\$166
2012	\$186	\$39	\$0	\$225	\$8	\$35	\$128	\$0		\$171
2013	\$189	\$39	\$0	\$228	\$8	\$36	\$132	\$0		\$175
2014	\$193	\$39	\$0	\$232	\$7	\$37	\$136	\$0		\$179
2015	\$197	\$39	\$0	\$236	\$6	\$38	\$140	\$0		\$184
2016	\$201	\$39	\$0	\$240	\$6	\$39	\$144	\$0		\$189
2017	\$205	\$39	\$0	\$244	\$6	\$40	\$148	\$0		\$194
2018	\$210	\$39	\$0	\$249	\$5	\$41	\$153	\$0		\$200
2019	\$214	\$39	\$0	\$253	\$4	\$43	\$157	\$0		\$205

Present Value  
of Benefits \$1,932

Present Value  
of Costs \$1,715

Benefit/Cost

Ratio 1.13



**Table 1** Rim Furnace

Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2000	180	\$0.33512	\$0.48797	\$0.82309	\$148
2001	180	\$0.33512	\$0.50261	\$0.83773	\$151
2002	180	\$0.33512	\$0.51769	\$0.85281	\$154
2003	180	\$0.33512	\$0.53322	\$0.86834	\$156
2004	180	\$0.33512	\$0.54921	\$0.88433	\$159
2005	180	\$0.33512	\$0.56569	\$0.90081	\$162
2006	180	\$0.33512	\$0.58266	\$0.91778	\$165
2007	180	\$0.33512	\$0.60014	\$0.93526	\$168
2008	180	\$0.33512	\$0.61815	\$0.95327	\$172
2009	180	\$0.33512	\$0.63669	\$0.97181	\$175
2010	180	\$0.33512	\$0.65579	\$0.99091	\$178
2011	180	\$0.33512	\$0.67546	\$1.01058	\$182
2012	180	\$0.33512	\$0.69573	\$1.03085	\$186
2013	180	\$0.33512	\$0.71660	\$1.05172	\$189
2014	180	\$0.33512	\$0.73810	\$1.07322	\$193
2015	180	\$0.33512	\$0.76024	\$1.09536	\$197
2016	180	\$0.33512	\$0.78305	\$1.11817	\$201
2017	180	\$0.33512	\$0.80654	\$1.14166	\$205
2018	180	\$0.33512	\$0.83074	\$1.16586	\$210
2019	180	\$0.33512	\$0.85566	\$1.19078	\$214

**Table 3** Rim Furnace

Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer Cost	Carrying Chg Mains & Svc
2000	0	0	620	115	4.71%	\$735	\$14
2001	0	0	598	111	4.71%	\$709	\$13
2002	0	0	576	107	4.71%	\$683	\$13
2003	0	0	554	103	4.71%	\$657	\$13
2004	0	0	532	99	4.71%	\$631	\$12
2005	0	0	510	95	4.71%	\$605	\$11
2006	0	0	488	91	4.71%	\$579	\$11
2007	0	0	466	87	4.71%	\$553	\$11
2008	0	0	444	83	4.71%	\$527	\$10
2009	0	0	422	79	4.71%	\$501	\$10
2010	0	0	400	75	4.71%	\$475	\$9
2011	0	0	378	71	4.71%	\$449	\$9
2012	0	0	356	67	4.71%	\$423	\$8
2013	0	0	334	63	4.71%	\$397	\$8
2014	0	0	312	59	4.71%	\$371	\$7
2015	0	0	290	55	4.71%	\$345	\$6
2016	0	0	268	51	4.71%	\$319	\$6
2017	0	0	246	47	4.71%	\$293	\$6
2018	0	0	224	43	4.71%	\$267	\$5
2019	0	0	202	39	4.71%	\$241	\$4

**Table 2** Rim Furnace

Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio * Annual Cust. Chg
2000	\$8.00	\$96	40.55%	\$39
2001	\$8.00	\$96	40.55%	\$39
2002	\$8.00	\$96	40.55%	\$39
2003	\$8.00	\$96	40.55%	\$39
2004	\$8.00	\$96	40.55%	\$39
2005	\$8.00	\$96	40.55%	\$39
2006	\$8.00	\$96	40.55%	\$39
2007	\$8.00	\$96	40.55%	\$39
2008	\$8.00	\$96	40.55%	\$39
2009	\$8.00	\$96	40.55%	\$39
2010	\$8.00	\$96	40.55%	\$39
2011	\$8.00	\$96	40.55%	\$39
2012	\$8.00	\$96	40.55%	\$39
2013	\$8.00	\$96	40.55%	\$39
2014	\$8.00	\$96	40.55%	\$39
2015	\$8.00	\$96	40.55%	\$39
2016	\$8.00	\$96	40.55%	\$39
2017	\$8.00	\$96	40.55%	\$39
2018	\$8.00	\$96	40.55%	\$39
2019	\$8.00	\$96	40.55%	\$39

**Table 4** Rim Furnace

Year	Adm. Cost	Annual Adm. Cost	Development Main	Supply Main	Customer Cost	Ratio Therms To Total Consumed	New Customer dm. & Main O&M
2000	\$5	\$60	\$0	\$0	\$60	40.55%	\$24
2001	\$5	\$62	\$0	\$0	\$62	40.55%	\$25
2002	\$5	\$64	\$0	\$0	\$64	40.55%	\$28
2003	\$5	\$66	\$0	\$0	\$66	40.55%	\$27
2004	\$6	\$68	\$0	\$0	\$68	40.55%	\$27
2005	\$6	\$70	\$0	\$0	\$70	40.55%	\$28
2006	\$6	\$72	\$0	\$0	\$72	40.55%	\$29
2007	\$6	\$74	\$0	\$0	\$74	40.55%	\$30
2008	\$6	\$76	\$0	\$0	\$76	40.55%	\$31
2009	\$7	\$78	\$0	\$0	\$78	40.55%	\$32
2010	\$7	\$81	\$0	\$0	\$81	40.55%	\$33
2011	\$7	\$83	\$0	\$0	\$83	40.55%	\$34
2012	\$7	\$86	\$0	\$0	\$86	40.55%	\$35
2013	\$7	\$88	\$0	\$0	\$88	40.55%	\$36
2014	\$8	\$91	\$0	\$0	\$91	40.55%	\$37
2015	\$8	\$93	\$0	\$0	\$93	40.55%	\$38
2016	\$8	\$96	\$0	\$0	\$96	40.55%	\$39
2017	\$8	\$99	\$0	\$0	\$99	40.55%	\$40
2018	\$9	\$102	\$0	\$0	\$102	40.55%	\$41
2019	\$9	\$105	\$0	\$0	\$105	40.55%	\$43

**Table 5** Rim Furnace

Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
2000	180	180	0	0.4987	0.0000	1.00	\$90
2001	180	180	0	0.5137	0.0000	1.00	\$92
2002	180	180	0	0.5291	0.0000	1.00	\$95
2003	180	180	0	0.5449	0.0000	1.00	\$98
2004	180	180	0	0.5613	0.0000	1.00	\$101
2005	180	180	0	0.5781	0.0000	1.00	\$104
2006	180	180	0	0.5955	0.0000	1.00	\$107
2007	180	180	0	0.6133	0.0000	1.00	\$110
2008	180	180	0	0.6317	0.0000	1.00	\$114
2009	180	180	0	0.6507	0.0000	1.00	\$117
2010	180	180	0	0.6702	0.0000	1.00	\$121
2011	180	180	0	0.6903	0.0000	1.00	\$124
2012	180	180	0	0.7110	0.0000	1.00	\$128
2013	180	180	0	0.7324	0.0000	1.00	\$132
2014	180	180	0	0.7543	0.0000	1.00	\$136
2015	180	180	0	0.7770	0.0000	1.00	\$140
2016	180	180	0	0.8003	0.0000	1.00	\$144
2017	180	180	0	0.8243	0.0000	1.00	\$148
2018	180	180	0	0.8490	0.0000	1.00	\$153
2019	180	180	0	0.8745	0.0000	1.00	\$157

**Rate Impact Measure Test Data**

All Costs In 2000 Dollars      Analysis Start Year: 2000      Number of Years: 20

Gas Program:	Residential Appliance Replacement Program	Gas Rate Number	Electric Rate Number
Gas Measure:	Dryer	Alternate Option:	Dryer
		AH Fuel Type:	Electric
Allowance:	\$50		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>\$0</b>

**II. Operating Data**

1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	10.81%
15. Average Life	13

**III. Common Gas & Electric Data**

1. Discount Rate	8.77%
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**IV. New Customer Installation Costs**

	\$
1. Supply Main	0
2. Development Main	0
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$734</b>
5. Utility Allowance	\$50
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

**V. Gas Supply Cost**

	Gas Supply Cost \$/Therm
1. Load Profile Type	
2. Commodity (Annual)	\$0.4987
3. Winter Multiplier	1.00
4. Summer Multiplier	1.00
5. Transportation, Capacity, Peaking and Balancing Cost	0.00000

**System Shrinkage**

**VI. Therms Conserved**

	New	Existing
1. Energy Factor	0.90	.88
2. Annual Gas Therms	0.0	0.0

**VII. Therms Displaced**

1. Energy Factor		1.00
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**VIII. Therms Per Hour @ Utility Receipt Point**

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

## Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therm	Gas Customer Charge	Meter & Service Line Removal	Total Columns 2 thru 4	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Main O&M	Gas Supply Cost	Other Cost	Program & Allowance Cost	Total Columns 6 thru 10
	Table 1	Table 2			Table 3	Table 4	Table 5	Table 6	Table 7	
1	2	3	4	5	6	7	8	9	10	11
2000	\$40	\$10	\$0	\$50	\$4	\$6	\$24	\$0	\$50	\$84
2001	\$40	\$10	\$0	\$50	\$4	\$7	\$25	\$0		\$35
2002	\$41	\$10	\$0	\$51	\$3	\$7	\$25	\$0		\$36
2003	\$42	\$10	\$0	\$52	\$3	\$7	\$26	\$0		\$37
2004	\$42	\$10	\$0	\$52	\$3	\$7	\$27	\$0		\$38
2005	\$43	\$10	\$0	\$53	\$3	\$8	\$28	\$0		\$38
2006	\$44	\$10	\$0	\$54	\$3	\$8	\$29	\$0		\$39
2007	\$45	\$10	\$0	\$55	\$3	\$8	\$29	\$0		\$40
2008	\$46	\$10	\$0	\$56	\$3	\$8	\$30	\$0		\$41
2009	\$47	\$10	\$0	\$57	\$3	\$8	\$31	\$0		\$42
2010	\$48	\$10	\$0	\$58	\$2	\$9	\$32	\$0		\$43
2011	\$49	\$10	\$0	\$59	\$2	\$9	\$33	\$0		\$44
2012	\$49	\$10	\$0	\$59	\$2	\$9	\$34	\$0		\$46
2013	\$50	\$10	\$0	\$60	\$2	\$10	\$35	\$0		\$47
2014	\$52	\$10	\$0	\$62	\$2	\$10	\$36	\$0		\$48
2015	\$53	\$10	\$0	\$63	\$2	\$10	\$37	\$0		\$49
2016	\$54	\$10	\$0	\$64	\$2	\$10	\$38	\$0		\$50
2017	\$55	\$10	\$0	\$65	\$2	\$11	\$40	\$0		\$52
2018	\$56	\$10	\$0	\$66	\$1	\$11	\$41	\$0		\$53
2019	\$57	\$10	\$0	\$67	\$1	\$11	\$42	\$0		\$55

Present Value  
of Benefits \$507

Present Value  
Of Costs \$422

Benefit/Cost Ratio 1.20
----------------------------

Table 1

Dryer

Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2000	48	\$0.33512	\$0.48797	\$0.82309	\$40
2001	48	\$0.33512	\$0.50261	\$0.83773	\$40
2002	48	\$0.33512	\$0.51769	\$0.85281	\$41
2003	48	\$0.33512	\$0.53322	\$0.86834	\$42
2004	48	\$0.33512	\$0.54921	\$0.88433	\$42
2005	48	\$0.33512	\$0.56569	\$0.90081	\$43
2006	48	\$0.33512	\$0.58266	\$0.91778	\$44
2007	48	\$0.33512	\$0.60014	\$0.93526	\$45
2008	48	\$0.33512	\$0.61815	\$0.95327	\$46
2009	48	\$0.33512	\$0.63669	\$0.97181	\$47
2010	48	\$0.33512	\$0.65579	\$0.99091	\$48
2011	48	\$0.33512	\$0.67546	\$1.01058	\$49
2012	48	\$0.33512	\$0.69573	\$1.03085	\$49
2013	48	\$0.33512	\$0.71660	\$1.05172	\$50
2014	48	\$0.33512	\$0.73810	\$1.07322	\$52
2015	48	\$0.33512	\$0.76024	\$1.09536	\$53
2016	48	\$0.33512	\$0.78305	\$1.11817	\$54
2017	48	\$0.33512	\$0.80654	\$1.14166	\$55
2018	48	\$0.33512	\$0.83074	\$1.16586	\$56
2019	48	\$0.33512	\$0.85566	\$1.19078	\$57

Table 3

Dryer

Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer Cost	Carrying Chg Mains & Svc
2000			620	114	4.71%	\$734	\$4
2001			598	110	4.71%	\$708	\$4
2002			576	106	4.71%	\$682	\$3
2003			554	102	4.71%	\$656	\$3
2004			532	98	4.71%	\$630	\$3
2005			510	94	4.71%	\$604	\$3
2006			488	90	4.71%	\$578	\$3
2007			466	86	4.71%	\$552	\$3
2008			444	82	4.71%	\$526	\$3
2009			422	78	4.71%	\$500	\$3
2010			400	74	4.71%	\$474	\$2
2011			378	70	4.71%	\$448	\$2
2012			356	66	4.71%	\$422	\$2
2013			334	62	4.71%	\$396	\$2
2014			312	58	4.71%	\$370	\$2
2015			290	54	4.71%	\$344	\$2
2016			268	50	4.71%	\$318	\$2
2017			246	46	4.71%	\$292	\$2
2018			224	42	4.71%	\$266	\$1
2019			202	38	4.71%	\$240	\$1

Table 2

Dryer

Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio * Annual Cust. Chg.
2000	8.00	\$96	10.81%	\$10
2001	8.00	\$96	10.81%	\$10
2002	8.00	\$96	10.81%	\$10
2003	8.00	\$96	10.81%	\$10
2004	8.00	\$96	10.81%	\$10
2005	8.00	\$96	10.81%	\$10
2006	8.00	\$96	10.81%	\$10
2007	8.00	\$96	10.81%	\$10
2008	8.00	\$96	10.81%	\$10
2009	8.00	\$96	10.81%	\$10
2010	8.00	\$96	10.81%	\$10
2011	8.00	\$96	10.81%	\$10
2012	8.00	\$96	10.81%	\$10
2013	8.00	\$96	10.81%	\$10
2014	8.00	\$96	10.81%	\$10
2015	8.00	\$96	10.81%	\$10
2016	8.00	\$96	10.81%	\$10
2017	8.00	\$96	10.81%	\$10
2018	8.00	\$96	10.81%	\$10
2019	8.00	\$96	10.81%	\$10

Table 4

Dryer

Year	Adm. Cost	Annual Adm. Cost	Ratio Therms T Total Consume	New Customer dm. & Main O&M
2000	\$5	\$60	10.81%	\$6
2001	\$5	\$62	10.81%	\$7
2002	\$5	\$64	10.81%	\$7
2003	\$5	\$66	10.81%	\$7
2004	\$6	\$68	10.81%	\$7
2005	\$6	\$70	10.81%	\$8
2006	\$6	\$72	10.81%	\$8
2007	\$6	\$74	10.81%	\$8
2008	\$6	\$76	10.81%	\$8
2009	\$7	\$78	10.81%	\$8
2010	\$7	\$81	10.81%	\$9
2011	\$7	\$83	10.81%	\$9
2012	\$7	\$85	10.81%	\$9
2013	\$7	\$88	10.81%	\$10
2014	\$8	\$91	10.81%	\$10
2015	\$8	\$93	10.81%	\$10
2016	\$8	\$96	10.81%	\$10
2017	\$8	\$99	10.81%	\$11
2018	\$9	\$102	10.81%	\$11
2019	\$9	\$105	10.81%	\$11

Table 5

Dryer

Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cos	Winter Multiplier	Gas Supply Cost
2000	48	24	24	0.4987	0.0000	1.00	\$24
2001	48	24	24	0.5137	0.0000	1.00	\$25
2002	48	24	24	0.5291	0.0000	1.00	\$25
2003	48	24	24	0.5449	0.0000	1.00	\$26
2004	48	24	24	0.5613	0.0000	1.00	\$27
2005	48	24	24	0.5781	0.0000	1.00	\$28
2006	48	24	24	0.5955	0.0000	1.00	\$29
2007	48	24	24	0.6133	0.0000	1.00	\$29
2008	48	24	24	0.6317	0.0000	1.00	\$30
2009	48	24	24	0.6507	0.0000	1.00	\$31
2010	48	24	24	0.6702	0.0000	1.00	\$32
2011	48	24	24	0.6903	0.0000	1.00	\$33
2012	48	24	24	0.7110	0.0000	1.00	\$34
2013	48	24	24	0.7324	0.0000	1.00	\$35
2014	48	24	24	0.7543	0.0000	1.00	\$36
2015	48	24	24	0.7770	0.0000	1.00	\$37
2016	48	24	24	0.8003	0.0000	1.00	\$38
2017	48	24	24	0.8243	0.0000	1.00	\$40
2018	48	24	24	0.8490	0.0000	1.00	\$41
2019	48	24	24	0.8745	0.0000	1.00	\$42

### Rate Impact Measure Test Data

All Costs in 2000 Dollars      Analysis Start Year: 2000      Number of Years: 20

Gas Program: Residential Appliance Replacement Program      Gas Rate Number      Electric Rate Number

Gas Measure:	Range	Alternative Option:	None
Allowance:	\$50	Alt Fuel Type:	Electric
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Company

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>\$0</b>

II. Operating Data

1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate	0.0	0.0	0.0
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

Gas Rates	Rate
8. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	10.81%
15. Average Life	19

III. Common Gas & Electric Data

1. Discount Rate	8.77%
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IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	0
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$734</b>
5. Utility Allowance	\$50
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

V. Gas Supply Cost

1. Load Profile Type		Gas Supply Cost \$/Therm
2. Commodity (Annual)		
3. Winter Multiplier	1.00	
4. Summer Multiplier	1.00	
5. Transportation, Capacity, Peaking and Balancing Cost	0.00000	

System Shrinkage

VI. Therms Conserved

	New	Existing
1. Energy Factor	0.90	.88
2. Annual Gas Therms	0.0	0.0

VII. Therms Displaced

1. Energy Factor	1.00
<b>Therms Displaced</b>	
	Winter      Summer      Total
2. Standard Rate	0.00      0.00      0.00
<b>Total</b>	<b>0.00      0.00      0.00</b>

VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

# Rate Impact Measure Test Data

Range

	Consumed Conserved Displaced Gas Therms	Gas Customer Charge	Meter & Service Line Removal	Total Columns 2 thru 4	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Main O&M	Gas Supply Cost	Other Cost	Program & Allowance Cost	Total Columns 6 thru 10
	Table 1	Table 2			Table 3	Table 4	Table 5			
1	2	3	4	5	6	7	8	9	10	11
2000	\$40	\$10	\$0	\$50	\$4	\$6	\$24	\$0	\$50	\$84
2001	\$40	\$10	\$0	\$50	\$2	\$7	\$25	\$0		\$34
2002	\$41	\$10	\$0	\$51	\$2	\$7	\$25	\$0		\$35
2003	\$42	\$10	\$0	\$52	\$2	\$7	\$26	\$0		\$36
2004	\$42	\$10	\$0	\$52	\$2	\$7	\$27	\$0		\$37
2005	\$43	\$10	\$0	\$53	\$2	\$8	\$28	\$0		\$37
2006	\$44	\$10	\$0	\$54	\$2	\$8	\$29	\$0		\$38
2007	\$45	\$10	\$0	\$55	\$2	\$8	\$29	\$0		\$39
2008	\$46	\$10	\$0	\$56	\$2	\$8	\$30	\$0		\$40
2009	\$47	\$10	\$0	\$57	\$2	\$8	\$31	\$0		\$42
2010	\$48	\$10	\$0	\$58	\$2	\$9	\$32	\$0		\$43
2011	\$49	\$10	\$0	\$59	\$2	\$9	\$33	\$0		\$44
2012	\$49	\$10	\$0	\$59	\$2	\$9	\$34	\$0		\$45
2013	\$50	\$10	\$0	\$60	\$1	\$10	\$35	\$0		\$46
2014	\$52	\$10	\$0	\$62	\$1	\$10	\$36	\$0		\$47
2015	\$53	\$10	\$0	\$63	\$1	\$10	\$37	\$0		\$49
2016	\$54	\$10	\$0	\$64	\$1	\$10	\$38	\$0		\$50
2017	\$55	\$10	\$0	\$65	\$1	\$11	\$40	\$0		\$51
2018	\$56	\$10	\$0	\$66	\$1	\$11	\$41	\$0		\$53
2019	\$57	\$10	\$0	\$67	\$1	\$11	\$42	\$0		\$54

Present Value  
Of Benefits

\$512

Present Value  
Of Costs

\$415

Benefit/Cost  
Ratio

1.23

Table 1

Range

Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2000	48	\$0.33512	\$0.48797	\$0.82309	\$40
2001	48	\$0.33512	\$0.50261	\$0.83773	\$40
2002	48	\$0.33512	\$0.51769	\$0.85281	\$41
2003	48	\$0.33512	\$0.53322	\$0.86834	\$42
2004	48	\$0.33512	\$0.54921	\$0.88433	\$42
2005	48	\$0.33512	\$0.56569	\$0.90081	\$43
2006	48	\$0.33512	\$0.58266	\$0.91778	\$44
2007	48	\$0.33512	\$0.60014	\$0.93526	\$45
2008	48	\$0.33512	\$0.61815	\$0.95327	\$46
2009	48	\$0.33512	\$0.63669	\$0.97181	\$47
2010	48	\$0.33512	\$0.65579	\$0.99091	\$48
2011	48	\$0.33512	\$0.67546	\$1.01058	\$49
2012	48	\$0.33512	\$0.69573	\$1.03085	\$49
2013	48	\$0.33512	\$0.71660	\$1.05172	\$50
2014	48	\$0.33512	\$0.73810	\$1.07322	\$52
2015	48	\$0.33512	\$0.76024	\$1.09536	\$53
2016	48	\$0.33512	\$0.78305	\$1.11817	\$54
2017	48	\$0.33512	\$0.80654	\$1.14166	\$55
2018	48	\$0.33512	\$0.83074	\$1.16588	\$56
2019	48	\$0.33512	\$0.85568	\$1.19078	\$57

Table 3

Range

Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer Cost	Carrying Chg Mains & Svc
2000			620	114	4.71%	\$734	\$4
2001			598	110	4.71%	\$708	\$2
2002			576	106	4.71%	\$682	\$2
2003			554	102	4.71%	\$656	\$2
2004			532	98	4.71%	\$630	\$2
2005			510	94	4.71%	\$604	\$2
2006			488	90	4.71%	\$578	\$2
2007			466	86	4.71%	\$552	\$2
2008			444	82	4.71%	\$526	\$2
2009			422	78	4.71%	\$500	\$2
2010			400	74	4.71%	\$474	\$2
2011			378	70	4.71%	\$448	\$2
2012			356	66	4.71%	\$422	\$2
2013			334	62	4.71%	\$396	\$1
2014			312	58	4.71%	\$370	\$1
2015			290	54	4.71%	\$344	\$1
2016			268	50	4.71%	\$318	\$1
2017			246	46	4.71%	\$292	\$1
2018			224	42	4.71%	\$266	\$1
2019			202	38	4.71%	\$240	\$1

Table 2

Range

Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms consumed To Tot	Ratio * Annual Cust. Chg
2000	8.00	\$96	10.81%	\$10
2001	8.00	\$96	10.81%	\$10
2002	8.00	\$96	10.81%	\$10
2003	8.00	\$96	10.81%	\$10
2004	8.00	\$96	10.81%	\$10
2005	8.00	\$96	10.81%	\$10
2006	8.00	\$96	10.81%	\$10
2007	8.00	\$96	10.81%	\$10
2008	8.00	\$96	10.81%	\$10
2009	8.00	\$96	10.81%	\$10
2010	8.00	\$96	10.81%	\$10
2011	8.00	\$96	10.81%	\$10
2012	8.00	\$96	10.81%	\$10
2013	8.00	\$96	10.81%	\$10
2014	8.00	\$96	10.81%	\$10
2015	8.00	\$96	10.81%	\$10
2016	8.00	\$96	10.81%	\$10
2017	8.00	\$96	10.81%	\$10
2018	8.00	\$96	10.81%	\$10
2019	8.00	\$96	10.81%	\$10

Table 4

Range

Year	Adm. Cost	Annual Adm. Cost	Ratio Therms To Total Consumed	New Customer Adm. & Main O&M
2000	\$5	\$60	10.81%	\$6
2001	\$5	\$62	10.81%	\$7
2002	\$5	\$64	10.81%	\$7
2003	\$5	\$66	10.81%	\$7
2004	\$6	\$68	10.81%	\$7
2005	\$6	\$70	10.81%	\$8
2006	\$6	\$72	10.81%	\$8
2007	\$6	\$74	10.81%	\$8
2008	\$6	\$76	10.81%	\$8
2009	\$7	\$78	10.81%	\$8
2010	\$7	\$81	10.81%	\$9
2011	\$7	\$83	10.81%	\$9
2012	\$7	\$86	10.81%	\$9
2013	\$7	\$88	10.81%	\$10
2014	\$8	\$91	10.81%	\$10
2015	\$8	\$93	10.81%	\$10
2016	\$8	\$96	10.81%	\$10
2017	\$8	\$99	10.81%	\$11
2018	\$9	\$102	10.81%	\$11
2019	\$9	\$105	10.81%	\$11

Table 5

Range

Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cos	Winter Multiplier	Gas Supply Cost
2000	48	24	24	0.4987	0.0000	1.00	\$24
2001	48	24	24	0.5137	0.0000	1.00	\$25
2002	48	24	24	0.5291	0.0000	1.00	\$25
2003	48	24	24	0.5449	0.0000	1.00	\$28
2004	48	24	24	0.5613	0.0000	1.00	\$27
2005	48	24	24	0.5781	0.0000	1.00	\$28
2006	48	24	24	0.5955	0.0000	1.00	\$29
2007	48	24	24	0.6133	0.0000	1.00	\$29
2008	48	24	24	0.6317	0.0000	1.00	\$30
2009	48	24	24	0.6507	0.0000	1.00	\$31
2010	48	24	24	0.6702	0.0000	1.00	\$32
2011	48	24	24	0.6903	0.0000	1.00	\$33
2012	48	24	24	0.7110	0.0000	1.00	\$34
2013	48	24	24	0.7324	0.0000	1.00	\$35
2014	48	24	24	0.7543	0.0000	1.00	\$36
2015	48	24	24	0.7770	0.0000	1.00	\$37
2016	48	24	24	0.8003	0.0000	1.00	\$38
2017	48	24	24	0.8243	0.0000	1.00	\$40
2018	48	24	24	0.8490	0.0000	1.00	\$41
2019	48	24	24	0.8745	0.0000	1.00	\$42

### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Appliance Replacement Program  
Gas Rate Number

Electric Rate Number

<b>Gas Measure:</b>	Water Heater	40 Gallon	<b>Alternate Option:</b>	Electric Resistance Water Heat	50 Gallons
			<b>Air Fuel Type:</b>	Electric	
<b>Allowance:</b>	330				
<b>Gas Utility:</b>	Florida Public Utilities Company		<b>Electric Utility:</b>	Florida Power & Light Co.	

**I. Installed Cost Data**

	\$
1. Equipment	234
2. Installation	521
<b>Total Cust. Cost</b>	<b>755</b>
3. Utility Rebate	330
4. Other Rebate	

**II. Operating Data**

1. Energy Factor			
Therms Consumed	Winter	Summer	Total
2. Standard Rate	101	67	168
3. Seasonal Rate			0
<b>Total</b>	<b>101</b>	<b>67</b>	<b>168</b>

4. Electric Consumption in KWH  
5. O&M (excluding energy) 7

Gas Rates	Rate
6. Base, Winter	0.33512
7. Base, Summer	0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg 8

14. Ratio of Therms Consumed to Total 37.83%

15. Average Life 12

**III. Common Gas & Electric Data**

1. Discount Rate 0.0877

**IV. Installed Cost Data**

	\$
1. Equipment	247
2. Installation	190
<b>Total Cust. Cost</b>	<b>437</b>
3. Utility Allowance	0
4. Other Allowance	

**V. Energy Conserved Data**

	New	Existing
1. Energy Factor	0.88	0.88
2. Annual KWH	3751	3751
3. Annual Oil Gallon	0	0
4. Annual Gas Ther	0	0

5. Diversified KW  
6. Billing KW

7. O&M (excluding energy) 9  
8. Monthly Utility Incentive 0  
9. Average Life in Yrs 14  
10. Existing Remaining Life in Yrs 0

11. Electric Rate per KWH 0.0728  
12. Electric Rate per KW, Winter 0  
13. Electric Rate per KW, Summer 0  
14. Electric Taxes & Fees 16.00%  
15. Customer Chg 5.65

**VI. Therms Displaced**

1. Energy Factor 1

Therms Displaced	Winter	Summer
2. Standard Rate		

Total 0 0



# PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	317	0	143	9	7	36	330	0	470	413	755	342
2001	326	0	147	9	7	36	0	0	89	0	0	0
2002	336	0	152	10	7	36	0	0	91	0	0	0
2003	346	0	156	10	8	36	0	0	94	0	0	0
2004	357	0	161	10	8	36	0	0	97	0	0	0
2005	367	0	166	10	8	36	0	0	100	0	0	0
2006	378	0	171	11	8	36	0	0	103	0	0	0
2007	390	0	176	11	9	36	0	0	106	0	0	0
2008	401	0	181	11	9	36	0	0	109	0	0	0
2009	413	0	186	12	9	36	0	0	112	0	0	0
2010	426	0	192	12	9	36	0	0	116	0	0	0
2011	438	0	198	12	10	36	0	0	119	0	0	0
2012	452	0	204	13	10	36	0	0	123	0	0	0
2013	465	0	210	13	10	36	0	0	127	0	0	0
2014	479	0	216	14	11	36	0	0	130	0	0	0
2015	494	0	223	14	11	36	0	0	134	0	0	0
2016	508	0	229	14	11	36	0	0	138	0	0	0
2017	524	0	236	15	12	36	0	0	142	0	0	0
2018	539	0	243	15	12	36	0	0	147	0	0	0
2019	555	0	250	16	12	36	0	0	151	0	0	0

Present Value  
of Benefits

\$1,344

Present Value  
of Costs

\$314

Benefit/Cost Ratio	4.27
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TABLE 1 Part  
Electric KW Cost Water

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	0.0728	3751	16.00%	\$317
2001	0.0750	3751	16.00%	\$326
2002	0.0772	3751	16.00%	\$336
2003	0.0796	3751	16.00%	\$346
2004	0.0819	3751	16.00%	\$357
2005	0.0844	3751	16.00%	\$367
2006	0.0869	3751	16.00%	\$378
2007	0.0895	3751	16.00%	\$390
2008	0.0922	3751	16.00%	\$401
2009	0.0950	3751	16.00%	\$413
2010	0.0978	3751	16.00%	\$426
2011	0.1008	3751	16.00%	\$438
2012	0.1038	3751	16.00%	\$452
2013	0.1069	3751	16.00%	\$465
2014	0.1101	3751	16.00%	\$479
2015	0.1134	3751	16.00%	\$494
2016	0.1168	3751	16.00%	\$508
2017	0.1203	3751	16.00%	\$524
2018	0.1239	3751	16.00%	\$539
2019	0.1277	3751	16.00%	\$555

TABLE 2 Consumed-Displaced-Conserved - Therms Water

1	2	3	4	3*2*4
Year	Therm Cost	Annual THERMS	Tax Fees	Gas Cost
2000	0.8231	168	16.00%	\$160
2001	0.8478	168	16.00%	\$165
2002	0.8732	168	16.00%	\$170
2003	0.8994	168	16.00%	\$175
2004	0.9264	168	16.00%	\$181
2005	0.9542	168	16.00%	\$186
2006	0.9828	168	16.00%	\$192
2007	1.0123	168	16.00%	\$197
2008	1.0427	168	16.00%	\$203
2009	1.0739	168	16.00%	\$209
2010	1.1062	168	16.00%	\$216
2011	1.1393	168	16.00%	\$222
2012	1.1735	168	16.00%	\$229
2013	1.2087	168	16.00%	\$236
2014	1.2450	168	16.00%	\$243
2015	1.2823	168	16.00%	\$250
2016	1.3208	168	16.00%	\$257
2017	1.3604	168	16.00%	\$265
2018	1.4013	168	16.00%	\$273
2019	1.4433	168	16.00%	\$281

TABLE 3 Gas Customer Charge Water

1	2	3	4	5	6	3*6+13.67%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Wtr. Htr Annual Therms	Total Annual Therms	Ratio Therms Consumerd to Total	Gas Customer Charge
2000	8.00	96.00	168	444	37.83%	36
2001	8.00	96.00	168	444	37.83%	36
2002	8.00	96.00	168	444	37.83%	36
2003	8.00	96.00	168	444	37.83%	36
2004	8.00	96.00	168	444	37.83%	36
2005	8.00	96.00	168	444	37.83%	36
2006	8.00	96.00	168	444	37.83%	36
2007	8.00	96.00	168	444	37.83%	36
2008	8.00	96.00	168	444	37.83%	36
2009	8.00	96.00	168	444	37.83%	36
2010	8.00	96.00	168	444	37.83%	36
2011	8.00	96.00	168	444	37.83%	36
2012	8.00	96.00	168	444	37.83%	36
2013	8.00	96.00	168	444	37.83%	36
2014	8.00	96.00	168	444	37.83%	36
2015	8.00	96.00	168	444	37.83%	36
2016	8.00	96.00	168	444	37.83%	36
2017	8.00	96.00	168	444	37.83%	36
2018	8.00	96.00	168	444	37.83%	36
2019	8.00	96.00	168	444	37.83%	36

## Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Appliance Replacement Program Gas Rate Number Electric Rate Number

Gas Measure:	Furnace	Alternate Option:	Electric Resistance Furnace
		Alt FileType:	Electric
Allowance:	330		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co

### I. Installed Cost Data

	\$
1. Equipment	1549
2. Installation	629
<b>Total Cust. Cost</b>	<b>2178</b>
3. Utility Rebate	330
4. Other Rebate	

### II. Operating Data

1. Energy Factor			
Therms Consumed	Winter	Summer	Total
2. Standard Rate	180	0	180
3. Seasonal Rate			0
<b>Total</b>	<b>180</b>	<b>0</b>	<b>180</b>

4. Electric Consumption in KWH	
5. O&M (excluding energy)	14

Gas Rates	Rate
6. Base, Winter	0.33512
7. Base, Summer	0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg	8.00
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14. Ratio of Therms Consumed to Total	40.55%
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15. Average Life	19
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### III. Common Gas & Electric Data

1. Discount Rate	8.77%
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### IV. Installed Cost Data

	\$
1. Equipment	576
2. Installation	654
<b>Total Cust. Cost</b>	<b>\$1,159</b>
3. Utility Allowance	0
4. Other Allowance	

### V. Energy Conserved Data

	New	Existing
1. Energy Factor	1	1
2. Annual KWH	4082	4082
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0

	Winter	Summer
5. Diversified KW		
6. Billing KW		
7. O&M (excluding energy)		9
8. Monthly Utility Incentive		0
9. Average Life in Yrs		16
10. Existing Remaining Life in Yrs		0

11. Electric Rate per KWH	0.0728
12. Electric Rate per KW, Winter	0
13. Electric Rate per KW, Summer	0
14. Electric Taxes & Fees	16.00%
15. Customer Chg	5.65

### VI. Therms Displaced

1. Energy Factor		1
Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0</b>	<b>0</b>

## PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil 3	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M 5	Gas Appliance O&M 6	Gas Customer Charge Table 3	Gas Rebate 8	Alternate Appliance Rebate 9	Total Benefits 2+3-4+5 -6-7+8-9 10	Alternate Appliance Installed Cost 11	Gas Appliance Installed Cost 12	Total Cost 12-11 13
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	345	0	172	9	14	44	330	0	454	1159	2178	1019
2001	355	0	155	9	14	44	0	0	119	0	0	0
2002	366	0	160	10	15	44	0	0	123	0	0	0
2003	377	0	164	10	15	44	0	0	127	0	0	0
2004	388	0	169	10	16	44	0	0	131	0	0	0
2005	400	0	174	10	16	44	0	0	135	0	0	0
2006	412	0	180	11	17	44	0	0	139	0	0	0
2007	424	0	185	11	17	44	0	0	143	0	0	0
2008	437	0	191	11	18	44	0	0	147	0	0	0
2009	450	0	196	12	18	44	0	0	151	0	0	0
2010	463	0	202	12	19	44	0	0	156	0	0	0
2011	477	0	208	12	19	44	0	0	161	0	0	0
2012	491	0	215	13	20	44	0	0	165	0	0	0
2013	506	0	221	13	21	44	0	0	170	0	0	0
2014	521	0	228	14	21	44	0	0	175	0	0	0
2015	537	0	234	14	22	44	0	0	180	0	0	0
2016	553	0	241	14	22	44	0	0	186	0	0	0
2017	570	0	249	15	23	44	0	0	192	0	0	0
2018	587	0	256	15	24	44	0	0	197	0	0	0
2019	604	0	264	16	25	44	0	0	203	0	0	0

Present Value  
of Benefits

\$1,645

Present Value  
of Costs

\$937

Benefit/Cost Ratio	1.76
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TABLE 1 Electric KW Cost Furnace

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	0.0728	4082	16.00%	345
2001	0.0750	4082	16.00%	355
2002	0.0772	4082	16.00%	366
2003	0.0796	4082	16.00%	377
2004	0.0819	4082	16.00%	388
2005	0.0844	4082	16.00%	400
2006	0.0869	4082	16.00%	412
2007	0.0895	4082	16.00%	424
2008	0.0922	4082	16.00%	437
2009	0.0950	4082	16.00%	450
2010	0.0978	4082	16.00%	463
2011	0.1008	4082	16.00%	477
2012	0.1038	4082	16.00%	491
2013	0.1069	4082	16.00%	506
2014	0.1101	4082	16.00%	521
2015	0.1134	4082	16.00%	537
2016	0.1168	4082	16.00%	553
2017	0.1203	4082	16.00%	570
2018	0.1239	4082	16.00%	587
2019	0.1277	4082	16.00%	604

TABLE 2 Consumed-Displaced-Conserved - Therms Furnace

1	2	3	4	3*2*4
Year	Therm Cost	Annual Therms	Tax Fees	Gas Cost
2000	0.8231	180	16.00%	172
2001	0.8478	180	16.00%	177
2002	0.8732	180	16.00%	182
2003	0.8994	180	16.00%	188
2004	0.9264	180	16.00%	193
2005	0.9542	180	16.00%	199
2006	0.9828	180	16.00%	205
2007	1.0123	180	16.00%	211
2008	1.0427	180	16.00%	218
2009	1.0739	180	16.00%	224
2010	1.1062	180	16.00%	231
2011	1.1393	180	16.00%	238
2012	1.1735	180	16.00%	245
2013	1.2087	180	16.00%	252
2014	1.2450	180	16.00%	260
2015	1.2823	180	16.00%	268
2016	1.3208	180	16.00%	276
2017	1.3604	180	16.00%	284
2018	1.4013	180	16.00%	293
2019	1.4433	180	16.00%	301

TABLE 3 Gas Customer Charge Furnace

1	2	3	4	5	6	3*6+13.67%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Furnace		Ratio Therms Consumed to Total	Gas Customer Charge
			Annual Therms	Annual Therms		
2000	8.00	96.00	180	444	40.55%	44
2001	8.00	96.00	180	444	40.55%	44
2002	8.00	96.00	180	444	40.55%	44
2003	8.00	96.00	180	444	40.55%	44
2004	8.00	96.00	180	444	40.55%	44
2005	8.00	96.00	180	444	40.55%	44
2006	8.00	96.00	180	444	40.55%	44
2007	8.00	96.00	180	444	40.55%	44
2008	8.00	96.00	180	444	40.55%	44
2009	8.00	96.00	180	444	40.55%	44
2010	8.00	96.00	180	444	40.55%	44
2011	8.00	96.00	180	444	40.55%	44
2012	8.00	96.00	180	444	40.55%	44
2013	8.00	96.00	180	444	40.55%	44
2014	8.00	96.00	180	444	40.55%	44
2015	8.00	96.00	180	444	40.55%	44
2016	8.00	96.00	180	444	40.55%	44
2017	8.00	96.00	180	444	40.55%	44
2018	8.00	96.00	180	444	40.55%	44
2019	8.00	96.00	180	444	40.55%	44

## Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Appliance Replacement  
Program Gas Rate Number

Electric Rate Number

Gas Measure: Dryer	Alternate Option: Dryer
Air Fuel Type: Electric	
Allowance: 50	
Gas Utility: Florida Public Utilities Company	Electric Utility: Florida Power & Light Co.

### I. Installed Cost Data

	\$
1. Equipment	425
2. Installation	202
<b>Total Cust. Cost</b>	<b>627</b>
3. Utility Rebate	50
4. Other Rebate	

### II. Operating Data

1. Energy Factor				
Therms Consumed	Winter	Summer	Total	
2. Standard Rate	24	24	48	
3. Seasonal Rate			0	
<b>Total</b>	<b>24</b>	<b>24</b>	<b>48</b>	

4. Electric Consumption in KWH  
5. O&M (excluding energy) 10

Gas Rates	Rate
6. Base, Winter	0.33512
7. Base, Summer	0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg 8.00

14. Ratio of Therms Consumed to Total 10.81%

15. Average Life 13

### III. Common Gas & Electric Data

1. Discount Rate 8.77%

### IV. Installed Cost Data

	\$
1. Equipment	375
2. Installation	113
<b>Total Cust. Cost</b>	<b>\$488</b>
3. Utility Allowance	0
4. Other Allowance	

### V. Energy Conserved Data

	New	Existing
1. Energy Factor	1	1
2. Annual KWH	1029	1029
3. Annual Oil Gallon	0	0
4. Annual Gas Ther	0	0

5. Diversified KW  
6. Billing KW

7. O&M (excluding energy) 14  
8. Monthly Utility Incentive 0  
9. Average Life in Yrs 13  
10. Existing Remaining Life in Yrs 0

11. Electric Rate per KWH 0.0728  
12. Electric Rate per KW, Winter 0  
13. Electric Rate per KW, Summer 0  
14. Electric Taxes & Fees 16.00%  
15. Customer Chg 5.65

### VI. Therms Displaced

1. Energy Factor		
Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0</b>	<b>0</b>

# PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	87	0	46	14	10	12	50	0	83	488	627	139
2001	90	0	47	14	10	12	0	0	34	0	0	0
2002	92	0	49	15	11	13	0	0	35	0	0	0
2003	95	0	50	15	11	13	0	0	36	0	0	0
2004	98	0	52	16	11	14	0	0	37	0	0	0
2005	101	0	53	16	12	14	0	0	38	0	0	0
2006	104	0	55	17	12	14	0	0	39	0	0	0
2007	107	0	56	17	12	15	0	0	41	0	0	0
2008	110	0	58	18	13	15	0	0	42	0	0	0
2009	113	0	60	18	13	16	0	0	43	0	0	0
2010	117	0	62	19	13	16	0	0	44	0	0	0
2011	120	0	63	19	14	17	0	0	46	0	0	0
2012	124	0	65	20	14	17	0	0	47	0	0	0
2013	128	0	67	21	15	18	0	0	49	0	0	0
2014	131	0	69	21	15	18	0	0	50	0	0	0
2015	135	0	71	22	16	19	0	0	51	0	0	0
2016	139	0	74	22	16	19	0	0	53	0	0	0
2017	144	0	76	23	17	20	0	0	55	0	0	0
2018	148	0	78	24	17	20	0	0	56	0	0	0
2019	152	0	80	25	18	21	0	0	58	0	0	0

Present Value of Benefits \$380

Present Value of Costs \$128

Benefit/Cost Ratio	2.98
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TABLE 1 Electric KW Cost Dryer

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	0.0728	1029	16.00%	86.90
2001	0.0750	1029	16.00%	89.50
2002	0.0772	1029	16.00%	92.19
2003	0.0796	1029	16.00%	94.95
2004	0.0819	1029	16.00%	97.80
2005	0.0844	1029	16.00%	100.74
2006	0.0869	1029	16.00%	103.76
2007	0.0895	1029	16.00%	106.87
2008	0.0922	1029	16.00%	110.08
2009	0.0950	1029	16.00%	113.38
2010	0.0978	1029	16.00%	116.78
2011	0.1008	1029	16.00%	120.28
2012	0.1038	1029	16.00%	123.89
2013	0.1069	1029	16.00%	127.61
2014	0.1101	1029	16.00%	131.44
2015	0.1134	1029	16.00%	135.38
2016	0.1168	1029	16.00%	139.44
2017	0.1203	1029	16.00%	143.63
2018	0.1239	1029	16.00%	147.94
2019	0.1277	1029	16.00%	152.37

TABLE 2 Consumed-Displaced-Conserved - Therms Dryer

1	2	3	4	3*2*4
Year	Therm Cost	Annual THERMS	Tax Fees	Gas Cost
2000	0.82309	48	16.00%	45.83
2001	0.84778	48	16.00%	47.20
2002	0.87322	48	16.00%	48.62
2003	0.89941	48	16.00%	50.08
2004	0.92640	48	16.00%	51.58
2005	0.95419	48	16.00%	53.13
2006	0.98281	48	16.00%	54.72
2007	1.01230	48	16.00%	56.36
2008	1.04267	48	16.00%	58.06
2009	1.07395	48	16.00%	59.80
2010	1.10618	48	16.00%	61.59
2011	1.13935	48	16.00%	63.44
2012	1.17353	48	16.00%	65.34
2013	1.20874	48	16.00%	67.30
2014	1.24500	48	16.00%	69.32
2015	1.28235	48	16.00%	71.40
2016	1.32082	48	16.00%	73.54
2017	1.36044	48	16.00%	75.75
2018	1.40126	48	16.00%	78.02
2019	1.44329	48	16.00%	80.36

TABLE 3 Gas Customer Charge Dryer

1	2	3	4	5	6	3*6*16.00%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Wtr. Htr Annual Therms	Total Annual Therms	Ratio Therms Consumed to Total	Gas Customer Charge
2000	8.00	96.00	48	444	10.81%	12.04
2001	8.00	96.00	48	444	10.81%	12.04
2002	8.00	96.00	48	444	10.81%	12.04
2003	8.00	96.00	48	444	10.81%	12.04
2004	8.00	96.00	48	444	10.81%	12.04
2005	8.00	96.00	48	444	10.81%	12.04
2006	8.00	96.00	48	444	10.81%	12.04
2007	8.00	96.00	48	444	10.81%	12.04
2008	8.00	96.00	48	444	10.81%	12.04
2009	8.00	96.00	48	444	10.81%	12.04
2010	8.00	96.00	48	444	10.81%	12.04
2011	8.00	96.00	48	444	10.81%	12.04
2012	8.00	96.00	48	444	10.81%	12.04
2013	8.00	96.00	48	444	10.81%	12.04
2014	8.00	96.00	48	444	10.81%	12.04
2015	8.00	96.00	48	444	10.81%	12.04
2016	8.00	96.00	48	444	10.81%	12.04
2017	8.00	96.00	48	444	10.81%	12.04
2018	8.00	96.00	48	444	10.81%	12.04
2019	8.00	96.00	48	444	10.81%	12.04



## Participants Cost Effectiveness Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Appliance Replacement Program Gas Rate Number Electric Rate Number

Gas Measure	Range	Alternate Option	Range
Allowance	\$50	All Fuel Types	Electric
Gas Utility	Florida Public Utilities Company	Electric Utility	Florida Power & Light Co.

### I. Installed Cost Data

	\$
1. Equipment	\$640
2. Installation	\$196
<b>Total Cust. Cost</b>	<b>\$836</b>
3. Utility Rebate	\$50
4. Other Rebate	

### II. Operating Data

#### 1. Energy Factor

Therms Consume	Winter	Summer	Total
2. Standard Rate	24	24	48
3. Seasonal Rate			0
<b>Total</b>	<b>24</b>	<b>24</b>	<b>48</b>

#### 4. Electric Consumption in KWH

5. O&M (excluding energy) 8

Gas Rates	Rate
6. Base, Winter	0.33512
7. Base, Summer	0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg 5.65

14. Ratio of Therms Consumed to Total 10.81%

15. Average Life 19

### III. Common Gas & Electric Data

1. Discount Rate 8.77%

### IV. Installed Cost Data

	\$
1. Equipment	530
2. Installation	113
<b>Total Cust. Cost</b>	<b>\$643</b>
3. Utility Allowance	0
4. Other Allowance	

### V. Energy Conserved Data

	New	Existing
1. Energy Factor	1	1
2. Annual KWH	1029	1029
3. Annual Oil Gallons	0	0
4. Annual Gas Ther	0	0

5. Diversified KW

6. Billing KW

7. O&M (excluding energy) 12

8. Monthly Utility Incentive 0

9. Average Life in Yrs 19

10. Existing Remaining Life in Yrs 0

11. Electric Rate per KWH 0.0728

12. Electric Rate per KW, Winter 0

13. Electric Rate per KW, Summer 0

14. Electric Taxes & Fees 16.00%

15. Customer Chg 5.65

### VI. Therms Displaced

1. Energy Factor 1

Therms Displaced Winter Summer

2. Standard Rate

Total 0 0

# PARTICIPANTS COST EFFECTIVE RESULTS

Range

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	87	0	46	12	8	12	50	0	83	643	836	193
2001	90	0	47	12	8	12	0	0	34	0	0	0
2002	92	0	49	13	8	12	0	0	36	0	0	0
2003	95	0	50	13	9	12	0	0	37	0	0	0
2004	98	0	52	14	9	12	0	0	39	0	0	0
2005	101	0	53	14	9	12	0	0	40	0	0	0
2006	104	0	55	14	10	12	0	0	42	0	0	0
2007	107	0	56	15	10	12	0	0	43	0	0	0
2008	110	0	58	15	10	12	0	0	45	0	0	0
2009	113	0	60	16	10	12	0	0	47	0	0	0
2010	117	0	62	16	11	12	0	0	49	0	0	0
2011	120	0	63	17	11	12	0	0	50	0	0	0
2012	124	0	65	17	11	12	0	0	52	0	0	0
2013	128	0	67	18	12	12	0	0	54	0	0	0
2014	131	0	69	18	12	12	0	0	56	0	0	0
2015	135	0	71	19	12	12	0	0	58	0	0	0
2016	139	0	74	19	13	12	0	0	60	0	0	0
2017	144	0	76	20	13	12	0	0	62	0	0	0
2018	148	0	78	20	14	12	0	0	65	0	0	0
2019	152	0	80	21	14	12	0	0	67	0	0	0

Present Value  
of Benefits \$453

Present Value  
of Costs \$177

Benefit/Cost Ratio	2.55
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TABLE 1 Electric KW Cost Range

1	2	3	4	3*2+4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	0.0728	1029	16.00%	86.90
2001	0.0750	1029	16.00%	89.50
2002	0.0772	1029	16.00%	92.19
2003	0.0796	1029	16.00%	94.95
2004	0.0819	1029	16.00%	97.80
2005	0.0844	1029	16.00%	100.74
2006	0.0869	1029	16.00%	103.78
2007	0.0895	1029	16.00%	106.87
2008	0.0922	1029	16.00%	110.09
2009	0.0950	1029	16.00%	113.38
2010	0.0978	1029	16.00%	116.78
2011	0.1008	1029	16.00%	120.29
2012	0.1038	1029	16.00%	123.89
2013	0.1069	1029	16.00%	127.61
2014	0.1101	1029	16.00%	131.44
2015	0.1134	1029	16.00%	135.38
2016	0.1168	1029	16.00%	139.44
2017	0.1203	1029	16.00%	143.63
2018	0.1239	1029	16.00%	147.94
2019	0.1277	1029	16.00%	152.37

TABLE 2 Consumed-Displaced-Conserved - Therms

1	2	3	4	3*2+4
Year	Therm Cost	Annual THERMS	Tax Fees	Gas Cost
2000	0.82309	48	16.00%	45.83
2001	0.84778	48	16.00%	47.20
2002	0.87322	48	16.00%	48.62
2003	0.89941	48	16.00%	50.08
2004	0.92640	48	16.00%	51.58
2005	0.95419	48	16.00%	53.13
2006	0.98281	48	16.00%	54.72
2007	1.01230	48	16.00%	56.36
2008	1.04267	48	16.00%	58.06
2009	1.07395	48	16.00%	59.80
2010	1.10616	48	16.00%	61.59
2011	1.13935	48	16.00%	63.44
2012	1.17353	48	16.00%	65.34
2013	1.20874	48	16.00%	67.30
2014	1.24500	48	16.00%	69.32
2015	1.28235	48	16.00%	71.40
2016	1.32082	48	16.00%	73.54
2017	1.36044	48	16.00%	75.75
2018	1.40126	48	16.00%	78.02
2019	1.44329	48	16.00%	80.36

TABLE 3 Gas Customer Charge Range

1	2	3	4	5	6	3*6+16.00%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Range Annual Therms	Total Annual Therms	Ratio Therms Consumerd to Total	Gas Customer Charge
2000	8.00	96.00	48	444	10.81%	12.04
2001	8.00	96.00	48	444	10.81%	12.04
2002	8.00	96.00	48	444	10.81%	12.04
2003	8.00	96.00	48	444	10.81%	12.04
2004	8.00	96.00	48	444	10.81%	12.04
2005	8.00	96.00	48	444	10.81%	12.04
2006	8.00	96.00	48	444	10.81%	12.04
2007	8.00	96.00	48	444	10.81%	12.04
2008	8.00	96.00	48	444	10.81%	12.04
2009	8.00	96.00	48	444	10.81%	12.04
2010	8.00	96.00	48	444	10.81%	12.04
2011	8.00	96.00	48	444	10.81%	12.04
2012	8.00	96.00	48	444	10.81%	12.04
2013	8.00	96.00	48	444	10.81%	12.04
2014	8.00	96.00	48	444	10.81%	12.04
2015	8.00	96.00	48	444	10.81%	12.04
2016	8.00	96.00	48	444	10.81%	12.04
2017	8.00	96.00	48	444	10.81%	12.04
2018	8.00	96.00	48	444	10.81%	12.04
2019	8.00	96.00	48	444	10.81%	12.04

Florida Division of Chesapeake Utilities  
ENERGY CONSERVATION PROGRAM ANALYSIS  
Summary of Cost-Effectiveness Ratios

Residential Propane Distribution Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	IRIM B/C Ratio
Water Heater	275	123.8	1.11
Furnace	275	5.57	1.08
Clothes Dryer Outlet	75	33.15	1.12
Range	75	20.98	1.11

## Rate Impact Measure Test Data

All Costs in 2000 dollars Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Propane Distribution Program Gas Rate Number Electric Rate Number

Gas Measure:	Water Heater	40 gallon	Alternate Option:	Electric Resistance Water Heater	50 gallon
Allowance:	\$275		Alt. Facility:	Electric	
Gas Utility:	Florida Public Utilities Company		Electric Utility:	Florida Public Utilities Co.	

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
Total Costs	\$0

## II. Operating Data

1. Energy Factor 0.56

Therms Consumed	Winter	Summer	Total
2. Standard Rate	101.0	67.0	168.0
3. Seasonal Rate			0.0
Total	101.0	67.0	168.0

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg \$8.00

14. Ratio of Therms Consumed to Total 37.83%

15. Average Life 12

## III. Common Gas &amp; Electric Data

1. Discount Rate 8.77%

## IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
Total Cust. Cost	\$1,027
5. Utility Allowance	\$275
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

## V. Gas Supply Cost

1. Load Profile Type	Gas Supply Cost \$/Therm	
2. Commodity (Annual)		\$0.4987
3. Winter Multiplier		1.00
4. Summer Multiplier		1.00
5. Transportation, Capacity, Peaking and Balancing Cost		0.00000

## System Shrinkage

## VI. Therms Conserved

	New	Existing
1. Energy Factor	0.88	.88
2. Annual Gas Therms	0.0	0.0

## VII. Therms Displaced

1. Energy Factor		1.00	
Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
Total	0.00	0.00	0.00

## VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

### Rate Impact Measure Test Data

Water

	Consumed Conserved Displaced Gas Therms	Gas Customer Charge	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Facilities O&M	Gas Supply Cost	Program & Allowance Cost	Total Columns 5 thru 8
	Table 1	Table 2		Table 3	Table 4	Table 5		
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
1	138	36	175	18	25	84	275	402
2	141	36	177	18	26	86		130
3	143	36	179	17	26	89		132
4	146	36	182	16	27	92		135
5	149	36	185	16	28	94		138
6	151	36	187	15	28	97		141
7	154	36	190	14	29	100		143
8	157	36	193	14	30	103		146
9	160	36	196	13	30	106		150
10	163	36	199	12	31	109		153
11	166	36	202	12	32	113		156
12	170	36	206	11	33	116		160
13	173	36	209	10	34	119		164
14	177	36	213	10	35	123		167
15	180	36	216	9	36	127		171
16	184	36	220	8	36	131		175
17	188	36	224	8	37	134		180
18	192	36	228	7	38	138		184
19	196	36	232	7	39	143		189
20	200	36	236	6	41	147		193

Present Value  
of Benefits \$1,802

Present Value  
of Costs \$1,623

Benefit/Cost Ratio 1.11
----------------------------

Table 1

Year	Therms	Base Rate	PGA Rate	Total Rate	Total Rate - Therms
1	168	0.3512	0.4879	0.8391	138
2	168	0.3512	0.5026	0.8538	141
3	168	0.3512	0.5169	0.8681	143
4	168	0.3512	0.5322	0.8834	146
5	168	0.3512	0.5491	0.8943	149
6	168	0.3512	0.5669	0.9081	151
7	168	0.3512	0.5826	0.9178	154
8	168	0.3512	0.6004	0.9526	157
9	168	0.3512	0.61815	0.95227	160
10	168	0.3512	0.6369	0.97181	163
11	168	0.3512	0.65579	0.99091	166
12	168	0.3512	0.6746	1.01058	170
13	168	0.3512	0.69353	1.03085	173
14	168	0.3512	0.71660	1.05172	177
15	168	0.3512	0.73810	1.07322	180
16	168	0.3512	0.76024	1.09536	184
17	168	0.3512	0.78305	1.11817	188
18	168	0.3512	0.80654	1.14166	192
19	168	0.3512	0.83074	1.16586	196
20	168	0.3512	0.85566	1.19078	200

Table 2

Year	Customer	Annual	Ratio of Therms	Consumed To Total	Rate - Annual
1	168	96.00	37.83%	37.83%	136
2	168	96.00	37.83%	37.83%	136
3	168	96.00	37.83%	37.83%	136
4	168	96.00	37.83%	37.83%	136
5	168	96.00	37.83%	37.83%	136
6	168	96.00	37.83%	37.83%	136
7	168	96.00	37.83%	37.83%	136
8	168	96.00	37.83%	37.83%	136
9	168	96.00	37.83%	37.83%	136
10	168	96.00	37.83%	37.83%	136
11	168	96.00	37.83%	37.83%	136
12	168	96.00	37.83%	37.83%	136
13	168	96.00	37.83%	37.83%	136
14	168	96.00	37.83%	37.83%	136
15	168	96.00	37.83%	37.83%	136
16	168	96.00	37.83%	37.83%	136
17	168	96.00	37.83%	37.83%	136
18	168	96.00	37.83%	37.83%	136
19	168	96.00	37.83%	37.83%	136
20	168	96.00	37.83%	37.83%	136

Table 3

Year	Supply	Development	Service	Avg Cost	Customer	Ratio of Therms	Consumed To Total	Rate - Annual
1	168	293	620	115	1028	37.83%	37.83%	118
2	168	293	598	110	991	37.83%	37.83%	118
3	168	293	576	105	954	37.83%	37.83%	117
4	168	293	554	100	917	37.83%	37.83%	116
5	168	293	532	95	880	37.83%	37.83%	116
6	168	293	510	90	843	37.83%	37.83%	115
7	168	293	488	85	806	37.83%	37.83%	114
8	168	293	466	80	769	37.83%	37.83%	114
9	168	293	444	75	732	37.83%	37.83%	113
10	168	293	422	70	695	37.83%	37.83%	112
11	168	293	400	65	658	37.83%	37.83%	112
12	168	293	378	60	621	37.83%	37.83%	111
13	168	293	356	55	584	37.83%	37.83%	110
14	168	293	334	50	547	37.83%	37.83%	110
15	168	293	312	45	510	37.83%	37.83%	109
16	168	293	290	40	473	37.83%	37.83%	108
17	168	293	268	36	437	37.83%	37.83%	107
18	168	293	246	32	401	37.83%	37.83%	107
19	168	293	224	28	365	37.83%	37.83%	106
20	168	293	202	24	319	37.83%	37.83%	106

Table 4

Year	Supply	Development	Admin. Cost	Annual	Therms	Supply	Mean	D & M	Rate Therms To	New Customer
1	168	293	60	5	104	7.83%	293	7.83%	37.83%	25
2	168	283	62	5	104	7.83%	283	7.83%	37.83%	26
3	168	273	64	5	104	7.83%	273	7.83%	37.83%	27
4	168	263	66	5	104	7.83%	263	7.83%	37.83%	28
5	168	253	68	6	104	7.83%	253	7.83%	37.83%	28
6	168	243	70	6	104	7.83%	243	7.83%	37.83%	29
7	168	233	72	6	104	7.83%	233	7.83%	37.83%	29
8	168	223	74	6	104	7.83%	223	7.83%	37.83%	30
9	168	213	76	6	104	7.83%	213	7.83%	37.83%	30
10	168	203	78	7	104	7.83%	203	7.83%	37.83%	31
11	168	193	81	7	104	7.83%	193	7.83%	37.83%	32
12	168	183	83	7	104	7.83%	183	7.83%	37.83%	33
13	168	173	86	7	104	7.83%	173	7.83%	37.83%	34
14	168	163	88	7	104	7.83%	163	7.83%	37.83%	35
15	168	153	91	8	104	7.83%	153	7.83%	37.83%	36
16	168	143	93	8	104	7.83%	143	7.83%	37.83%	36
17	168	133	96	8	104	7.83%	133	7.83%	37.83%	37
18	168	123	99	8	104	7.83%	123	7.83%	37.83%	38
19	168	113	102	9	104	7.83%	113	7.83%	37.83%	39
20	168	104	105	9	104	7.83%	104	7.83%	37.83%	41

Table 5

Year	Therms	Water	Summer	Commodity Cost	Feeding & Bl. Cost	Water	Gas Supply
1	168	101	67	0.4987	0.0000	1.00	184
2	168	101	67	0.5137	0.0000	1.00	188
3	168	101	67	0.5291	0.0000	1.00	189
4	168	101	67	0.5449	0.0000	1.00	192
5	168	101	67	0.5613	0.0000	1.00	194
6	168	101	67	0.5781	0.0000	1.00	197
7	168	101	67	0.5955	0.0000	1.00	199
8	168	101	67	0.6133	0.0000	1.00	199
9	168	101	67	0.6317	0.0000	1.00	196
10	168	101	67	0.6507	0.0000	1.00	199
11	168	101	67	0.6702	0.0000	1.00	199
12	168	101	67	0.6903	0.0000	1.00	199
13	168	101	67	0.7110	0.0000	1.00	199
14	168	101	67	0.7324	0.0000	1.00	199
15	168	101	67	0.7543	0.0000	1.00	199
16	168	101	67	0.7770	0.0000	1.00	199
17	168	101	67	0.8003	0.0000	1.00	199
18	168	101	67	0.8243	0.0000	1.00	199
19	168	101	67	0.8490	0.0000	1.00	199
20	168	101	67	0.8745	0.0000	1.00	199

## Rate Impact Measure Test Data

All Costs in 2000 Dollars

Analysis Start Year: 2000

Number of Years:

20

Gas Program: Residential Propane Distribution Program Gas Rate Number Electric Rate Number

Gas Measure:	Furnace	Appliance:	Electric
Allowance:	\$275	Electric Utility:	Florida Power & Light
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>\$0</b>

## II. Operating Data

## 1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	180.0	0.0	180.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>180.0</b>	<b>0.0</b>	<b>180.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	40.55%

15. Average Life	19
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## III. Common Gas &amp; Electric Data

1. Discount Rate	8.77%
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## IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$1,027</b>

5. Utility Allowance	\$275
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

## V. Gas Supply Cost

1. Load Profile Type		Gas Supply Cost \$/Therm
2. Commodity (Annual)		\$0.4987
3. Winter Multiplier		1.00
4. Summer Multiplier		1.00
5. Transportation, Capacity, Peaking and Balancing Cost		0

## System Shrinkage

## VI. Therms Conserved

	New	Existing
1. Energy Factor	1.00	1
2. Annual Gas Therms	0.0	0.0

## VII. Therms Displaced

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			



# Rate Impact Measure Test Data

Heating

	Consumed Conserved Displaced Gas Therms	Gas Customer Charge	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Facilities O&M	Gas Supply Cost	Program & Allowance Cost	Total Columns 6 thru 9
	Table 1	Table 2		Table 3	Table 4	Table 5		
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
1	148	39	187	20	34	90	275	418
2	148	39	187	19	34	92		146
3	151	39	190	18	35	95		148
4	154	39	193	18	35	98		151
5	157	39	196	17	36	101		153
6	159	39	198	16	36	104		156
7	162	39	201	15	37	107		159
8	166	39	205	15	37	110		162
9	169	39	208	14	38	114		165
10	172	39	211	13	38	117		168
11	175	39	214	13	39	121		172
12	179	39	218	12	39	124		176
13	182	39	221	11	40	128		180
14	186	39	225	10	41	132		183
15	190	39	229	10	42	136		187
16	194	39	233	9	38	140		187
17	198	39	237	8	43	144		196
18	202	39	241	8	44	148		200
19	206	39	245	7	45	153		205
20	211	39	250	6	46	157		209

Present Value  
of Benefits

\$1,907

Present Value  
of Costs

\$1,769

Benefit/Cost  
Ratio

1.08

Heating

**Table 1**

Year	1	2	3	4	5	5-2
Total Rate	10.48792	10.82308	10.48792	10.48792	10.48792	Total Rate
Term	10.48792	10.48792	10.48792	10.48792	10.48792	Term
Base Rate	10.48792	10.48792	10.48792	10.48792	10.48792	Base Rate
PCA Rate	0.00000	0.00000	0.00000	0.00000	0.00000	PCA Rate
Total Rate	10.48792	10.48792	10.48792	10.48792	10.48792	Total Rate
Year	1	2	3	4	5	21

Heating

**Table 2**

Year	1	2	3	4
Customer Rate Annual	96.00	96.00	96.00	96.00
Rate of Terms Consumed To Total	40.55%	40.55%	40.55%	40.55%
Customer Rate Chg	0.00	0.00	0.00	0.00
Rate of Terms Consumed To Total	40.55%	40.55%	40.55%	40.55%
Year	1	2	3	4

Heating

**Table 3**

Year	1	2	3	4	5	6	7	8
Supply Main	230	230	230	230	230	230	230	230
Development Main	183	193	203	213	223	233	243	253
Service Low	620	620	620	620	620	620	620	620
Avg Cost of Dist	115	115	115	115	115	115	115	115
Customer Cost	1028	1028	1028	1028	1028	1028	1028	1028
Rate of Terms Consumed To Total	40.55%	40.55%	40.55%	40.55%	40.55%	40.55%	40.55%	40.55%
Carrying Chg Main & Svc	110	110	110	110	110	110	110	110
Year	1	2	3	4	5	6	7	8

Heating

**Table 4**

Year	1	2	3	4	5	6	7	8
Term	180	180	180	180	180	180	180	180
Summer	0	0	0	0	0	0	0	0
Community Gas Supply Cost	0.4387	0.4387	0.4387	0.4387	0.4387	0.4387	0.4387	0.4387
Feeding & Bal. Cost	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water Mixture	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Gas Supply Cost	137	137	137	137	137	137	137	137
Year	1	2	3	4	5	6	7	8

Heating

**Table 5**

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Admin. Cost	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Annual Adm. Cost	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293
Development Main	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283	283
Supply "	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O. & M. Rate	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%	7.83%
% Total Consumed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Customer Adm. & Main DDM	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293
Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

## Rate Impact Measure Test Data

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Propane Distribution Program Gas Rate Number Electric Rate Number

Gas Measure:	Dryer	Alternative Fuel:	Electric
Allowance:	\$75	Electric Utility:	FLORIDA PUBLIC UTILITIES CO.
Gas Utility:	Florida Public Utilities Company		

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>\$0</b>

## II. Operating Data

## 1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	10.81%

15. Average Life	13
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## III. Common Gas &amp; Electric Data

1. Discount Rate	8.77%
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## IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>\$1,027</b>

5. Utility Allowance	\$75
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

## V. Gas Supply Cost

1. Load Profile Type		Gas Supply Cost \$/Therm
2. Commodity (Annual)		\$0.4987
3. Winter Multiplier		1.00
4. Summer Multiplier		1.00
5. Transportation, Capacity, Peaking and Balancing Cost		0.00000

## System Shrinkage

## VI. Therms Conserved

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual Gas Therms	0.0	0.0

## VII. Therms Displaced

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

## VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

# Rate Impact Measure Test Data

Dryer

	Consumed Conserved Displaced Gas Therms Table 1	Gas Customer Charge Table 2	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter Table 3	New Customer Admin. & Facilities O&M Table 4	Gas Supply Cost Table 5	Program & Allowance Cost	Total Columns 6 thru 9
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
1	40	10	50	5	7	23	75	110
2	40	10	50	5	7	25		37
3	41	10	51	5	8	25		38
4	42	10	52	5	8	26		39
5	42	10	52	4	8	27		39
6	43	10	53	4	8	28		40
7	44	10	54	4	8	29		41
8	45	10	55	4	8	29		42
9	46	10	56	4	9	30		43
10	47	10	57	4	9	31		44
11	48	10	58	3	9	32		45
12	49	10	59	3	9	33		46
13	49	10	59	3	10	34		47
14	50	10	60	3	10	35		48
15	52	10	62	3	10	36		49
16	53	10	63	2	10	37		50
17	54	10	64	2	11	38		51
18	55	10	65	2	11	40		53
19	56	10	66	2	11	41		54
20	57	10	67	2	12	42		55

Present Value  
of Benefits

\$516

Present Value  
of Costs

\$459

Benefit/Cost  
Ratio

1.12

**Table 1**  
Dry

Year	Thermos	PGA Rate	Rate Rate	Rate Rate	Total Rate
1	48	10.33512	10.48197	10.83209	140
2	48	10.33512	10.50261	10.83773	140
3	48	10.33512	10.51769	10.85281	141
4	48	10.33512	10.53222	10.86834	142
5	48	10.33512	10.54921	10.88433	142
6	48	10.33512	10.56959	10.90081	143
7	48	10.33512	10.58266	10.91778	144
8	48	10.33512	10.60014	10.93526	145
9	48	10.33512	10.61815	10.95327	146
10	48	10.33512	10.63689	10.97181	147
11	48	10.33512	10.65579	10.99091	148
12	48	10.33512	10.67546	11.01058	149
13	48	10.33512	10.69572	11.03085	149
14	48	10.33512	10.71660	11.05172	150
15	48	10.33512	10.73810	11.07322	152
16	48	10.33512	10.76024	11.09536	153
17	48	10.33512	10.78305	11.11817	154
18	48	10.33512	10.80654	11.14166	155
19	48	10.33512	10.83074	11.16586	156
20	48	10.33512	10.85566	11.19078	157

**Table 2**  
Dry

Year	Customer	Annual	Ratio of Items	Rate Annual	Charged/No	Consumed To Total	Cost Chg.	Cost Chg.
1	1	60	10.81%	96.00	10.81%	110	110	110
2	2	60	10.81%	96.00	10.81%	110	110	110
3	3	60	10.81%	96.00	10.81%	110	110	110
4	4	60	10.81%	96.00	10.81%	110	110	110
5	5	60	10.81%	96.00	10.81%	110	110	110
6	6	60	10.81%	96.00	10.81%	110	110	110
7	7	60	10.81%	96.00	10.81%	110	110	110
8	8	60	10.81%	96.00	10.81%	110	110	110
9	9	60	10.81%	96.00	10.81%	110	110	110
10	10	60	10.81%	96.00	10.81%	110	110	110
11	11	60	10.81%	96.00	10.81%	110	110	110
12	12	60	10.81%	96.00	10.81%	110	110	110
13	13	60	10.81%	96.00	10.81%	110	110	110
14	14	60	10.81%	96.00	10.81%	110	110	110
15	15	60	10.81%	96.00	10.81%	110	110	110
16	16	60	10.81%	96.00	10.81%	110	110	110
17	17	60	10.81%	96.00	10.81%	110	110	110
18	18	60	10.81%	96.00	10.81%	110	110	110
19	19	60	10.81%	96.00	10.81%	110	110	110
20	20	60	10.81%	96.00	10.81%	110	110	110

**Table 3**  
Dry

Year	Main	Service	Line	Meter	Customer	Rate of Items	Consumed To Total	7.6.8
1	0	203	820	115	1028	4.71%	10.81%	15
2	0	283	991	110	991	4.71%	10.81%	15
3	0	273	954	105	954	4.71%	10.81%	15
4	0	263	917	100	917	4.71%	10.81%	15
5	0	253	880	95	880	4.71%	10.81%	14
6	0	243	843	90	843	4.71%	10.81%	14
7	0	233	806	85	806	4.71%	10.81%	14
8	0	223	769	80	769	4.71%	10.81%	14
9	0	213	732	75	732	4.71%	10.81%	14
10	0	203	695	70	695	4.71%	10.81%	14
11	0	193	658	65	658	4.71%	10.81%	13
12	0	183	621	60	621	4.71%	10.81%	13
13	0	173	584	55	584	4.71%	10.81%	13
14	0	163	547	50	547	4.71%	10.81%	13
15	0	153	510	45	510	4.71%	10.81%	13
16	0	143	473	40	473	4.71%	10.81%	12
17	0	133	437	36	437	4.71%	10.81%	12
18	0	123	401	32	401	4.71%	10.81%	12
19	0	113	365	28	365	4.71%	10.81%	12
20	0	104	329	24	329	4.71%	10.81%	12

**Table 4**  
Dry

Year	Winter	Summer	Thermos	Thermos	Supply Cost	Commonity Gas	Transp. Capacity	Meter	Gas Supply
1	48	23	23	0.487	0.0000	0.0000	1.00	1.00	123
2	48	24	24	0.5137	0.0000	0.0000	1.00	1.00	125
3	48	24	24	0.5291	0.0000	0.0000	1.00	1.00	125
4	48	24	24	0.5449	0.0000	0.0000	1.00	1.00	126
5	48	24	24	0.5613	0.0000	0.0000	1.00	1.00	127
6	48	24	24	0.5781	0.0000	0.0000	1.00	1.00	128
7	48	24	24	0.5955	0.0000	0.0000	1.00	1.00	128
8	48	24	24	0.6133	0.0000	0.0000	1.00	1.00	129
9	48	24	24	0.6317	0.0000	0.0000	1.00	1.00	130
10	48	24	24	0.6507	0.0000	0.0000	1.00	1.00	131
11	48	24	24	0.6702	0.0000	0.0000	1.00	1.00	132
12	48	24	24	0.6903	0.0000	0.0000	1.00	1.00	133
13	48	24	24	0.7110	0.0000	0.0000	1.00	1.00	134
14	48	24	24	0.7324	0.0000	0.0000	1.00	1.00	135
15	48	24	24	0.7543	0.0000	0.0000	1.00	1.00	136
16	48	24	24	0.7770	0.0000	0.0000	1.00	1.00	137
17	48	24	24	0.8003	0.0000	0.0000	1.00	1.00	138
18	48	24	24	0.8243	0.0000	0.0000	1.00	1.00	140
19	48	24	24	0.8490	0.0000	0.0000	1.00	1.00	141
20	48	24	24	0.8745	0.0000	0.0000	1.00	1.00	142

**Table 5**  
Dry

Year	Admin	Annual	Development	Supply	Meter	O & M	Rate Thermos To	New Customer	Admin & Meter O&M
1	5	60	293	293	7.83%	10.81%	7	7	7
2	5	64	283	273	7.83%	10.81%	8	8	8
3	5	68	263	253	7.83%	10.81%	8	8	8
4	5	66	263	243	7.83%	10.81%	8	8	8
5	5	66	253	233	7.83%	10.81%	8	8	8
6	6	70	243	223	7.83%	10.81%	8	8	8
7	6	72	233	213	7.83%	10.81%	9	9	9
8	6	74	223	203	7.83%	10.81%	9	9	9
9	6	76	213	203	7.83%	10.81%	9	9	9
10	7	78	203	193	7.83%	10.81%	9	9	9
11	7	81	193	183	7.83%	10.81%	9	9	9
12	7	83	183	173	7.83%	10.81%	9	9	9
13	7	86	173	163	7.83%	10.81%	10	10	10
14	7	88	163	153	7.83%	10.81%	10	10	10
15	8	91	153	143	7.83%	10.81%	10	10	10
16	8	93	143	133	7.83%	10.81%	11	11	11
17	8	96	133	123	7.83%	10.81%	11	11	11
18	8	99	123	113	7.83%	10.81%	11	11	11
19	9	102	113	104	7.83%	10.81%	12	12	12
20	9	105	104	0	0	7.83%	10.81%	12	12

## Rate Impact Measure Test Data

All Costs in 2000 Analysis Start Year: 2000 Number of Years: 20

Gas Program: Residential Propane Distribution Program Gas Rate Number Electric Rate Number

Gas Measure	Propane	Alternative Option	Electric
Allowance	\$75	Electric Utility	FLORIDA POWER & LIGHT CO.
Gas Utility	Florida Public Utilities Company		

	\$
1. Avoided Meter Removal Cost	\$0
2. Avoided Cut & Cap Cost	0
Total Costs	\$0

## II. Operating Data

## 1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate			0.0
Total	24.0	24.0	48.0

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	10.81%

15. Average Life	19
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## III. Common Gas &amp; Electric Data

1. Discount Rate	8.77%
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## IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
Total Cust. Cost	\$1,027

5. Utility Allowance	\$75
6. Program Cost	\$0
7. New Customer Admin. Cost \$/month	\$5
8. Main O&M (Percent)	7.83%

## V. Gas Supply Cost

1. Load Profile Type	Gas Supply Cost \$/Therm	
2. Commodity (Annual)		\$0.4987
3. Winter Multiplier		1.00
4. Summer Multiplier		1.00
5. Transportation, Capacity, Peaking and Balancing Cost		0.00000

## System Shrinkage

## VI. Therms Conserved

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual Gas Therms	0.0	0.0

## VII. Therms Displaced

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
Total	0.00	0.00	0.00

## VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

## Rate Impact Measure Test Data

Range

	Consumed Conserved Displaced Gas Therms	Gas Customer Charge	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Facilities O&M	Gas Supply Cost	Program & Allowance Cost	Total Columns 6 thru 9
	Table 1	Table 2		Table 3	Table 4	Table 5		
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
1	40	10	50	\$5	7	24	75	111
2	40	10	50	\$5	7	25		37
3	41	10	51	\$5	7	25		38
4	42	10	52	\$5	8	26		39
5	42	10	52	\$4	8	27		39
6	43	10	53	\$4	8	28		40
7	44	10	54	\$4	8	29		41
8	45	10	55	\$4	8	29		42
9	46	10	56	\$4	9	30		43
10	47	10	57	\$4	9	31		44
11	48	10	58	\$3	9	32		44
12	49	10	59	\$3	9	33		45
13	49	10	59	\$3	10	34		47
14	50	10	60	\$3	10	35		48
15	52	10	62	\$3	10	36		49
16	53	10	63	\$2	10	37		50
17	54	10	64	\$2	11	38		51
18	55	10	65	\$2	11	40		53
19	56	10	66	\$2	11	41		54
20	57	-10	67	\$2	12	42		56

Present Value  
of Benefits \$512

Present Value  
of Costs \$460

Benefit/Cost Ratio	1.11
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Table 1

Range

1	2	3	4	5	5*2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
1	48	10.33512	10.48797	10.82309	140
2	48	10.33512	10.50261	10.83773	140
3	48	10.33512	10.51769	10.85281	141
4	48	10.33512	10.53322	10.86834	142
5	48	10.33512	10.54921	10.88433	142
6	48	10.33512	10.56569	10.90081	143
7	48	10.33512	10.58266	10.91778	144
8	48	10.33512	10.60014	10.93526	145
9	48	10.33512	10.61815	10.95327	146
10	48	10.33512	10.63669	10.97181	147
11	48	10.33512	10.65579	10.99091	148
12	48	10.33512	10.67546	11.01058	149
13	48	10.33512	10.69573	11.03085	149
14	48	10.33512	10.71660	11.05172	150
15	48	10.33512	10.73810	11.07322	152
16	48	10.33512	10.76024	11.09536	153
17	48	10.33512	10.78305	11.11817	154
18	48	10.33512	10.80654	11.14166	155
19	48	10.33512	10.83074	11.16586	156
20	48	10.33512	10.85568	11.19078	157

Table 2

Range

1	2	3	4	4*3
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio * Annual Cust. Chg
1	8.00	96.00	10.81%	110
2	8.00	96.00	10.81%	110
3	8.00	96.00	10.81%	110
4	8.00	96.00	10.81%	110
5	8.00	96.00	10.81%	110
6	8.00	96.00	10.81%	110
7	8.00	96.00	10.81%	110
8	8.00	96.00	10.81%	110
9	8.00	96.00	10.81%	110
10	8.00	96.00	10.81%	110
11	8.00	96.00	10.81%	110
12	8.00	96.00	10.81%	110
13	8.00	96.00	10.81%	110
14	8.00	96.00	10.81%	110
15	8.00	96.00	10.81%	110
16	8.00	96.00	10.81%	110
17	8.00	96.00	10.81%	110
18	8.00	96.00	10.81%	110
19	8.00	96.00	10.81%	110
20	8.00	96.00	10.81%	110

Table 3

Range

1	2	3	4	5	6	7	8	7*8*8
Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer Cost	Ratio Therms Cons.	Carrying Chg Mains & Svc
1	0	293	620	115	4.71%	1,028	10.81%	15
2	0	283	598	110	4.71%	991	10.81%	15
3	0	273	576	105	4.71%	954	10.81%	15
4	0	263	554	100	4.71%	917	10.81%	15
5	0	253	532	95	4.71%	880	10.81%	14
6	0	243	510	90	4.71%	843	10.81%	14
7	0	233	488	85	4.71%	806	10.81%	14
8	0	223	466	80	4.71%	769	10.81%	14
9	0	213	444	75	4.71%	732	10.81%	14
10	0	203	422	70	4.71%	695	10.81%	14
11	0	193	400	65	4.71%	658	10.81%	13
12	0	183	378	60	4.71%	621	10.81%	13
13	0	173	356	55	4.71%	584	10.81%	13
14	0	163	334	50	4.71%	547	10.81%	13
15	0	153	312	45	4.71%	510	10.81%	13
16	0	143	290	40	4.71%	473	10.81%	12
17	0	133	268	36	4.71%	437	10.81%	12
18	0	123	246	32	4.71%	401	10.81%	12
19	0	113	224	28	4.71%	365	10.81%	12
20	0	104	202	13	4.71%	319	10.81%	12

Table 4

Range

1	2	3	4	5	6	7	8*0204*7-(3*7)
Year	Adm. Cost	Annual Adm. Cost	Development Main	Supply Main	Customer Cost	Ratio Therms To Total Consumed	New Customer Adm. & Main O&M
1	5	60	293	0	293	10.81%	17
2	5	62	283	0	283	10.81%	17
3	5	64	273	0	273	10.81%	17
4	5	66	263	0	263	10.81%	18
5	6	68	253	0	253	10.81%	18
6	6	70	243	0	243	10.81%	18
7	6	72	233	0	233	10.81%	18
8	6	74	223	0	223	10.81%	18
9	6	76	213	0	213	10.81%	19
10	7	78	203	0	203	10.81%	19
11	7	81	193	0	193	10.81%	19
12	7	83	183	0	183	10.81%	19
13	7	86	173	0	173	10.81%	19
14	7	88	163	0	163	10.81%	110
15	8	91	153	0	153	10.81%	110
16	8	93	143	0	143	10.81%	110
17	8	96	133	0	133	10.81%	111
18	8	99	123	0	123	10.81%	111
19	9	102	113	0	113	10.81%	111
20	9	105	104	0	104	10.81%	112

Table 5

Range

1	2	3	4	5	6	7	137
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	*Transp. Capacity Pk'gng & Bal. Cost	Winter Multiplier	Gas Supply Cost
1	48	24	24	0.4987	0.0000	1.00	124
2	48	24	24	0.5137	0.0000	1.00	125
3	48	24	24	0.5291	0.0000	1.00	125
4	48	24	24	0.5449	0.0000	1.00	126
5	48	24	24	0.5613	0.0000	1.00	127
6	48	24	24	0.5781	0.0000	1.00	128
7	48	24	24	0.5955	0.0000	1.00	129
8	48	24	24	0.6133	0.0000	1.00	129
9	48	24	24	0.6317	0.0000	1.00	130
10	48	24	24	0.6507	0.0000	1.00	131
11	48	24	24	0.6702	0.0000	1.00	132
12	48	24	24	0.6903	0.0000	1.00	133
13	48	24	24	0.7110	0.0000	1.00	134
14	48	24	24	0.7324	0.0000	1.00	135
15	48	24	24	0.7543	0.0000	1.00	136
16	48	24	24	0.7770	0.0000	1.00	137
17	48	24	24	0.8003	0.0000	1.00	138
18	48	24	24	0.8243	0.0000	1.00	140
19	48	24	24	0.8490	0.0000	1.00	141
20	48	24	24	0.8745	0.0000	1.00	142



### Participants Cost Effectiveness Test Data

All Costs in	2000 dollars	Analysis Start Year:	2000	Number of Years:	20
Gas Program:	Residential Propane Distribution Program	Gas Rate Number		Electric Rate Number	
Gas Measure:	Water Heater	40 gallon	Annual Oil Gallons	Electric Rate Number	50 gallon
Allowance:	\$275				
Gas Utility:	Florida Public Utilities Company		Electric Utility:	Florida Power & Light Co.	

I. Installed Cost Data

	\$
1. Equipment	\$235
2. Installation	521
<b>Total Cust. Cost</b>	<b>\$756</b>
3. Utility Rebate	\$275
4. Other Rebate	

II. Operating Data

1. Energy Factor	0.56			
	Therms Consumed	Winter	Summer	Total
2. Standard Rate	101.0	67.0	168.0	
3. Seasonal Rate				0.0
	Total	101.0	67.0	168.0

4. Electric Consumption in KWH	
5. O&M (excluding energy)	\$7

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	37.83%
15. Average Life	12

III. Common Gas & Electric Data

1. Discount Rate	8.77%
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IV. Installed Cost Data

	\$
1. Equipment	\$247
2. Installation	191
<b>Total Cust. Cost</b>	<b>\$438</b>
3. Utility Allowance	
4. Other Allowance	

V. Energy Conserved Data

	New	Existing
1. Energy Factor	0.88	0.88
2. Annual KWH	3,751	3,751
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0
	Winter	Summer

5. Diversified KW	
6. Billing KW	

7. O&M (excluding energy)	\$9
8. Monthly Utility Incentive	\$0
9. Average Life in Yrs	14
10. Existing Remaining Life in Yrs	0
11. Electric Rate per KWH	\$0.0728
12. Electric Rate per KW, Winter	\$0.0000
13. Electric Rate per KW, Summer	\$0.0000
14. Electric Taxes & Fees	16.00%
15. Customer Chg	\$5.65

VI. Therms Displaced

1. Energy Factor	1.00	
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	Therms Displaced	Winter	Summer
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2. Standard Rate	0.0		
<b>Total</b>	0.0	0.0	0.0

# PARTICIPANTS COST EFFECTIVE RESULTS

Water

Program Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserve -Displaced Gas Therm Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
1	\$317	\$0	\$160	\$9	\$7	\$42	\$275	\$0	\$391	\$0	\$0	\$0
2	\$326	\$0	\$165	\$9	\$7	\$42	0	0	\$121	0	0	0
3	\$336	\$0	\$170	\$10	\$7	\$42	0	0	\$126	0	0	0
4	\$346	\$0	\$175	\$10	\$8	\$42	0	0	\$131	0	0	0
5	\$356	\$0	\$181	\$10	\$8	\$42	0	0	\$136	0	0	0
6	\$367	\$0	\$186	\$10	\$8	\$42	0	0	\$141	0	0	0
7	\$378	\$0	\$192	\$11	\$8	\$42	0	0	\$147	0	0	0
8	\$390	\$0	\$197	\$11	\$9	\$42	0	0	\$153	0	0	0
9	\$401	\$0	\$203	\$11	\$9	\$42	0	0	\$158	0	0	0
10	\$413	\$0	\$209	\$12	\$9	\$42	0	0	\$164	0	0	0
11	\$426	\$0	\$216	\$12	\$9	\$42	0	0	\$171	0	332	332
12	\$438	\$0	\$222	\$12	\$10	\$42	0	0	\$177	0	0	0
13	\$452	\$0	\$229	\$13	\$10	\$42	0	0	\$184	352	0	(352)
14	\$465	\$0	\$236	\$13	\$10	\$42	0	0	\$190	0	0	0
15	\$479	\$0	\$243	\$14	\$11	\$42	0	0	\$197	0	0	0
16	\$493	\$0	\$250	\$14	\$11	\$42	0	0	\$205	0	0	0
17	\$508	\$0	\$257	\$14	\$11	\$42	0	0	\$212	0	0	0
18	\$524	\$0	\$265	\$15	\$12	\$42	0	0	\$220	0	0	0
19	\$539	\$0	\$273	\$15	\$12	\$42	0	0	\$227	0	0	0
20	\$555	\$0	\$281	\$16	\$12	\$42	0	0	\$236	0	0	0

Present Value of Benefits \$1,683

Present Value of Costs \$14

Benefit/Cost Ratio	123.80
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TABLE 1 Electric KW Cost WATER

Year	1	2	3	4
Year	1	2	3	4
KWH	\$0.0728	3.751	16.00%	\$317
Cost	\$0.0728	3.751	16.00%	\$326
Year	2	3	4	5
Electric	\$0.0772	3.751	16.00%	\$336
Cost	\$0.0772	3.751	16.00%	\$346
Year	3	4	5	6
Electric	\$0.0844	3.751	16.00%	\$367
Cost	\$0.0844	3.751	16.00%	\$378
Year	4	5	6	7
Electric	\$0.0895	3.751	16.00%	\$390
Cost	\$0.0895	3.751	16.00%	\$401
Year	5	6	7	8
Electric	\$0.0950	3.751	16.00%	\$413
Cost	\$0.0950	3.751	16.00%	\$426
Year	6	7	8	9
Electric	\$0.1008	3.751	16.00%	\$438
Cost	\$0.1008	3.751	16.00%	\$452
Year	7	8	9	10
Electric	\$0.1069	3.751	16.00%	\$465
Cost	\$0.1069	3.751	16.00%	\$479
Year	8	9	10	11
Electric	\$0.1134	3.751	16.00%	\$493
Cost	\$0.1134	3.751	16.00%	\$508
Year	9	10	11	12
Electric	\$0.1203	3.751	16.00%	\$524
Cost	\$0.1203	3.751	16.00%	\$539
Year	10	11	12	13
Electric	\$0.1276	3.751	16.00%	\$555
Cost	\$0.1276	3.751	16.00%	\$570

TABLE 2 Consumed-Displaced-Conserved - Therms

Year	1	2	3	4
Year	1	2	3	4
Therm	\$0.8731	168	16.00%	\$160
Annual	\$0.8731	168	16.00%	\$165
Tax	\$0.8732	168	16.00%	\$170
Cost	\$0.8732	168	16.00%	\$175
Year	2	3	4	5
Therm	\$0.9264	168	16.00%	\$181
Annual	\$0.9264	168	16.00%	\$186
Tax	\$0.9264	168	16.00%	\$192
Cost	\$0.9264	168	16.00%	\$197
Year	3	4	5	6
Therm	\$1.0427	168	16.00%	\$203
Annual	\$1.0427	168	16.00%	\$209
Tax	\$1.0427	168	16.00%	\$216
Cost	\$1.0427	168	16.00%	\$222
Year	4	5	6	7
Therm	\$1.1735	168	16.00%	\$229
Annual	\$1.1735	168	16.00%	\$236
Tax	\$1.1735	168	16.00%	\$243
Cost	\$1.1735	168	16.00%	\$250
Year	5	6	7	8
Therm	\$1.2507	168	16.00%	\$243
Annual	\$1.2507	168	16.00%	\$250
Tax	\$1.2507	168	16.00%	\$257
Cost	\$1.2507	168	16.00%	\$265
Year	6	7	8	9
Therm	\$1.3208	168	16.00%	\$257
Annual	\$1.3208	168	16.00%	\$265
Tax	\$1.3208	168	16.00%	\$273
Cost	\$1.3208	168	16.00%	\$281
Year	7	8	9	10
Therm	\$1.4433	168	16.00%	\$281
Annual	\$1.4433	168	16.00%	\$289
Tax	\$1.4433	168	16.00%	\$297
Cost	\$1.4433	168	16.00%	\$305

TABLE 3 Gas Customer Charge Water

Year	1	2	3	4	5	6
Year	1	2	3	4	5	6
Monthly	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00
Annual	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00
Cust. Chrg	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00	\$8.00
Therms	168	168	168	168	168	168
Annual	168	168	168	168	168	168
Wtr. Hr	444	444	444	444	444	444
Total	444	444	444	444	444	444
Annual	444	444	444	444	444	444
Consumer	37.84%	37.84%	37.84%	37.84%	37.84%	37.84%
Ratio	37.84%	37.84%	37.84%	37.84%	37.84%	37.84%
Therm	37.84%	37.84%	37.84%	37.84%	37.84%	37.84%
to Total	37.84%	37.84%	37.84%	37.84%	37.84%	37.84%
Customer	\$42	\$42	\$42	\$42	\$42	\$42
Charge	\$42	\$42	\$42	\$42	\$42	\$42
3-7-4	3-7-4	3-7-4	3-7-4	3-7-4	3-7-4	3-7-4

### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars      Analysis Start Year: 2000      Number of Years: 20

Gas Program: Residential Propane      Gas Rate Number      Electric Rate Number  
Distribution Program

Gas Meter:	PG&E	Electric Meter:	PG&E
Allowance:	270		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Public Utilities Company

**I. Installed Cost Data**

	\$
1. Equipment	\$1,549
2. Installation	629
<b>Total Cust. Cost</b>	<b>\$2,178</b>
3. Utility Rebate	\$275
4. Other Rebate	

**II. Operating Data**

1. Energy Factor	0.78		
Therms Consumed	Winter	Summer	Total
2. Standard Rate	180.0	0.0	180.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>180.0</b>	<b>0.0</b>	<b>180.0</b>

4. Electric Consumption in KWH	
5. O&M (excluding energy)	\$14

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	40.55%

15. Average Life	19
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**III. Common Gas & Electric Data**

1. Discount Rate	8.77%
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**IV. Installed Cost Data**

	\$
1. Equipment	\$576
2. Installation	654
<b>Total Cust. Cost</b>	<b>\$1,230</b>
3. Utility Allowance	\$0
4. Other Allowance	

**V. Energy Conserved Data**

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual KWH	4,082	4,082
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0

	Winter	Summer
5. Diversified KW		
6. Billing KW		
7. O&M (excluding energy)		\$9
8. Monthly Utility Incentive		\$0
9. Average Life in Yrs		16
10. Existing Remaining Life in Yrs		0

11. Electric Rate per KWH	\$0.0728
12. Electric Rate per KW, Winter	\$0.0000
13. Electric Rate per KW, Summer	\$0.0000
14. Electric Taxes & Fees	16.00%
15. Customer Chg	\$5.65

**VI. Therms Displaced**

1. Energy Factor	1.00
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Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

**PARTICIPANTS COST EFFECTIVE RESULTS**

Furnace

Program Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserve -Displaced Gas Therm Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11	
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	\$345	\$0	\$172	\$9	\$14	\$45	\$275	\$0	\$398	\$0	\$0	\$0	
2	\$355	\$0	\$177	\$9	\$14	\$45	0	0	\$128	0	0	0	
3	\$366	\$0	\$182	\$10	\$15	\$45	0	0	\$133	0	0	0	
4	\$377	\$0	\$188	\$10	\$15	\$45	0	0	\$138	0	0	0	
5	\$388	\$0	\$193	\$10	\$16	\$45	0	0	\$144	0	0	0	
6	\$400	\$0	\$199	\$10	\$16	\$45	0	0	\$149	0	0	0	
7	\$412	\$0	\$205	\$11	\$17	\$45	0	0	\$155	0	0	0	
8	\$424	\$0	\$211	\$11	\$17	\$45	0	0	\$161	0	0	0	
9	\$437	\$0	\$218	\$11	\$18	\$45	0	0	\$167	0	0	0	
10	\$450	\$0	\$224	\$12	\$18	\$45	0	0	\$174	0	0	0	
11	\$463	\$0	\$231	\$12	\$19	\$45	0	0	\$180	0	0	0	
12	\$477	\$0	\$238	\$12	\$19	\$45	0	0	\$187	0	0	0	
13	\$491	\$0	\$245	\$13	\$20	\$45	0	0	\$194	0	0	0	
14	\$506	\$0	\$252	\$13	\$21	\$45	0	0	\$201	0	0	0	
15	\$521	\$0	\$260	\$14	\$21	\$45	0	0	\$209	871	0	(871)	
16	\$537	\$0	\$268	\$14	\$22	\$45	0	0	\$216	0	0	0	
17	\$553	\$0	\$276	\$14	\$22	\$45	0	0	\$224	0	0	0	
18	\$570	\$0	\$284	\$15	\$23	\$45	0	0	\$232	0	2560	2560	
19	\$587	\$0	\$293	\$15	\$24	\$45	0	0	\$241	0	0	0	
20	\$604	\$0	\$301	\$16	\$25	\$45	\$0	0	\$249	0	0	0	

Present Value  
of Benefits

\$1,765

Present Value  
of Costs

\$317

Benefit/Cost  
Ratio 5.57

TABLE 1 Electric KW Cost Furnace

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
1	\$0.0728	4,082	16.00%	\$345
2	\$0.0750	4,082	16.00%	\$355
3	\$0.0772	4,082	16.00%	\$366
4	\$0.0795	4,082	16.00%	\$377
5	\$0.0819	4,082	16.00%	\$388
6	\$0.0844	4,082	16.00%	\$400
7	\$0.0869	4,082	16.00%	\$412
8	\$0.0895	4,082	16.00%	\$424
9	\$0.0922	4,082	16.00%	\$437
10	\$0.0950	4,082	16.00%	\$450
11	\$0.0978	4,082	16.00%	\$463
12	\$0.1008	4,082	16.00%	\$477
13	\$0.1038	4,082	16.00%	\$491
14	\$0.1069	4,082	16.00%	\$506
15	\$0.1101	4,082	16.00%	\$521
16	\$0.1134	4,082	16.00%	\$537
17	\$0.1168	4,082	16.00%	\$553
18	\$0.1203	4,082	16.00%	\$570
19	\$0.1239	4,082	16.00%	\$587
20	\$0.1276	4,082	16.00%	\$604

TABLE 2 Consumed-Displaced-Conserved - Therms Furnace

1	2	3	4	3*2*4
Year	Therm Cost	Annual Therms	Tax Fees	Gas Cost
1	\$0.8231	180	16.00%	\$172
2	\$0.8478	180	16.00%	\$177
3	\$0.8732	180	16.00%	\$182
4	\$0.8994	180	16.00%	\$188
5	\$0.9264	180	16.00%	\$193
6	\$0.9542	180	16.00%	\$199
7	\$0.9828	180	16.00%	\$205
8	\$1.0123	180	16.00%	\$211
9	\$1.0427	180	16.00%	\$218
10	\$1.0739	180	16.00%	\$224
11	\$1.1062	180	16.00%	\$231
12	\$1.1393	180	16.00%	\$238
13	\$1.1735	180	16.00%	\$245
14	\$1.2087	180	16.00%	\$252
15	\$1.2450	180	16.00%	\$260
16	\$1.2823	180	16.00%	\$268
17	\$1.3208	180	16.00%	\$276
18	\$1.3604	180	16.00%	\$284
19	\$1.4013	180	16.00%	\$293
20	\$1.4433	180	16.00%	\$301

TABLE 3 Gas Customer Charge Furnace

1	2	3	4	5	6	3*6*16.0%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Furnace Annual Therms	Total Annual Therms	Ratio Therms Consumerd to Total	Gas Customer Charge
1	\$8.00	\$96.00	180	444	40.54%	\$45
2	\$8.00	\$96.00	180	444	40.54%	\$45
3	\$8.00	\$96.00	180	444	40.54%	\$45
4	\$8.00	\$96.00	180	444	40.54%	\$45
5	\$8.00	\$96.00	180	444	40.54%	\$45
6	\$8.00	\$96.00	180	444	40.54%	\$45
7	\$8.00	\$96.00	180	444	40.54%	\$45
8	\$8.00	\$96.00	180	444	40.54%	\$45
9	\$8.00	\$96.00	180	444	40.54%	\$45
10	\$8.00	\$96.00	180	444	40.54%	\$45
11	\$8.00	\$96.00	180	444	40.54%	\$45
12	\$8.00	\$96.00	180	444	40.54%	\$45
13	\$8.00	\$96.00	180	444	40.54%	\$45
14	\$8.00	\$96.00	180	444	40.54%	\$45
15	\$8.00	\$96.00	180	444	40.54%	\$45
16	\$8.00	\$96.00	180	444	40.54%	\$45
17	\$8.00	\$96.00	180	444	40.54%	\$45
18	\$8.00	\$96.00	180	444	40.54%	\$45
19	\$8.00	\$96.00	180	444	40.54%	\$45
20	\$8.00	\$96.00	180	444	40.54%	\$45

## Participants Cost Effectiveness Test Data

All Costs in 2000 dollars      Analysis Start Year: 2000      Number of Years: 20

Gas Program: Residential Propane      Gas Rate Number      Electric Rate Number  
Distribution Program

Gas Measure:	Dryer	Alternate Order:	Dryer
Allowance:	202	Alternate Order:	113
Gas Utility:	Florida Public Utilities Company	Gas Utility:	Florida Public Utilities

### I. Installed Cost Data

	\$
1. Equipment	\$425
2. Installation	202
<b>Total Cust. Cost</b>	<b>\$627</b>

3. Utility Rebate	\$75
4. Other Rebate	

### II. Operating Data

1. Energy Factor	0.72		
	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate	0.0		
	Total		
	24.0	24.0	48.0

4. Electric Consumption in KWH	
5. O&M (excluding energy)	\$10

	Gas Rates	Rate
6. Base, Winter		\$0.33512
7. Base, Summer		\$0.33512
8. Seasonal, Winter		
9. Seasonal, Summer		
10. PGA, Winter		0.48797
11. PGA, Summer		0.48797
12. Taxes & Fees		16.00%

13. Customer Chg	\$8.00
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14. Ratio of Therms Consumed to Total	10.81%
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15. Average Life	13
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### III. Common Gas & Electric Data

1. Discount Rate	8.65%
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### IV. Installed Cost Data

	\$
1. Equipment	\$375
2. Installation	113
<b>Total Cust. Cost</b>	<b>\$488</b>

3. Utility Allowance	\$0
4. Other Allowance	

### V. Energy Conserved Data

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual KWH	1,404	1,404
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0
	Winter	Summer

5. Diversified KW	
6. Billing KW	

7. O&M (excluding energy)	\$14
8. Monthly Utility Incentive	\$0
9. Average Life in Yrs	13
10. Existing Remaining Life in Yrs	0

11. Electric Rate per KWH	\$0.0728
12. Electric Rate per KW, Winter	\$0.0000
13. Electric Rate per KW, Summer	\$0.0000
14. Electric Taxes & Fees	16.00%
15. Customer Chg	\$5.85

### VI. Therms Displaced

1. Energy Factor	1.00	
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	Therms Displaced	Winter	Summer
2. Standard Rate	0.0		
	Total	0.0	0.0

# PARTICIPANTS COST EFFECTIVE RESULTS

Dryer

Program Year	Electric KWH Cost Table 1	No. 2 Fuel Oil Table 2	Consumed -Conserved -Displaced Gas Therm Table 2	Alternate Appliance O&M Table 2	Gas Appliance O&M Table 3	Gas Customer Charge Table 3	Gas Rebate Table 3	Alternate Appliance Rebate Table 3	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost Table 3	Gas Appliance Installed Cost Table 3	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
1	\$119	\$0	\$46	\$14	\$10	\$12	\$75	\$0	\$139	\$0	\$0	\$0
2	\$122	\$0	\$47	\$14	\$10	\$12	0	0	\$67	0	0	0
3	\$126	\$0	\$49	\$15	\$11	\$12	0	0	\$69	0	0	0
4	\$130	\$0	\$50	\$15	\$11	\$12	0	0	\$71	0	0	0
5	\$133	\$0	\$52	\$16	\$11	\$12	0	0	\$74	0	0	0
6	\$137	\$0	\$53	\$16	\$12	\$12	0	0	\$77	0	0	0
7	\$142	\$0	\$55	\$17	\$12	\$12	0	0	\$79	0	0	0
8	\$146	\$0	\$56	\$17	\$12	\$12	0	0	\$82	0	0	0
9	\$150	\$0	\$58	\$18	\$13	\$12	0	0	\$85	0	0	0
10	\$155	\$0	\$60	\$18	\$13	\$12	0	0	\$88	0	0	0
11	\$159	\$0	\$62	\$19	\$13	\$12	0	0	\$91	0	0	0
12	\$164	\$0	\$63	\$19	\$14	\$12	0	0	\$94	519	588	69
13	\$169	\$0	\$65	\$20	\$14	\$12	0	0	\$97	0	0	0
14	\$174	\$0	\$67	\$21	\$15	\$12	0	0	\$100	0	0	0
15	\$179	\$0	\$69	\$21	\$15	\$12	0	0	\$104	0	0	0
16	\$185	\$0	\$71	\$22	\$16	\$12	0	0	\$107	0	0	0
17	\$190	\$0	\$74	\$22	\$16	\$12	0	0	\$111	0	0	0
18	\$196	\$0	\$76	\$23	\$17	\$12	0	0	\$114	0	0	0
19	\$202	\$0	\$78	\$24	\$17	\$12	0	0	\$118	0	0	0
20	\$208	\$0	\$80	\$25	\$18	\$12	0	0	\$122	0	0	0

Present Value  
of Benefits \$837

Present Value  
of Costs \$25

Benefit/Cost Ratio	33.15
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TABLE 1 Electric KW Cost Dryer

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
1	\$0.0728	1,404	16.00%	\$119
2	\$0.0750	1,404	16.00%	\$122
3	\$0.0772	1,404	16.00%	\$126
4	\$0.0795	1,404	16.00%	\$130
5	\$0.0819	1,404	16.00%	\$133
6	\$0.0844	1,404	16.00%	\$137
7	\$0.0869	1,404	16.00%	\$142
8	\$0.0895	1,404	16.00%	\$146
9	\$0.0922	1,404	16.00%	\$150
10	\$0.0950	1,404	16.00%	\$155
11	\$0.0978	1,404	16.00%	\$159
12	\$0.1008	1,404	16.00%	\$164
13	\$0.1038	1,404	16.00%	\$169
14	\$0.1069	1,404	16.00%	\$174
15	\$0.1101	1,404	16.00%	\$179
16	\$0.1134	1,404	16.00%	\$185
17	\$0.1168	1,404	16.00%	\$190
18	\$0.1203	1,404	16.00%	\$196
19	\$0.1239	1,404	16.00%	\$202
20	\$0.1276	1,404	16.00%	\$208

TABLE 2 Consumed-Displaced-Conserved - Therms Dryer

1	2	3	4	3*2*4
Year	Therm Cost	Annual Therms	Tax Fees	Gas Cost
1	\$0.6231	48	16.00%	\$46
2	\$0.6478	48	16.00%	\$47
3	\$0.6732	48	16.00%	\$49
4	\$0.6994	48	16.00%	\$50
5	\$0.7264	48	16.00%	\$52
6	\$0.7542	48	16.00%	\$53
7	\$0.7828	48	16.00%	\$55
8	\$1.0123	48	16.00%	\$56
9	\$1.0427	48	16.00%	\$58
10	\$1.0739	48	16.00%	\$60
11	\$1.1062	48	16.00%	\$62
12	\$1.1393	48	16.00%	\$63
13	\$1.1735	48	16.00%	\$65
14	\$1.2087	48	16.00%	\$67
15	\$1.2450	48	16.00%	\$69
16	\$1.2823	48	16.00%	\$71
17	\$1.3208	48	16.00%	\$74
18	\$1.3604	48	16.00%	\$76
19	\$1.4013	48	16.00%	\$78
20	\$1.4433	48	16.00%	\$80

TABLE 3 Gas Customer Charge Dryer

1	2	3	4	5	6	3*6*13.67%
Year	Cust. Chrg	Annual Cust. Chrg	Dryer Annual Therms	Total Annual Therms	Ratio Therm Consumerd to Total	Gas Customer Charge
1	\$8.00	\$96.00	48	423	11.35%	12
2	\$8.00	\$96.00	48	423	11.35%	12
3	\$8.00	\$96.00	48	423	11.35%	12
4	\$8.00	\$96.00	48	423	11.35%	12
5	\$8.00	\$96.00	48	423	11.35%	12
6	\$8.00	\$96.00	48	423	11.35%	12
7	\$8.00	\$96.00	48	423	11.35%	12
8	\$8.00	\$96.00	48	423	11.35%	12
9	\$8.00	\$96.00	48	423	11.35%	12
10	\$8.00	\$96.00	48	423	11.35%	12
11	\$8.00	\$96.00	48	423	11.35%	12
12	\$8.00	\$96.00	48	423	11.35%	12
13	\$8.00	\$96.00	48	423	11.35%	12
14	\$8.00	\$96.00	48	423	11.35%	12
15	\$8.00	\$96.00	48	423	11.35%	12
16	\$8.00	\$96.00	48	423	11.35%	12
17	\$8.00	\$96.00	48	423	11.35%	12
18	\$8.00	\$96.00	48	423	11.35%	12
19	\$8.00	\$96.00	48	423	11.35%	12
20	\$8.00	\$96.00	48	423	11.35%	12

### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars      Analysis Start Year: 2000      Number of Years: 20

Gas Program: Residential Propane      Gas Rate Number      Electric Rate Number  
Distribution Program

Gas Metering	Range	Analysis Period	Electric Rate
Allowance	175		
Gas Utility	Florida Public Utilities Company	Electric Utility	Florida Public Utilities Company

I. Installed Cost Data

	\$
1. Equipment	\$640
2. Installation	196
<b>Total Cust. Cost</b>	<b>\$836</b>
3. Utility Rebate	\$75
4. Other Rebate	

II. Operating Data

1. Energy Factor	0.72		
Therms Consumed	Winter	Summer	Total
2. Standard Rate	24.0	24.0	48.0
3. Seasonal Rate	0.0		
<b>Total</b>	<b>24.0</b>	<b>24.0</b>	<b>48.0</b>

4. Electric Consumption in KWH	
5. O&M (excluding energy)	\$8

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	\$8.00

14. Ratio of Therms Consumed to Total	10.81%
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15. Average Life	19
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III. Common Gas & Electric Data

1. Discount Rate	8.77%
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IV. Installed Cost Data

	\$
1. Equipment	\$530
2. Installation	113
<b>Total Cust. Cost</b>	<b>\$643</b>
3. Utility Allowance	\$0
4. Other Allowance	

V. Energy Conserved Data

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual KWH	1,404	1,404
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0
	Winter	Summer

5. Diversified KW	
6. Billing KW	
7. O&M (excluding energy)	\$12
8. Monthly Utility Incentive	\$0
9. Average Life in Yrs	19
10. Existing Remaining Life in Yrs	0

11. Electric Rate per KWH	\$0.0728
12. Electric Rate per KW, Winter	\$0.0000
13. Electric Rate per KW, Summer	\$0.0000
14. Electric Taxes & Fees	16.00%
15. Customer Chg	\$5.65

VI. Therms Displaced

1. Energy Factor	1.00	
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Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

# PARTICIPANTS COST EFFECTIVE RESULTS

Range

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserve -Displaced as Therm Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
1	\$119	\$0	\$46	\$12	\$8	\$12	\$75	\$0	\$140	\$0	\$0	\$0
2	\$122	\$0	\$47	\$12	\$8	\$12	0	0	\$67	0	0	0
3	\$126	\$0	\$49	\$13	\$8	\$12	0	0	\$69	0	0	0
4	\$130	\$0	\$50	\$13	\$9	\$12	0	0	\$72	0	0	0
5	\$133	\$0	\$52	\$14	\$9	\$12	0	0	\$74	0	0	0
6	\$137	\$0	\$53	\$14	\$9	\$12	0	0	\$77	0	0	0
7	\$142	\$0	\$55	\$14	\$10	\$12	0	0	\$80	0	0	0
8	\$146	\$0	\$56	\$15	\$10	\$12	0	0	\$82	0	0	0
9	\$150	\$0	\$58	\$15	\$10	\$12	0	0	\$85	0	0	0
10	\$155	\$0	\$60	\$16	\$10	\$12	0	0	\$88	0	0	0
11	\$159	\$0	\$62	\$16	\$11	\$12	0	0	\$91	0	0	0
12	\$164	\$0	\$63	\$17	\$11	\$12	0	0	\$94	0	0	0
13	\$169	\$0	\$65	\$17	\$11	\$12	0	0	\$97	0	0	0
14	\$174	\$0	\$67	\$18	\$12	\$12	0	0	\$101	0	0	0
15	\$179	\$0	\$69	\$18	\$12	\$12	0	0	\$104	0	0	0
16	\$185	\$0	\$71	\$19	\$12	\$12	0	0	\$107	0	0	0
17	\$190	\$0	\$74	\$19	\$13	\$12	0	0	\$111	0	0	0
18	\$196	\$0	\$76	\$20	\$13	\$12	0	0	\$115	876	1,058	182
19	\$202	\$0	\$78	\$20	\$14	\$12	0	0	\$119	0	0	0
20	\$208	\$0	\$80	\$21	\$14	\$12	0	0	\$123	0	0	0

Present Valu  
of Benefits

\$840

Present Valu  
of Costs

\$40

Benefit/Cos Ratio	20.98
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TABLE 1 Electric KW Cost Range

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
1	\$0.0728	1,404	16.00%	\$119
2	\$0.0750	1,404	16.00%	\$122
3	\$0.0772	1,404	16.00%	\$126
4	\$0.0795	1,404	16.00%	\$130
5	\$0.0819	1,404	16.00%	\$133
6	\$0.0844	1,404	16.00%	\$137
7	\$0.0869	1,404	16.00%	\$142
8	\$0.0895	1,404	16.00%	\$146
9	\$0.0922	1,404	16.00%	\$150
10	\$0.0950	1,404	16.00%	\$155
11	\$0.0978	1,404	16.00%	\$159
12	\$0.1008	1,404	16.00%	\$164
13	\$0.1038	1,404	16.00%	\$169
14	\$0.1069	1,404	16.00%	\$174
15	\$0.1101	1,404	16.00%	\$179
16	\$0.1134	1,404	16.00%	\$185
17	\$0.1168	1,404	16.00%	\$190
18	\$0.1203	1,404	16.00%	\$196
19	\$0.1239	1,404	16.00%	\$202
20	\$0.1276	1,404	16.00%	\$208

TABLE 2 Consumed-Displaced-Conserved - Therms Range

1	2	3	4	3*2*4
Year	Therm Cost	Annual Therms	Tax Fees	Gas Cost
1	\$0.6231	48	16.00%	\$46
2	\$0.6478	48	16.00%	\$47
3	\$0.6732	48	16.00%	\$49
4	\$0.6994	48	16.00%	\$50
5	\$0.7264	48	16.00%	\$52
6	\$0.7542	48	16.00%	\$53
7	\$0.7828	48	16.00%	\$55
8	\$1.0123	48	16.00%	\$56
9	\$1.0427	48	16.00%	\$58
10	\$1.0739	48	16.00%	\$60
11	\$1.1062	48	16.00%	\$62
12	\$1.1393	48	16.00%	\$63
13	\$1.1735	48	16.00%	\$65
14	\$1.2087	48	16.00%	\$67
15	\$1.2450	48	16.00%	\$69
16	\$1.2823	48	16.00%	\$71
17	\$1.3208	48	16.00%	\$74
18	\$1.3604	48	16.00%	\$76
19	\$1.4013	48	16.00%	\$78
20	\$1.4433	48	16.00%	\$80

TABLE 3 Gas Customer Charge Range

1	2	3	4	5	6	3*6*16.0%
Year	Cust. Chrg	Annual Cust. Chrg	Range Annual Therms	Total Annual Therms	Ratio Therms Consumed to Total	Gas Customer Charge
1	\$8.00	\$96.00	48	444	10.81%	12
2	\$8.00	\$96.00	48	444	10.81%	12
3	\$8.00	\$96.00	48	444	10.81%	12
4	\$8.00	\$96.00	48	444	10.81%	12
5	\$8.00	\$96.00	48	444	10.81%	12
6	\$8.00	\$96.00	48	444	10.81%	12
7	\$8.00	\$96.00	48	444	10.81%	12
8	\$8.00	\$96.00	48	444	10.81%	12
9	\$8.00	\$96.00	48	444	10.81%	12
10	\$8.00	\$96.00	48	444	10.81%	12
11	\$8.00	\$96.00	48	444	10.81%	12
12	\$8.00	\$96.00	48	444	10.81%	12
13	\$8.00	\$96.00	48	444	10.81%	12
14	\$8.00	\$96.00	48	444	10.81%	12
15	\$8.00	\$96.00	48	444	10.81%	12
16	\$8.00	\$96.00	48	444	10.81%	12
17	\$8.00	\$96.00	48	444	10.81%	12
18	\$8.00	\$96.00	48	444	10.81%	12
19	\$8.00	\$96.00	48	444	10.81%	12
20	\$8.00	\$96.00	48	444	10.81%	12

**Florida Division of Chesapeake Utilities  
ENERGY CONSERVATION PROGRAM ANALYSIS  
Summary of Cost-Effectiveness Ratios**

**Residential Water Heater Retention Program**

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Program B/C Ratio
Water Heater	150	128.55	1.58

## Rate Impact Measure Test Data

All Costs in 2000 dollars      Analysis Start Year: 2000      Number of Years: 20

Gas Program:	Residential Appliance Retention Program	Gas Rate Number	Electric Rate Number
Gas Measure:	Water Heater 40 gallon	Alternate Option:	Electric Resistance Water Heater 50 gallon
Allowance:	\$350	AFEL Type:	Electric
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
1. Avoided Meter Removal Cost	20
2. Avoided Cut & Cap Cost	234
<b>Total Costs</b>	<b>254</b>

### II. Operating Data

1. Energy Factor 0.56

Therms Consumed	Winter	Summer	Total
2. Standard Rate	101.0	67.0	168.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>101.0</b>	<b>67.0</b>	<b>168.0</b>

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797

13. Customer Chg \$8.00

14. Ratio of Therms Consumed to Total 37.83%

15. Average Life 12

### III. Common Gas & Electric Data

1. Discount Rate 8.77%

### IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	0
3. Service	0
4. Meter	0
<b>Total Cust. Cost</b>	<b>\$0</b>

5. Utility Allowance \$350  
 6. Program Cost \$0  
 7. New Customer Admin. Cost \$/month \$0  
 8. Main O&M (Percent) 7.83%

### V. Gas Supply Cost

1. Load Profile Type	Gas Supply Cost \$/Therm	
2. Commodity (Annual)		\$0.4987
3. Winter Multiplier		1.00
4. Summer Multiplier		1.00
5. Transportation, Capacity, Peaking and Balancing Cost		0.00000

### System Shrinkage

### VI. Therms Conserved

	New	Existing
1. Energy Factor	0.88	.88
2. Annual Gas Therms	0.0	0.0

### VII. Therms Displaced (not in VI 2.)

1. Energy Factor 1.00

Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

### VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			
3. Consumed Existing			
4. Displaced			

## Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therm	Gas Customer Charge	Avoid Meter Service Line Removal	Total Columns 2 thru 4	Carrying Chg. On Main, Svc. & Meter	New Customer Admin. & Main O&M	Gas Supply Cost	Other Cost	Program & Allowance Cost	Total Columns 6 thru 10
	Table 1	Table 2			Table 3	Table 4	Table 5	Table 6	Table 7	
1	2	3	4	5	6	7	8	9	10	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1998	138	36	254	428	0	0	84	0	350	434
1999	141	36		177	0	0	86	0		86
2000	143	36		179	0	0	89	0		89
2001	146	36		182	0	0	92	0		92
2002	149	36		185	0	0	94	0		94
2003	151	36		187	0	0	97	0		97
2004	154	36		190	0	0	100	0		100
2005	157	36		193	0	0	103	0		103
2006	160	36		196	0	0	106	0		106
2007	163	36		199	0	0	109	0		109
2008	166	36		202	0	0	113	0		113
2009	170	36		206	0	0	116	0		116
2010	173	36		209	0	0	119	0		119
2011	177	36		213	0	0	123	0		123
2012	180	36		216	0	0	127	0		127
2013	184	36		220	0	0	131	0		131
2014	188	36		224	0	0	134	0		134
2015	192	36		228	0	0	138	0		138
2016	196	36		232	0	0	143	0		143
2017	200	36		236	0	0	147	0		147

Present Value \$2,033  
of Benefits

Present Value \$1,286  
of Costs

Benefit/Cost Ratio	1.58
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Table 1

1	2	3	4	5	5*2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2000	168	0.33512	0.48797	0.82309	138
2001	168	0.33512	0.50261	0.83773	141
2002	168	0.33512	0.51769	0.85281	143
2003	168	0.33512	0.53322	0.86834	146
2004	168	0.33512	0.54921	0.88433	149
2005	168	0.33512	0.56569	0.90081	151
2006	168	0.33512	0.58266	0.91778	154
2007	168	0.33512	0.60014	0.93526	157
2008	168	0.33512	0.61815	0.95327	160
2009	168	0.33512	0.63669	0.97181	163
2010	168	0.33512	0.65579	0.99091	166
2011	168	0.33512	0.67546	1.01058	170
2012	168	0.33512	0.69573	1.03085	173
2013	168	0.33512	0.71660	1.05172	177
2014	168	0.33512	0.73810	1.07322	180
2015	168	0.33512	0.76024	1.09536	184
2016	168	0.33512	0.78305	1.11817	188
2017	168	0.33512	0.80654	1.14166	192
2018	168	0.33512	0.83074	1.16586	196
2019	168	0.33512	0.85566	1.19078	200

Table 3

1	2	3	4	5	6	8	3*5*8+4*5+2*6)*7
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
2000	168	101	67	0.4987	0.0000	1.00	\$84
2001	168	101	67	0.5137	0.0000	1.00	\$86
2002	168	101	67	0.5291	0.0000	1.00	\$89
2003	168	101	67	0.5449	0.0000	1.00	\$92
2004	168	101	67	0.5613	0.0000	1.00	\$94
2005	168	101	67	0.5781	0.0000	1.00	\$97
2006	168	101	67	0.5955	0.0000	1.00	\$100
2007	168	101	67	0.6133	0.0000	1.00	\$103
2008	168	101	67	0.6317	0.0000	1.00	\$106
2009	168	101	67	0.6507	0.0000	1.00	\$109
2010	168	101	67	0.6702	0.0000	1.00	\$113
2011	168	101	67	0.6903	0.0000	1.00	\$116
2012	168	101	67	0.7110	0.0000	1.00	\$119
2013	168	101	67	0.7324	0.0000	1.00	\$123
2014	168	101	67	0.7543	0.0000	1.00	\$127
2015	168	101	67	0.7770	0.0000	1.00	\$131
2016	168	101	67	0.8003	0.0000	1.00	\$134
2017	168	101	67	0.8243	0.0000	1.00	\$138
2018	168	101	67	0.8490	0.0000	1.00	\$143
2019	168	101	67	0.8745	0.0000	1.00	\$147

Table 2

1	2	3	4	4*2
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio * Annual Cust. Chg.
2000	8.00	96	37.83%	\$36
2001	8.00	96	37.83%	\$36
2002	8.00	96	37.83%	\$36
2003	8.00	96	37.83%	\$36
2004	8.00	96	37.83%	\$36
2005	8.00	96	37.83%	\$36
2006	8.00	96	37.83%	\$36
2007	8.00	96	37.83%	\$36
2008	8.00	96	37.83%	\$36
2009	8.00	96	37.83%	\$36
2010	8.00	96	37.83%	\$36
2011	8.00	96	37.83%	\$36
2012	8.00	96	37.83%	\$36
2013	8.00	96	37.83%	\$36
2014	8.00	96	37.83%	\$36
2015	8.00	96	37.83%	\$36
2016	8.00	96	37.83%	\$36
2017	8.00	96	37.83%	\$36
2018	8.00	96	37.83%	\$36
2019	8.00	96	37.83%	\$36



### Participants Cost Effectiveness Test Data

All Costs in 2000 dollars      Analysis Start Year: 2000      Number of Years: 20

Gas Program:	Residential Appliance Retention Program	Gas Rate Number	Electric Rate Number
Gas Measure:	Water Heater - 40 gallon	Alt. Fuel Type:	Electric Resistance Water Heater - 50 gallon Electric
Allowance:	\$350	Gas Utility:	Florida Power & Light Co.
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

**I. Installed Cost Data**

	\$
1. Equipment	\$235
2. Installation	160
<b>Total Cust. Cost</b>	<b>\$395</b>
3. Utility Rebate	\$350
4. Other Rebate	

**II. Operating Data**

1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	101.0	67.0	168.0
3. Seasonal Rate			0.0
<b>Total</b>	<b>101.0</b>	<b>67.0</b>	<b>168.0</b>

4. Electric Consumption in KWH

5. O&M (excluding energy)      \$7

Gas Rates	Rate
6. Base, Winter	\$0.33512
7. Base, Summer	\$0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	37.83%
15. Average Life	12

**III. Common Gas & Electric Data**

1. Discount Rate      8.77%

**IV. Installed Cost Data**

	\$
1. Equipment	\$233
2. Installation	160
<b>Total Cust. Cost</b>	<b>\$393</b>
3. Utility Allowance	\$0
4. Other Allowance	

**V. Energy Conserved Data**

	New	Existing
1. Energy Factor	0.88	0.88
2. Annual KWH	3,751	3,751
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0
	Winter	Summer
5. Diversified KW		
6. Billing KW		
7. O&M (excluding energy)		\$9
8. Monthly Utility Incentive		\$0
9. Average Life in Yrs		14
10. Existing Remaining Life in Yrs		0
11. Electric Rate per KWH		\$0.0728
12. Electric Rate per KW, Winter		\$0.0000
13. Electric Rate per KW, Summer		\$0.0000
14. Electric Taxes & Fees		16.00%
15. Customer Chg		\$5.65

**VI. Therms Displaced (not in V. 4.)**

1. Energy Factor      1.00

Therms Displaced	Winter	Summer
2. Standard Rate		
<b>Total</b>	<b>0.0</b>	<b>0.0</b>

**PARTICIPANTS COST EFFECTIVE RESULTS**

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil 3	Consumed -Conserve -Displaced Gas Therm Table 2	Alternate Appliance O&M 5	Gas Appliance O&M 6	Gas Customer Charge Table 3	Gas Rebate 8	Alternate Appliance Rebate 9	Total Benefits 2+3-4+5 -6-7+8-9 10	Alternate Appliance Installed Cost 11	Gas Appliance Installed Cost 12	Total Cost 12-11 13
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	\$317	\$0	\$160	\$9	\$7	\$42	\$350	\$0	\$466	\$393	\$395	\$2
2001	\$326	\$0	\$165	\$9	\$7	\$42	0	0	\$121	0	0	0
2002	\$336	\$0	\$170	\$10	\$7	\$42	0	0	\$126	0	0	0
2003	\$346	\$0	\$175	\$10	\$8	\$42	0	0	\$131	0	0	0
2004	\$357	\$0	\$181	\$10	\$8	\$42	0	0	\$136	0	0	0
2005	\$367	\$0	\$186	\$10	\$8	\$42	0	0	\$141	0	0	0
2006	\$378	\$0	\$192	\$11	\$8	\$42	0	0	\$147	0	0	0
2007	\$390	\$0	\$197	\$11	\$9	\$42	0	0	\$153	0	0	0
2008	\$401	\$0	\$203	\$11	\$9	\$42	0	0	\$158	0	0	0
2009	\$413	\$0	\$209	\$12	\$9	\$42	0	0	\$164	0	0	0
2010	\$426	\$0	\$216	\$12	\$9	\$42	0	0	\$171	0	0	0
2011	\$438	\$0	\$222	\$12	\$10	\$42	0	0	\$177	0	0	0
2012	\$452	\$0	\$229	\$13	\$10	\$42	0	0	\$184	0	0	0
2013	\$465	\$0	\$236	\$13	\$10	\$42	0	0	\$190	0	345	345
2014	\$479	\$0	\$243	\$14	\$11	\$42	0	0	\$197	0	0	0
2015	\$493	\$0	\$250	\$14	\$11	\$42	0	0	\$204	363	0	(363)
2016	\$508	\$0	\$257	\$14	\$11	\$42	0	0	\$212	0	0	0
2017	\$524	\$0	\$265	\$15	\$12	\$42	0	0	\$220	0	0	0
2018	\$539	\$0	\$273	\$15	\$12	\$42	0	0	\$227	0	0	0
2019	\$555	\$0	\$281	\$16	\$12	\$42	0	0	\$236	0	0	0

Present Value  
of Benefits \$1,752Present Value  
of Costs \$14Benefit/Cos  
Ratio 128.55

TABLE 1

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	\$0.0728	3,751	18.00%	\$317
2001	\$0.0750	3,751	18.00%	\$326
2002	\$0.0772	3,751	18.00%	\$336
2003	\$0.0795	3,751	18.00%	\$346
2004	\$0.0819	3,751	18.00%	\$357
2005	\$0.0844	3,751	18.00%	\$367
2006	\$0.0869	3,751	18.00%	\$378
2007	\$0.0895	3,751	18.00%	\$390
2008	\$0.0922	3,751	18.00%	\$401
2009	\$0.0950	3,751	18.00%	\$413
2010	\$0.0978	3,751	18.00%	\$426
2011	\$0.1008	3,751	18.00%	\$438
2012	\$0.1038	3,751	18.00%	\$452
2013	\$0.1069	3,751	18.00%	\$465
2014	\$0.1101	3,751	18.00%	\$479
2015	\$0.1133	3,751	18.00%	\$493
2016	\$0.1166	3,751	18.00%	\$508
2017	\$0.1203	3,751	18.00%	\$524
2018	\$0.1239	3,751	18.00%	\$539
2019	\$0.1277	3,751	18.00%	\$555

TABLE 2

1	2	3	4	3*2*4
Year	Therm Cost	Annual THERMS	Tax Fees	Gas Cost
2000	\$0.8231	168	18.00%	\$160
2001	\$0.8478	168	18.00%	\$165
2002	\$0.8732	168	18.00%	\$170
2003	\$0.8994	168	18.00%	\$175
2004	\$0.9264	168	18.00%	\$181
2005	\$0.9542	168	18.00%	\$188
2006	\$0.9828	168	18.00%	\$192
2007	\$1.0123	168	18.00%	\$197
2008	\$1.0427	168	18.00%	\$203
2009	\$1.0739	168	18.00%	\$209
2010	\$1.1062	168	18.00%	\$216
2011	\$1.1393	168	18.00%	\$222
2012	\$1.1735	168	18.00%	\$229
2013	\$1.2087	168	18.00%	\$236
2014	\$1.2450	168	18.00%	\$243
2015	\$1.2823	168	18.00%	\$250
2016	\$1.3208	168	18.00%	\$257
2017	\$1.3604	168	18.00%	\$265
2018	\$1.4013	168	18.00%	\$273
2019	\$1.4433	168	18.00%	\$281

TABLE 3

1	2	3	4	5	6	3*6*13.67%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Wtr. Htr Annual Therma	Total Annual Therma	Ratio Therma Consumerd to Total	Gas Customer Charge
2000	8.00	96	168	444	37.84%	\$42
2001	8.00	96	168	444	37.84%	\$42
2002	8.00	96	168	444	37.84%	\$42
2003	8.00	96	168	444	37.84%	\$42
2004	8.00	96	168	444	37.84%	\$42
2005	8.00	96	168	444	37.84%	\$42
2006	8.00	96	168	444	37.84%	\$42
2007	8.00	96	168	444	37.84%	\$42
2008	8.00	96	168	444	37.84%	\$42
2009	8.00	96	168	444	37.84%	\$42
2010	8.00	96	168	444	37.84%	\$42
2011	8.00	96	168	444	37.84%	\$42
2012	8.00	96	168	444	37.84%	\$42
2013	8.00	96	168	444	37.84%	\$42
2014	8.00	96	168	444	37.84%	\$42
2015	8.00	96	168	444	37.84%	\$42
2016	8.00	96	168	444	37.84%	\$42
2017	8.00	96	168	444	37.84%	\$42
2018	8.00	96	168	444	37.84%	\$42
2019	8.00	96	168	444	37.84%	\$42

**Florida Division of Chesapeake Utilities  
ENERGY CONSERVATION PROGRAM ANALYSIS  
Summary of Cost-Effectiveness Ratios**

**Natural Gas Space Conditioning  
For Residential Homes Conditioning Program**

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Final B/C Ratio
Triathlon/Equivalent	1200	1.51	1.31

## Rate Impact Measure Test Data

All Costs in 2000 dollars Number of Years: 20  
 Analysis Start Year: 2000  
 Gas Program: Natural Gas Space Gas Rate Number Electric Rate Number  
 Conditioning for Residential Homes

<b>Gas Measure:</b>	<b>Robur/Equivalent Unit</b>	<b>Alternate Option:</b>	<b>14 SEER Heat Pump</b>
		<b>Alt FuelType:</b>	<b>Electric</b>
<b>Allowance:</b>	<b>\$1200</b>		
<b>Gas Utility:</b>	<b>Florida Public Utilities Company</b>	<b>Electric Utility:</b>	<b>Florida Power &amp; Light</b>

	\$
1. Avoided Meter Removal Cost	0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>0</b>

## II. Operating Data

1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	112	210	322
3. Seasonal Rate		579	579
<b>Total</b>	<b>112</b>	<b>789</b>	<b>901</b>

Gas Rates	Rate
6. Base, Winter	0.33512
7. Base, Summer	0.33512
8. Seasonal, Winter	
9. Seasonal, Summer	0
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	1

15. Average Life

## III. Common Gas &amp; Electric Data

1. Discount Rate	8.77%
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## IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>1027</b>
5. Utility Allowance	1200
6. Program Cost	0
7. New Customer Admin. Cost \$/month	5
8. Main O&M (Percent)	7.83%

## V. Gas Supply Cost

1. Load Profile Type		Gas Supply Cost \$/Therm
2. Commodity (Annual)		0.4987
3. Winter Multiplier		1.00
4. Summer Multiplier		1
5. Transportation, Capacity, Peaking and Balancing		0.00000

## System Shrinkage

## VI. Therms Conserved

	New	Existing
1. Energy Factor	0.9	.88
2. Annual Gas Therms	0	0

## VII. Therms Displaced

1. Energy Factor	1
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

## VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed	0.07671	0.07671	0.15342
2. Consumed New			

# Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therms Table 1	Gas Customer Charge Table 2	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter Table 3	New Customer Admin. & Facilities O&M Table 4	Gas Supply Cost Table 5	Program & Allowance Cost 8	Cooling Total Columns 6 thru 9 9
1	2	3	4	5	6	7	8	9
\$	\$	\$	\$	\$	\$	\$	\$	\$
2000	740	96	836	50	83	449	1248	1780
2001	762	96	858	49	84	463		547
2002	785	96	881	47	85	477		562
2003	808	96	904	46	86	491		577
2004	833	96	929	44	88	506		593
2005	858	96	954	43	89	521		610
2006	883	96	979	41	90	537		627
2007	910	96	1006	40	92	553		645
2008	937	96	1033	39	94	569		663
2009	965	96	1061	37	95	586		682
2010	994	96	1090	36	97	604		701
2011	1024	96	1120	35	99	622		721
2012	1055	96	1151	34	101	641		742
2013	1086	96	1182	33	103	660		763
2014	1119	96	1215	32	105	680		785
2015	1152	96	1248	30	107	700		807
2016	1187	96	1283	29	110	721		831
2017	1223	96	1319	29	112	743		855
2018	1259	96	1355	28	115	765		880
2019	1297	96	1393	27	117	788		905

Present Value  
of Benefits \$9,402

Present Value  
of Costs \$7,179

Benefit/Cost Ratio	1.31
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Table 1

Cooling

1	3	4	5	6	6*3+2	
Year	Therms	Base Rate	PGA Rate	Seasonal rate	Therm Rate	Therms * Total Rate
2000	901	0.33512	0.48797	0	0.82103	740
2001	901	0.33512	0.50281	0	0.84588	782
2002	901	0.33512	0.51789	0	0.87103	785
2003	901	0.33512	0.53322	0	0.89718	808
2004	901	0.33512	0.54921	0	0.92407	833
2005	901	0.33512	0.56589	0	0.95179	858
2006	901	0.33512	0.58266	0	0.98035	883
2007	901	0.33512	0.60014	0	1.00976	910
2008	901	0.33512	0.61815	0	1.04005	937
2009	901	0.33512	0.63689	0	1.07125	965
2010	901	0.33512	0.65579	0	1.10339	994
2011	901	0.33512	0.67546	0	1.13649	1024
2012	901	0.33512	0.69573	0	1.17059	1055
2013	901	0.33512	0.71680	0	1.20571	1088
2014	901	0.33512	0.73810	0	1.24188	1119
2015	901	0.33512	0.76024	0	1.27913	1152
2016	901	0.33512	0.78305	0	1.31751	1187
2017	901	0.33512	0.80654	0	1.35703	1223
2018	901	0.33512	0.83074	0	1.39774	1259
2019	901	0.33512	0.85586	0	1.43968	1297

Table 4

1	2	3	4	5	6	7	8	8
Year	Adm. Cost	Annual Adm. Cost	Development Main	Supply Main	Main Cost	O & M %	Ratio Therms To Total Consumed	New Customer Adm. & Main O&M
2000	5	60	293	0	293	7.83	1	83
2001	5	62	283	0	283	7.83	1	84
2002	5	64	274	0	274	7.83	1	85
2003	5	68	265	0	265	7.83	1	88
2004	6	68	256	0	256	7.83	1	88
2005	6	70	248	0	248	7.83	1	89
2006	6	72	240	0	240	7.83	1	90
2007	6	74	232	0	232	7.83	1	92
2008	6	76	224	0	224	7.83	1	94
2009	7	78	217	0	217	7.83	1	95
2010	7	81	209	0	209	7.83	1	97
2011	7	83	203	0	203	7.83	1	98
2012	7	86	196	0	196	7.83	1	101
2013	7	88	189	0	189	7.83	1	103
2014	8	91	183	0	183	7.83	1	105
2015	8	93	177	0	177	7.83	1	107
2016	8	96	171	0	171	7.83	1	110
2017	8	99	166	0	166	7.83	1	112
2018	9	102	160	0	160	7.83	1	115
2019	9	105	155	0	155	7.83	1	117

Table 2

Cooling

1	2	3	4	4*3
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms consumed To Tot	Ratio * Annual Cust. Chg
2000	8.00	96	1	96
2001	8.00	96	1	96
2002	8.00	96	1	96
2003	8.00	96	1	96
2004	8.00	96	1	96
2005	8.00	96	1	96
2006	8.00	96	1	96
2007	8.00	96	1	96
2008	8.00	96	1	96
2009	8.00	96	1	96
2010	8.00	96	1	96
2011	8.00	96	1	96
2012	8.00	96	1	96
2013	8.00	96	1	96
2014	8.00	96	1	96
2015	8.00	96	1	96
2016	8.00	96	1	96
2017	8.00	96	1	96
2018	8.00	96	1	96
2019	8.00	96	1	96

Table 5

Cooling

1	2	3	4	5	6	7	3*5*7+4*5+2*8
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Making & Bal. Cos	Winter Multiplier	Gas Supply Cost
2000	901	112	789	0.4987	0.00000	1.00	449
2001	901	112	789	0.5137	0.00000	1.00	463
2002	901	112	789	0.5291	0.00000	1.00	477
2003	901	112	789	0.5449	0.00000	1.00	491
2004	901	112	789	0.5613	0.00000	1.00	506
2005	901	112	789	0.5781	0.00000	1.00	521
2006	901	112	789	0.5955	0.00000	1.00	537
2007	901	112	789	0.6133	0.00000	1.00	553
2008	901	112	789	0.6317	0.00000	1.00	569
2009	901	112	789	0.6507	0.00000	1.00	588
2010	901	112	789	0.6702	0.00000	1.00	604
2011	901	112	789	0.6903	0.00000	1.00	622
2012	901	112	789	0.7110	0.00000	1.00	641
2013	901	112	789	0.7324	0.00000	1.00	660
2014	901	112	789	0.7543	0.00000	1.00	680
2015	901	112	789	0.7770	0.00000	1.00	700
2016	901	112	789	0.8003	0.00000	1.00	721
2017	901	112	789	0.8243	0.00000	1.00	743
2018	901	112	789	0.8490	0.00000	1.00	765
2019	901	112	789	0.8745	0.00000	1.00	788

Table 3

Cooling

1	2	3	4	5	6	7	8	7*8*8
Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer Cost	Ratio of Therms Consumed To Total	Carrying Chg Mains & Svc
2000	0	293	114	114	4.91%	1027	1	50
2001	0	283	800	110	4.91%	993	1	49
2002	0	274	580	107	4.91%	980	1	47
2003	0	265	561	103	4.91%	929	1	46
2004	0	256	542	100	4.91%	898	1	44
2005	0	248	524	96	4.91%	888	1	43
2006	0	240	507	93	4.91%	840	1	41
2007	0	232	490	90	4.91%	812	1	40
2008	0	224	474	87	4.91%	785	1	39
2009	0	217	458	84	4.91%	759	1	37
2010	0	209	443	82	4.91%	734	1	36
2011	0	203	429	79	4.91%	710	1	35
2012	0	196	414	76	4.91%	687	1	34
2013	0	189	401	74	4.91%	664	1	33
2014	0	183	388	71	4.91%	642	1	32
2015	0	177	375	69	4.91%	621	1	30
2016	0	171	362	67	4.91%	600	1	29
2017	0	166	350	64	4.91%	581	1	29
2018	0	160	339	62	4.91%	561	1	28
2019	0	155	328	60	4.91%	543	1	27

## Participants Cost Effectiveness Test Data

All Costs in 2000 Analysis Start Year: 2000 Number of Years: 20

Gas Program:	Natural Gas Space Conditioning for Residential Homes	Gas Rate Number	Electric Rate Number
Gas Measure:	Rebur/Equivalent Unit		Alternate Option: 10 SEER Heat Pump Alt Fuel Type: Electric
Allowance:	\$1,200		
Gas Utility:	Florida Public Utilities Company		Electric Utility: Florida Power & Light Co.
<b>I. Installed Cost Data</b>		<b>N. Installed Cost Data</b>	
	\$		\$
1. Equipment	\$4,403	1. Equipment	\$1,969
2. Installation	3,019	2. Installation	1,275
<b>Total Cust. Cost</b>	<b>\$7,422</b>	<b>Total Cust. Cost</b>	<b>\$3,244</b>
3. Utility Rebate	\$1,200	3. Utility Allowance	\$0
4. Other Rebate		4. Other Allowance	
<b>II. Operating Data</b>		<b>V. Energy Conserved Data</b>	
1. Energy Factor			
	Therms Consumed	Winter	Summer
2. Standard Rate	112	579	691
3. Seasonal Rate	0	210	210
	Total	112	789
4. Electric Consumption in KWH	0		
5. O&M (excluding energy)	\$133		
	Gas Rates	Rate	
6. Base, Winter	\$0.33512		
7. Base, Summer	\$0.33512		
8. Seasonal, Winter			
9. Seasonal, Summer	0.33512		
10. PGA, Winter	0.48797		
11. PGA, Summer	0.48797		
12. Taxes & Fees	16.00%		
13. Customer Chg	\$8.00		
14. Ratio of Therms Consumed to Total	100.00%		
15. Average Life	20		
<b>III. Common Gas &amp; Electric Data</b>		<b>VI. Therms Displaced</b>	
1. Discount Rate	8.77%		
		Therms Displaced	Winter
		Summer	
		2. Standard Rate	
		Total	0.0
			0.0



**PARTICIPANTS COST EFFECTIVE RESULTS**

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge Table 3	Gas Rebate	Alternate Appliance Rebate	Total Benefits 2+3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	\$1,259	\$0	\$647	\$18	\$133	\$111	\$1,200	\$0	\$1,586	\$3,244	\$7,422	\$4,178
2001	\$1,297	\$0	\$666	\$19	\$137	\$111	0	0	\$401	0	0	0
2002	\$1,336	\$0	\$686	\$19	\$141	\$111	0	0	\$417	0	0	0
2003	\$1,376	\$0	\$706	\$20	\$145	\$111	0	0	\$433	0	0	0
2004	\$1,417	\$0	\$728	\$20	\$150	\$111	0	0	\$449	0	0	0
2005	\$1,460	\$0	\$749	\$21	\$154	\$111	0	0	\$466	0	0	0
2006	\$1,504	\$0	\$772	\$21	\$159	\$111	0	0	\$483	0	0	0
2007	\$1,549	\$0	\$795	\$22	\$164	\$111	0	0	\$501	0	0	0
2008	\$1,595	\$0	\$819	\$23	\$168	\$111	0	0	\$519	0	0	0
2009	\$1,643	\$0	\$844	\$23	\$174	\$111	0	0	\$538	0	0	0
2010	\$1,692	\$0	\$869	\$24	\$179	\$111	0	0	\$558	0	0	0
2011	\$1,743	\$0	\$895	\$25	\$184	\$111	0	0	\$578	0	0	0
2012	\$1,795	\$0	\$922	\$26	\$190	\$111	0	0	\$598	0	0	0
2013	\$1,849	\$0	\$949	\$26	\$195	\$111	0	0	\$620	0	0	0
2014	\$1,905	\$0	\$978	\$27	\$201	\$111	0	0	\$642	0	0	0
2015	\$1,962	\$0	\$1,007	\$28	\$207	\$111	0	0	\$664	0	0	0
2016	\$2,021	\$0	\$1,037	\$29	\$213	\$111	0	0	\$687	0	0	0
2017	\$2,081	\$0	\$1,069	\$30	\$220	\$111	0	0	\$711	0	0	0
2018	\$2,144	\$0	\$1,101	\$31	\$226	\$111	0	0	\$736	0	0	0
2019	\$2,208	\$0	\$1,134	\$32	\$233	\$111	0	0	\$762	0	0	0

Present Value  
of Benefits

\$5,797

Present Value  
of Costs

\$3,841

Benefit/Cost  
Ratio

1.51

TABLE 1 Cooling

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	\$0.0728	14,912	16.00%	\$1,258
2001	\$0.0750	14,912	16.00%	\$1,297
2002	\$0.0772	14,912	16.00%	\$1,338
2003	\$0.0796	14,912	16.00%	\$1,376
2004	\$0.0819	14,912	16.00%	\$1,417
2005	\$0.0844	14,912	16.00%	\$1,460
2006	\$0.0869	14,912	16.00%	\$1,504
2007	\$0.0895	14,912	16.00%	\$1,549
2008	\$0.0922	14,912	16.00%	\$1,595
2009	\$0.0950	14,912	16.00%	\$1,643
2010	\$0.0978	14,912	16.00%	\$1,692
2011	\$0.1008	14,912	16.00%	\$1,743
2012	\$0.1038	14,912	16.00%	\$1,795
2013	\$0.1069	14,912	16.00%	\$1,849
2014	\$0.1101	14,912	16.00%	\$1,905
2015	\$0.1134	14,912	16.00%	\$1,962
2016	\$0.1168	14,912	16.00%	\$2,021
2017	\$0.1203	14,912	16.00%	\$2,081
2018	\$0.1239	14,912	16.00%	\$2,144
2019	\$0.1277	14,912	16.00%	\$2,208

TABLE 2 Cooling

1	2	3	4	5	6	7	8	9	10	(3*2+9*10+8)*4
Year	Therm Cost	Load Enh. Therms	Tax Fees	Winter Therms	1st 30 Therms/mos	Therm Cost	Non-Enh Cost	Electric KWH	\$ per KWH	Gas Cost
2000	\$0.8231	579	16.00%	112	0	0.82309	92	0	0.0728	\$647
2001	\$0.8478	579	16.00%	112	0	0.84778	95	0	0.0750	\$686
2002	\$0.8732	579	16.00%	112	0	0.87322	98	0	0.0772	\$706
2003	\$0.8994	579	16.00%	112	0	0.89941	101	0	0.0796	\$728
2004	\$0.9264	579	16.00%	112	0	0.92640	104	0	0.0819	\$749
2005	\$0.9542	579	16.00%	112	0	0.95419	107	0	0.0844	\$772
2006	\$0.9829	579	16.00%	112	0	0.98281	110	0	0.0869	\$795
2007	\$1.0123	579	16.00%	112	0	1.01230	113	0	0.0895	\$819
2008	\$1.0427	579	16.00%	112	0	1.04267	117	0	0.0922	\$844
2009	\$1.0739	579	16.00%	112	0	1.07395	120	0	0.0950	\$869
2010	\$1.1062	579	16.00%	112	0	1.10616	124	0	0.0978	\$895
2011	\$1.1393	579	16.00%	112	0	1.13935	128	0	0.1008	\$922
2012	\$1.1735	579	16.00%	112	0	1.17353	131	0	0.1038	\$949
2013	\$1.2087	579	16.00%	112	0	1.20874	135	0	0.1069	\$978
2014	\$1.2450	579	16.00%	112	0	1.24500	139	0	0.1101	\$1,007
2015	\$1.2823	579	16.00%	112	0	1.28235	144	0	0.1134	\$1,037
2016	\$1.3208	579	16.00%	112	0	1.32082	148	0	0.1168	\$1,069
2017	\$1.3604	579	16.00%	112	0	1.36044	152	0	0.1203	\$1,101
2018	\$1.4013	579	16.00%	112	0	1.40126	157	0	0.1239	\$1,134
2019	\$1.4433	579	16.00%	112	0	1.44329	162	0	0.1277	

TABLE 3 Cooling

1	2	3	4	5	6	3*6+16.0%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Cooling Annual Therms	Total Annual Therms	Ratio Therm Consumed to Total	Gas Customer Charge
2000	\$8.00	\$96.00	789	901	100.00%	\$111
2001	\$8.00	\$96.00	789	901	100.00%	\$111
2002	\$8.00	\$96.00	789	901	100.00%	\$111
2003	\$8.00	\$96.00	789	901	100.00%	\$111
2004	\$8.00	\$96.00	789	901	100.00%	\$111
2005	\$8.00	\$96.00	789	901	100.00%	\$111
2006	\$8.00	\$96.00	789	901	100.00%	\$111
2007	\$8.00	\$96.00	789	901	100.00%	\$111
2008	\$8.00	\$96.00	789	901	100.00%	\$111
2009	\$8.00	\$96.00	789	901	100.00%	\$111
2010	\$8.00	\$96.00	789	901	100.00%	\$111
2011	\$8.00	\$96.00	789	901	100.00%	\$111
2012	\$8.00	\$96.00	789	901	100.00%	\$111
2013	\$8.00	\$96.00	789	901	100.00%	\$111
2014	\$8.00	\$96.00	789	901	100.00%	\$111
2015	\$8.00	\$96.00	789	901	100.00%	\$111
2016	\$8.00	\$96.00	789	901	100.00%	\$111
2017	\$8.00	\$96.00	789	901	100.00%	\$111
2018	\$8.00	\$96.00	789	901	100.00%	\$111
2019	\$8.00	\$96.00	789	901	100.00%	\$111

**Florida Division of Chesapeake Utilities  
ENERGY CONSERVATION PROGRAM ANALYSIS  
Summary of Cost-Effectiveness Ratios**

**Natural Gas Space Conditioning**

Installed Appliances	Incentive Amount (\$)	Participant's B/C Ratio	Rim B/C Ratio
Engine Dr. Chiller	50/ton	1.20	1.25

# Rate Impact Measure Test Data

DOCKET NO. EXHIBIT F  
PAGE 2 of 7

All Costs in 2000 dollars. Number of Years: 20

Analysis Start Year: 2000  
Gas Rate Number

Gas Program: Natural Gas Space Conditioning Electric Rate Number

<b>Gas Measure:</b>	Engine Drive Chiller 500 Ton	<b>Alternate Option:</b>	Electric Drive Chiller
		<b>Alt Fuel Type:</b>	Electric
<b>Allowance:</b>	\$50/TON		
<b>Gas Utility:</b>	Florida Public Utilities Company	<b>Electric Utility:</b>	Florida Power & Light Co.

	\$
1. Avoided Meter Removal Cost	0
2. Avoided Cut & Cap Cost	0
<b>Total Costs</b>	<b>0</b>

## II. Operating Data

### 1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	62850	62850	125700
3. Seasonal Rate			0
<b>Total</b>	<b>62850</b>	<b>62850</b>	<b>125700</b>

Gas Rates	Rate
6. Base, Winter	0.15474
7. Base, Summer	0.15474
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%
13. Customer Chg	45
14. Ratio of Therms Consumed to Total	1

15. Average Life 20

## III. Common Gas & Electric Data

1. Discount Rate 8.77%

## IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	293
3. Service	620
4. Meter	114
<b>Total Cust. Cost</b>	<b>1027</b>

5. Utility Allowance	25000
6. Program Cost	0
7. New Customer Admin. Cost \$/month	5
8. Main O&M (Percent)	0.0783

## V. Gas Supply Cost

1. Load Profile Type	
	Gas Supply Cost \$/Therm
2. Commodity (Annual)	0.4987
3. Winter Multiplier	1.00
4. Summer Multiplier	1
5. Transportation, Capacity, Peaking and Balancing Co	0.00000

## System Shrinkage

### VI. Therms Conserved

	New	Existing
1. Energy Factor	6.1	
2. Annual Gas Therms	0	0

### VII. Therms Displaced

1. Energy Factor	1
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Therms Displaced	Winter	Summer	Total
2. Standard Rate	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

### VIII. Therms Per Hour @ Utility Receipt Point

Therms per Hour	Winter	Summer	Total
1. Consumed			
2. Consumed New			

# Rate Impact Measure Test Data

	Consumed Conserved Displaced Gas Therms Table 1	Gas Customer Charge Table 2	Total Columns 2 thru 3	Carrying Chg. On Main, Svc. & Meter Table 3	New Customer Admin. & Facilities O&M Table 4	Gas Supply Cost Table 5	Program & Allowance Cost	Total Columns 6 thru 9
1	2	3	4	5	6	7	8	9
\$	\$	\$	\$	\$	\$	\$	\$	\$
2000	80789	540	81329	228	60	62680	25000	87969
2001	83212	540	83752	219	62	64561		64841
2002	85709	540	86249	210	64	66498		66771
2003	88280	540	88820	201	66	68492		68759
2004	90928	540	91468	192	68	70547		70807
2005	93656	540	94196	184	70	72664		72917
2006	96466	540	97006	176	72	74844		75092
2007	99360	540	99900	169	74	77089		77332
2008	102341	540	102881	162	76	79402		79639
2009	105411	540	105951	155	78	81784		82017
2010	108573	540	109113	148	81	84237		84466
2011	111830	540	112370	142	83	86764		86989
2012	115185	540	115725	136	86	89367		89589
2013	118641	540	119181	130	88	92048		92266
2014	122200	540	122740	125	91	94810		95025
2015	125866	540	126406	119	93	97654		97867
2016	129642	540	130182	114	96	100583		100794
2017	133531	540	134071	109	99	103601		103809
2018	137537	540	138077	105	102	106709		106916
2019	141663	540	142203	100	105	109910		110116

Present Value of Benefits \$934,470

Present Value of Costs \$746,419

Benefit/Cost Ratio	1.25
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Table 1

1	2	3	4
Year	Therms	Fuel Rate	Total Rate
2000	125700	0.6427	80788.65
2001	125700	0.6620	83212.31
2002	125700	0.6819	85708.68
2003	125700	0.7023	88279.84
2004	125700	0.7234	90928.33
2005	125700	0.7451	93856.18
2006	125700	0.7874	98465.87
2007	125700	0.7905	99359.85
2008	125700	0.8142	102340.84
2009	125700	0.8366	105410.88
2010	125700	0.8837	108573.19
2011	125700	0.8897	111830.38
2012	125700	0.9164	115185.29
2013	125700	0.9438	118840.85
2014	125700	0.9722	122200.08
2015	125700	1.0013	125866.08
2016	125700	1.0314	129842.06
2017	125700	1.0823	133531.32
2018	125700	1.0942	137537.26
2019	125700	1.1270	141683.38

Table 4

1	2	3	4	5	6	7	8	6*7*8+3*8
Year	Adm. Cost	Annual Adm. Cost	developmen Main	Supply Main	Main Cost	O & M %	Ratio Therms Total Consumed	New Customer Adm. & Main O&M
2000	5	80	0	0	0	7.83	1	60
2001	5	82	0	0	0	7.83	1	62
2002	5	84	0	0	0	7.83	1	64
2003	5	86	0	0	0	7.83	1	66
2004	6	88	0	0	0	7.83	1	68
2005	6	70	0	0	0	7.83	1	70
2006	6	72	0	0	0	7.83	1	72
2007	6	74	0	0	0	7.83	1	74
2008	6	76	0	0	0	7.83	1	76
2009	7	78	0	0	0	7.83	1	78
2010	7	81	0	0	0	7.83	1	81
2011	7	83	0	0	0	7.83	1	83
2012	7	86	0	0	0	7.83	1	86
2013	7	88	0	0	0	7.83	1	88
2014	8	91	0	0	0	7.83	1	91
2015	8	93	0	0	0	7.83	1	93
2016	8	96	0	0	0	7.83	1	96
2017	8	99	0	0	0	7.83	1	99
2018	9	102	0	0	0	7.83	1	102
2019	9	105	0	0	0	7.83	1	105

Table 2

Cooling

1	2	3	4	4*3
Year	Customer Charge/Mo	Annual Cust. Chg	Ratio of Therms Consumed To Total	Ratio * Annual Cust. Chg.
2000	45	540	100.00%	540
2001	45	540	100.00%	540
2002	45	540	100.00%	540
2003	45	540	100.00%	540
2004	45	540	100.00%	540
2005	45	540	100.00%	540
2006	45	540	100.00%	540
2007	45	540	100.00%	540
2008	45	540	100.00%	540
2009	45	540	100.00%	540
2010	45	540	100.00%	540
2011	45	540	100.00%	540
2012	45	540	100.00%	540
2013	45	540	100.00%	540
2014	45	540	100.00%	540
2015	45	540	100.00%	540
2016	45	540	100.00%	540
2017	45	540	100.00%	540
2018	45	540	100.00%	540
2019	45	540	100.00%	540

Table 5

Cooling

1	2	3	4	5	6	7	32
Year	Therms	Winter Therms	Summer Therms	monodity Ga Supply Cost	Transp. Capacity Peaking & Bal Cost	Winter Multiplier	Gas Supply Cost
2000	125700	82850	82850	0.4987	0.0000	1.00	62680
2001	125700	82850	82850	0.5138	0.0000	1.00	64581
2002	125700	82850	82850	0.5290	0.0000	1.00	66498
2003	125700	82850	82850	0.5449	0.0000	1.00	68492
2004	125700	82850	82850	0.5612	0.0000	1.00	70547
2005	125700	82850	82850	0.5781	0.0000	1.00	72864
2006	125700	82850	82850	0.5954	0.0000	1.00	74844
2007	125700	82850	82850	0.6133	0.0000	1.00	77089
2008	125700	82850	82850	0.6317	0.0000	1.00	79402
2009	125700	82850	82850	0.6506	0.0000	1.00	81784
2010	125700	82850	82850	0.6701	0.0000	1.00	84237
2011	125700	82850	82850	0.6902	0.0000	1.00	86764
2012	125700	82850	82850	0.7110	0.0000	1.00	89367
2013	125700	82850	82850	0.7323	0.0000	1.00	92048
2014	125700	82850	82850	0.7543	0.0000	1.00	94810
2015	125700	82850	82850	0.7769	0.0000	1.00	97654
2016	125700	82850	82850	0.8002	0.0000	1.00	100583
2017	125700	82850	82850	0.8242	0.0000	1.00	103601
2018	125700	82850	82850	0.8489	0.0000	1.00	106709
2019	125700	82850	82850	0.8744	0.0000	1.00	109910

Table 3

Cooling

1	2	3	4	5	6	7	8	7*6*8
Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer Cost	Ratio of Therms consumed To Tot	Carrying Chg Mains & Svc
2000	0	0	620	4230	4.71%	4,850.01	1	228
2001	0	0	800	4046	4.71%	4,845.53	1	219
2002	0	0	580	3870	4.71%	4,449.81	1	210
2003	0	0	561	3701	4.71%	4,281.89	1	201
2004	0	0	542	3540	4.71%	4,082.01	1	192
2005	0	0	524	3385	4.71%	3,909.84	1	184
2006	0	0	507	3238	4.71%	3,744.44	1	178
2007	0	0	490	3096	4.71%	3,586.11	1	169
2008	0	0	474	2960	4.71%	3,434.34	1	162
2009	0	0	458	2830	4.71%	3,288.86	1	155
2010	0	0	443	2708	4.71%	3,149.39	1	148
2011	0	0	429	2587	4.71%	3,015.67	1	142
2012	0	0	414	2473	4.71%	2,887.46	1	138
2013	0	0	401	2364	4.71%	2,764.51	1	130
2014	0	0	388	2259	4.71%	2,646.59	1	125
2015	0	0	375	2159	4.71%	2,533.50	1	119
2016	0	0	362	2063	4.71%	2,425.01	1	114
2017	0	0	350	1970	4.71%	2,320.94	1	109
2018	0	0	339	1882	4.71%	2,221.08	1	105
2019	0	0	328	1798	4.71%	2,125.28	1	100

# Participants Cost Effectiveness Test Data

DOCKET No.

EXHIBIT F  
Page 5 of 7

All Costs in 2000 dollars. Analysis Start Year: 2000 Number of Years: 20

Gas Program:	Natural Gas Space Conditioning	Gas Rate Number	Electric Rate Number
Gas Measure:	Ton Engine Driven Chiller	Alternate Option:	Electric Driven Chiller
		Air Fuel Type:	Electric
Attendance:	\$50000		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light

## I. Installed Cost Data

	\$
1. Equipment	\$250,000
2. Installation	40,000
<b>Total Cust. Cost</b>	<b>\$290,000</b>
3. Utility Rebate	\$25,000
4. Other Rebate	

## II. Operating Data

### 1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	62,850	62,850	125,700
3. Seasonal Rate			
Total	62,850	62,850	125,700

4. Oil Consumption	3,000
5. O&M (excluding energy)	\$5,550

Gas Rates	Rate
6. Base, Winter	\$0.15474
7. Base, Summer	\$0.15474
8. Seasonal, Winter	
9. Seasonal, Summer	
10. PGA, Winter	0.48797
11. PGA, Summer	0.48797
12. Taxes & Fees	16.00%

13. Customer Chg	\$45.00
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14. Ratio of Therms Consumed to Total	100.00%
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15. Average Life	20
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## III. Common Gas & Electric Data

1. Discount Rate	8.77%
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## IV. Installed Cost Data

	\$
1. Equipment	\$175,000
2. Installation	35,363
<b>Total Cust. Cost</b>	<b>\$210,363</b>
3. Utility Allowance	\$0
4. Other Allowance	

## V. Energy Conserved Data

	New	Existing
1. Energy Factor	1.00	
2. Annual KWH	1,050,000	1,050,000
3. Annual Oil Gallons	0	0
4. Annual Gas Therms	0	0
	Winter	Summer
5. Diversified KW	1,050	1,050
6. Billing KW	2,100	2,100

7. O&M (excluding energy)	\$1,050
8. Monthly Utility Incentive	\$0
9. Average Life in Yrs	20
10. Existing Remaining Life in Yrs	0
11. Electric Rate per KWH	\$0.0324
12. Electric Rate per KW, Winter	\$6.2500
13. Electric Rate per KW, Summer	\$6.2500
14. Electric Taxes & Fees	16.00%
15. Customer Chg	\$35.00

## VI. Therms Displaced

1. Energy Factor	1.00		
	Therms Displaced	Winter	Summer
2. Standard Rate			
Total	0.0		0.0

# PARTICIPANTS COST EFFECTIVE RESULTS

DOCKET NO.

EXHIBIT F  
PAGE 6 of 7

Year	Electric KWH Cost Table 1	Motor Oil Table 2	Consumed -Conserved -Displaced Gas Therms Table 2	Alternate Appliance O&M Table 2	Gas Appliance O&M Table 2	Gas Customer Charge Table 3	Gas Rebate Table 3	Alternate Appliance Rebate Table 3	Total Benefits 2-3-4+5 -6-7+8-9	Alternate Appliance Installed Cost	Gas Appliance Installed Cost	Total Cost 12-11
1	2	3	4	5	6	7	8	9	10	11	12	13
2000	\$65,750	\$3,000	\$93,715	\$1,050	\$5,550	\$540	\$25,000	\$0	(\$11,005)	\$210,363	\$290,000	\$79,637
2001	\$66,935	\$3,000	\$96,526	\$1,082	\$5,717	\$556	0	0	(\$37,783)	\$0	0	0
2002	\$68,155	\$3,000	\$99,422	\$1,114	\$5,888	\$573	0	0	(\$39,614)	\$0	0	0
2003	\$69,412	\$3,000	\$102,405	\$1,147	\$6,065	\$590	0	0	(\$41,500)	\$0	0	0
2004	\$70,707	\$3,000	\$105,477	\$1,182	\$6,247	\$608	0	0	(\$43,442)	\$0	0	0
2005	\$72,041	\$3,000	\$108,641	\$1,217	\$6,434	\$626	0	0	(\$45,443)	\$0	0	0
2006	\$73,415	\$3,000	\$111,900	\$1,254	\$6,627	\$645	0	0	(\$47,504)	\$0	0	0
2007	\$74,830	\$3,000	\$115,257	\$1,291	\$6,826	\$664	0	0	(\$49,626)	\$0	0	0
2008	\$76,287	\$3,000	\$118,715	\$1,330	\$7,031	\$684	0	0	(\$51,813)	\$0	0	0
2009	\$77,788	\$3,000	\$122,277	\$1,370	\$7,241	\$705	0	0	(\$54,064)	\$0	0	0
2010	\$79,334	\$3,000	\$125,945	\$1,411	\$7,459	\$726	0	0	(\$56,384)	\$0	0	0
2011	\$80,927	\$3,000	\$129,723	\$1,453	\$7,682	\$747	0	0	(\$58,773)	\$0	0	0
2012	\$82,567	\$3,000	\$133,615	\$1,497	\$7,913	\$770	0	0	(\$61,234)	\$0	0	0
2013	\$84,257	\$3,000	\$137,623	\$1,542	\$8,150	\$793	0	0	(\$63,768)	\$0	0	0
2014	\$85,997	\$3,000	\$141,752	\$1,588	\$8,395	\$817	0	0	(\$66,379)	\$0	0	0
2015	\$87,789	\$3,000	\$146,005	\$1,636	\$8,647	\$841	0	0	(\$69,068)	\$0	0	0
2016	\$89,635	\$3,000	\$150,385	\$1,685	\$8,906	\$867	0	0	(\$71,837)	\$0	0	0
2017	\$91,537	\$3,000	\$154,896	\$1,735	\$9,173	\$893	0	0	(\$74,690)	\$0	0	0
2018	\$93,496	\$3,000	\$159,543	\$1,788	\$9,449	\$919	0	0	(\$77,628)	\$0	0	0
2019	\$95,513	\$3,000	\$164,330	\$1,841	\$9,732	\$947	0	0	(\$80,654)	\$0	0	0

Present Value  
of Benefits \$88,148

Present Value \$73,297  
of Costs

Benefit/Cost Ratio	1.20
-----------------------	------



TABLE 1

## Cooling

1	2	3	4	3*2+4+6	6
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost	Demand * Billing KW
2000	\$0.0324	1,050,000	16.00%	\$85,750	26250
2001	\$0.0334	1,050,000	16.00%	\$86,935	26250
2002	\$0.0344	1,050,000	16.00%	\$88,155	26250
2003	\$0.0354	1,050,000	16.00%	\$89,412	26250
2004	\$0.0365	1,050,000	16.00%	\$90,707	26250
2005	\$0.0376	1,050,000	16.00%	\$92,041	26250
2006	\$0.0387	1,050,000	16.00%	\$93,415	26250
2007	\$0.0399	1,050,000	16.00%	\$94,830	26250
2008	\$0.0411	1,050,000	16.00%	\$96,287	26250
2009	\$0.0423	1,050,000	16.00%	\$97,788	26250
2010	\$0.0436	1,050,000	16.00%	\$99,334	26250
2011	\$0.0449	1,050,000	16.00%	\$80,927	26250
2012	\$0.0462	1,050,000	16.00%	\$82,567	26250
2013	\$0.0476	1,050,000	16.00%	\$84,257	26250
2014	\$0.0491	1,050,000	16.00%	\$85,997	26250
2015	\$0.0505	1,050,000	16.00%	\$87,789	26250
2016	\$0.0520	1,050,000	16.00%	\$89,635	26250
2017	\$0.0536	1,050,000	16.00%	\$91,537	26250
2018	\$0.0552	1,050,000	16.00%	\$93,496	26250
2019	\$0.0569	1,050,000	16.00%	\$95,513	26250

DOCKET N

EXHIBIT F

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TABLE 2

## Cooling

1	2	3	4	(3*2+5*6)*	\$6
Year	Therm Cost	# Therms	Tax Fees	Gas Cost	Oil Consumption
2000	\$0.6427	125,700	16.00%	\$93,715	\$3,000
2001	\$0.6620	125,700	16.00%	\$95,526	\$3,000
2002	\$0.6819	125,700	16.00%	\$97,422	\$3,000
2003	\$0.7023	125,700	16.00%	\$99,405	\$3,000
2004	\$0.7234	125,700	16.00%	\$101,477	\$3,000
2005	\$0.7451	125,700	16.00%	\$103,641	\$3,000
2006	\$0.7674	125,700	16.00%	\$111,900	\$3,000
2007	\$0.7905	125,700	16.00%	\$115,257	\$3,000
2008	\$0.8142	125,700	16.00%	\$118,715	\$3,000
2009	\$0.8386	125,700	16.00%	\$122,277	\$3,000
2010	\$0.8637	125,700	16.00%	\$125,945	\$3,000
2011	\$0.8897	125,700	16.00%	\$129,723	\$3,000
2012	\$0.9164	125,700	16.00%	\$133,615	\$3,000
2013	\$0.9438	125,700	16.00%	\$137,623	\$3,000
2014	\$0.9722	125,700	16.00%	\$141,752	\$3,000
2015	\$1.0013	125,700	16.00%	\$146,005	\$3,000
2016	\$1.0314	125,700	16.00%	\$150,385	\$3,000
2017	\$1.0623	125,700	16.00%	\$154,896	\$3,000
2018	\$1.0942	125,700	16.00%	\$159,543	\$3,000
2019	\$1.1270	125,700	16.00%	\$164,330	\$3,000

TABLE 3

1	2	3
Year	Monthly Cust. Chrg	Annual Cust. Chrg
2000	\$45.00	\$540.00
2001	\$45.00	\$540.00
2002	\$45.00	\$540.00
2003	\$45.00	\$540.00
2004	\$45.00	\$540.00
2005	\$45.00	\$540.00
2006	\$45.00	\$540.00
2007	\$45.00	\$540.00
2008	\$45.00	\$540.00
2009	\$45.00	\$540.00
2010	\$45.00	\$540.00
2011	\$45.00	\$540.00
2012	\$45.00	\$540.00
2013	\$45.00	\$540.00
2014	\$45.00	\$540.00
2015	\$45.00	\$540.00
2016	\$45.00	\$540.00
2017	\$45.00	\$540.00
2018	\$45.00	\$540.00
2019	\$45.00	\$540.00

STATE OF FLORIDA



Commissioners:  
JOE GARCIA, CHAIRMAN  
J. TERRY DEASON  
SUSAN F. CLARK  
E. LEON JACOBS, JR.  
LILA A. JABER

DIVISION OF RECORDS & REPORTING  
BLANCA S. BAYÓ  
DIRECTOR  
(850) 413-6770

**Public Service Commission**

June 16, 2000

Norman H. Horton, Jr., Esquire  
Messer, Caparello & Self Law Offices  
Post Office 1876  
Tallahassee, Florida 32302-1876

Re: Docket No. 000721-EG

Dear Mr. Horton:

This will acknowledge receipt of a petition by Florida Public Utilities Company for approval of new energy conservation programs for natural gas customers, which was filed in this office on June 15, 2000 and assigned the above-referenced docket number. Appropriate staff members will be advised.

Mediation may be available to resolve any dispute in this docket. If mediation is conducted, it does not affect a substantially interested person's right to an administrative hearing. For more information, contact the Office of General Counsel at (850) 413-6248 or FAX (850) 413-7180.

Division of Records and Reporting  
Florida Public Service Commission