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June 15, 2000

ORIGINAL

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RECORDS AND
REPORTING

BY HAND DELIVERY

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

000721 - BA

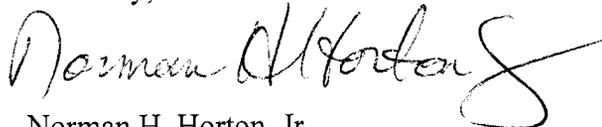
Dear Ms. Bayó:

Enclosed for filing on behalf of Florida Public Utilities Company are an original and fifteen copies of a Petition for Approval of Natural Gas Conservation Program.

Please acknowledge receipt of these documents by stamping the extra copy of this letter "filed" and returning the same to me.

Thank you for your assistance with this filing.

Sincerely,



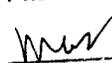
Norman H. Horton, Jr.

NHH/amb

Enclosure

cc: Mr. Robert L. Smith
Ms. Cheryl Banks

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FPSC-BUREAU OF RECORDS

DOCUMENT NUMBER-DATE

0730 JUN 15 8

FPSC-RECORDS/REPORTING

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Florida Public Utilities)
Company for Approval of Natural)
Gas Conservation Programs)
_____)

Docket No.: 000721-EG
Dated: June 15, 2000

PETITION FOR APPROVAL OF NATURAL GAS CONSERVATION PROGRAMS

Comes now Florida Public Utilities Company ("Florida Public Utilities"), through undersigned counsel and requests approval of new energy conservation programs for natural gas customers. As basis, FPUC states:

1. Florida Public Utilities, whose address is: P.O. Box 3395, West Palm Beach, Florida, 33402-3395, is a public utility as defined in Chapter 366, Florida Statutes, providing natural gas service to customers along with other services.

2. The name and address of the person authorized to receive notices, pleadings, orders and other documents on behalf of Florida Public Utilities is:

Norman H. Horton, Jr., Esquire
Messer, Caparello & Self, P.A.
P.O. Box 1876
Tallahassee, FL 32302-1876
(850)222-0720 (Telephone)

3. Florida Public Utilities does not currently offer any energy conservation programs as part of its natural gas operations but with this petition seeks approval of 13 programs. Specifically the programs for which approval is sought are:

(A) Full House Residential New Construction

This program is designed to increase the overall energy efficiency in the residential single-family construction market by promoting energy-efficient natural gas appliances. The program

DOCUMENT NUMBER-DATE

07334 JUN 15 8

FPSC-RECORDS/REPORTING

offers builders and developers incentives in the form of cash allowances to defray the additional costs associated with the installation of natural gas supply lines, house piping, venting and natural gas appliances.

(B) Residential Appliance Replacement Program

This program is designed to encourage the replacement of inefficient non-natural gas residential appliances with energy-efficient natural gas appliances. The program offers incentives in the form of cash allowances to residential consumers to assist in defraying the additional costs associated with the installation of efficient natural gas appliances.

(C) Residential Appliance Retention Program

This program is designed to promote the retention of energy-efficient appliances for current natural gas customers. The program offers allowances to customers to assist in defraying the cost of purchasing and installing more expensive energy-efficient appliances.

(D) Residential Service Reactivation Program

This program is designed to encourage the reactivation of existing residential service liens that are scheduled to be cut-off and capped. The program offers incentives in the form of cash allowances to residential consumers to assist in defraying the additional costs associated with the purchase and the installation of energy-efficient natural gas appliances.

(E) Residential Conservation Service

This program is designed to assist residential customers in conserving all forms of energy consumption. Certified company representatives or private contractors will conduct energy surveys.

(F) Residential Propane Appliance Conversion Program

This program is designed to promote the conversion of existing residential propane gas appliances to utilize natural gas. This program offers incentives in the form of cash allowances to residential consumers to assist in defraying the additional costs associated with the conversion of their existing propane appliances to utilize natural gas.

(G) Commercial Equipment Replacement Program

This program is designed to encourage the replacement of inefficient non-natural gas commercial equipment with energy-efficient natural gas equipment. The program offers incentives in the form of cash allowances to commercial consumers to assist in the defraying the additional cost associated with the installation of efficient natural gas appliances.

(H) Commercial Propane Equipment Conversion Program

This program is designed to promote the conversion of existing propane gas equipment to utilize natural gas. The program offers incentives in the form of cash allowances to existing non-residential businesses located in existing structures for assisting in defraying the incremental first cost associated with the conversion, installation of natural gas supply lines, internal piping, venting and equipment.

(I) Commercial Conservation Program

This program is designed to assist commercial customers in conserving all forms of energy consumption. Company representatives or private contractors will conduct energy surveys.

(J) Space Conditioning Program

This program is designed to convert on-main customers from electric space conditioning equipment to energy-efficient natural gas space conditioning equipment. The program provides an allowance to qualifying participants to compensate for higher initial costs of natural gas space

conditioning equipment and the associated installation costs. This program will also reduce summer as well as winter peak demand and contribute to the conservation of kwh/kwd consumption.

(K) On-Site Power Generation Program

This program is designed to promote the direct use of natural gas to generate on-site heating, cooling and water heater requirements for residential and commercial applicants. A feasibility survey will be made available to customer. Direct mail and personal contact will be used to promote this program. Cash incentives will be provided to customers to offset equipment and installation costs.

(L) Conservation Education Program

The purpose of this program is to teach adult and young people about conservation measures designed to reduce energy consumption and consequently reduce their utility bills.

(M) Dealer Program

This program is designed to encourage the replacement of non-gas appliances with energy-efficient natural gas appliances through appliance dealers and contractors. This program offers incentives to the dealers and contractors.

4. These programs are similar to programs offered by other natural gas providers and, if approved for Florida Public Utilities, will provide incentives to customers to implement energy conservation measures. Moreover, these programs will increase the use of energy efficient appliances, encourage conservation, and encourage efficient energy consumption.

5. Attachment A hereto provides additional information as to the several programs described herein. Attachment B consisting of Exhibits A through E provides information and data as to the cost effectiveness of the programs and Attachments C and D consisting of Exhibit G details

the calculation of the cost recovery factor for August - December 2000 and September - December 2000 respectively.

6. FPUC requests that each of these programs be approved and that the utility be permitted to recover the costs associated with these programs as permitted by Rule 25-17.015, Florida Administrative Code, including the implementation costs incurred to offer these programs.

WHEREFORE, for the reasons given, FPUC requests the Commission approve the energy conservation programs described herein and permit the company to begin recovering the costs associated with these programs.

Dated this 15th day of June, 2000.

MESSER, CAPARELLO & SELF, P.A.
215 S. Monroe Street, Suite 701
Post Office Box 1876
Tallahassee, FL 32302-1876
(850) 222-0720


NORMAN H. HORTON, JR., ESQ.
FLOYD R. SELF, ESQ.

Attorneys for Florida Public Utilities Company

ATTACHMENT A

Conservation Programs

A. FULL HOUSE RESIDENTIAL NEW CONSTRUCTION PROGRAM

This program is designed to increase the overall energy efficiency in the residential single and multi-family new construction market by promoting energy-efficient natural gas appliances. The program offers builders and developers incentives in the form of cash allowances to defray the additional costs associated with the installation of natural gas supply lines, house piping, venting and natural gas appliances.

Single-family:

Furnace or Hydro heater	\$300
Water Heater	\$300
Range	\$ 85
Dryer	\$ 85

B. RESIDENTIAL APPLIANCE REPLACEMENT PROGRAM

This program is designed to encourage the replacement of inefficient non-natural gas residential appliances with energy-efficient natural gas appliances. The program offers incentives in the form of cash allowances to residential consumers to assist in defraying the additional costs associated with the installation of efficient natural gas appliances.

Furnaces or Hydro heater	\$330
Water Heater	\$330
Range	\$ 50
Dryer	\$ 50

C. RESIDENTIAL APPLIANCE RETENTION PROGRAM

This program is designed to promote the retention of energy-efficient appliances for current natural gas customers. The program offers allowances to customers to assist in defraying the cost of purchasing and installing more expensive energy-efficient appliances.

Water Heater	\$350
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D. RESIDENTIAL SERVICE REACTIVATION PROGRAM

This program is designed to encourage the reactivation of existing residential service lines that are scheduled to be cut-off and capped. The program offers incentives in the form of cash allowances to residential consumers to assist in defraying the additional costs associated with the purchase and the installation of energy-efficient natural gas appliances.

Service Reactivation (with installation of water heater):	\$350
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E. RESIDENTIAL CONSERVATION SERVICE PROGRAM

This program is designed to assist residential customers in conserving all forms of energy consumption. Certified company representatives or private contractors will conduct energy surveys.

Audit Materials & Resources: Not Specified
Audit Training & Certification: Not Specified

F. RESIDENTIAL PROPANE APPLIANCE CONVERSION PROGRAM

this program is designed to promote the conversion of existing residential propane gas appliances to utilize natural gas. This program offers incentives in the form of cash allowances to residential consumers to assist in defraying the additional costs associated with the conversion of their existing propane appliances to utilize natural gas.

Furnace or Hydro heater	\$275
Water Heater	\$275
Range	\$ 75
Dryer	\$ 75

G. COMMERCIAL EQUIPMENT REPLACEMENT PROGRAM

This program is designed to encourage the replacement of inefficient non-natural gas commercial equipment with energy-efficient natural gas equipment. The program offers incentives in the form of cash allowances to commercial consumers to assist in the defraying the additional cost associated with the installation of efficient natural gas appliances.

Per 100,000 Btu rating Incentives to be established

H. COMMERCIAL PROPANE EQUIPMENT CONVERSION PROGRAM

This program is designed to promote the conversion of existing propane gas equipment to utilize natural gas. The program offers incentives in the form of cash allowances to existing non-residential businesses located in existing structures for assisting in defraying the incremental first cost associated with the conversion, installation of natural gas supply lines, internal piping, venting and equipment.

Per 100,000 Btu rating Incentives to be established

I. COMMERCIAL CONSERVATION SERVICE PROGRAM

This program is designed to assist commercial customers in conserving all forms of energy consumption. Company representatives or private contractors will conduct energy surveys.

Audit Materials and Resources Not Specified
Audit Training & Certification Not Specified

J. SPACE CONDITIONING PROGRAM

This program is designed to convert on-main customers from electric space conditioning equipment to energy-efficient natural gas space conditioning equipment. The program provides an allowance to qualifying participants to compensate for higher initial costs of natural gas space conditioning equipment and the associated installation costs. This program will also reduce summer as well as winter peak demand and contribute to the conservation of kwh/kwd consumption.

Residential: For Robur/Equivalent Unit \$1200

Non-Residential \$50/ton

K. ON-SITE POWER GENERATION PROGRAM

this program is designed to promote the direct use of natural gas to generate on-site heating, cooling and water heater requirements for residential and commercial applications. A feasibility survey will be made available to customer. Direct mail and personal contact will be used to promote this program. Cash incentives will be provided to customers to offset equipment and installation costs.

Program Materials and Resources: No Specified

L. CONSERVATION EDUCATION PROGRAM

The purpose of this program is to teach adults and young people about conservation measures designed to reduce energy consumption and consequently reduce their utility bills.

Program Materials and Resources: Not Specified
Speaker Resources: Not Specified

M. DEALER PROGRAM

This program is designed to encourage the replacement of non-gas appliances with energy-efficient natural gas appliances through appliance dealers and contractors. This program offers incentives to the dealers and contractors.

ATTACHMENT B

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

Full House Residential New Construction Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Water Heater	300	5.30	1.22
Furnace	300	1.80	1.45
Clothes Dryer Outlet	85	6.44	1.19
Range	85	4.64	1.24

Residential Appliance Replacement Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Water Heater	330	1.76	1.26
Furnace	330	4.28	1.24
Clothes Dryer	50	2.98	1.36
Range	50	2.44	1.37

Residential Propane Distribution Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Water Heater	275	98.31	1.24
Furnace	275	4.45	1.31
Clothes Dryer Outlet	75	30.39	1.25
Range	75	18.59	1.25

Residential Water Heater Retention Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Water Heater	350	121.68	1.74

Natural Gas Space Conditioning
For Residential Homes Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Triathlon/Equivalent	1200	1.44	1.34

Natural Gas Space Conditioning

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Engine Dr. Chiller	50/ton	1.86	1.20

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:	Water Heater	40 gallon	Alternate Option:	Electric Resistance Water Heater	50 gallon
	New Customer, New Dwelling		Air Fuel Type:	Electric	
	New Main				
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
Total Costs		\$0

II. Operating Data

1. Energy Factor	0.56
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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
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14. Ratio of Therms Consumed to Total	37.83%
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15. Average Life	12
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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
Total Cust. Cost		\$1,027

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		0.00000

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

	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	Water Total Columns 5 thru 8
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
2000	138	36	175	18	25	84	300	427
2001	142	37	179	18	26	86		130
2002	147	39	186	17	26	89		132
2003	151	40	191	16	27	92		135
2004	156	41	197	16	28	94		138
2005	160	42	202	15	28	97		141
2006	165	43	208	14	29	100		143
2007	170	45	215	14	30	103		146
2008	175	46	221	13	30	106		150
2009	180	47	227	12	31	109		153
2010	186	49	235	12	32	113		156
2011	191	50	241	11	33	116		160
2012	197	52	249	10	34	119		164
2013	203	53	256	10	35	123		167
2014	209	55	264	9	36	127		171
2015	215	57	272	8	36	131		175
2016	222	58	280	8	37	134		180
2017	229	60	289	7	38	138		184
2018	235	62	297	6	39	143		189
2019	242	64	306	6	41	147		193

Present Value of Benefits \$2,008

\$1,646

Benefit/Cost Ratio	1.22
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Year	Therms	PCA Rate	Total Rate	Year	Therms	Total Rate
2000	188	0.3512	0.4877	2000	188	0.2208
2001	188	0.3417	0.5021	2001	188	0.4478
2002	188	0.3553	0.5178	2002	188	0.7222
2003	188	0.3618	0.5322	2003	188	0.8841
2004	188	0.3718	0.5421	2004	188	0.8240
2005	188	0.3850	0.5680	2005	188	0.8819
2006	188	0.4001	0.5828	2006	188	0.8821
2007	188	0.4128	0.6004	2007	188	1.0120
2008	188	0.4245	0.6181	2008	188	1.0428
2009	188	0.4376	0.6368	2009	188	1.0795
2010	188	0.4507	0.6559	2010	188	1.1066
2011	188	0.4638	0.6748	2011	188	1.1395
2012	188	0.4770	0.6937	2012	188	1.1753
2013	188	0.4914	0.7126	2013	188	1.2074
2014	188	0.5058	0.7310	2014	188	1.2450
2015	188	0.5211	0.7504	2015	188	1.2825
2016	188	0.5377	0.7705	2016	188	1.3202
2017	188	0.5538	0.8004	2017	188	1.3604
2018	188	0.5702	0.8304	2018	188	1.4012
2019	188	0.5878	0.8558	2019	188	1.4429

Table 1
Water

Year	Therms	Rate	Annual	Year	Therms	Rate	Annual
2000	188	0.8000	150.40	2000	188	0.8000	150.40
2001	188	0.8240	154.91	2001	188	0.8240	154.91
2002	188	0.8480	159.42	2002	188	0.8480	159.42
2003	188	0.8720	163.93	2003	188	0.8720	163.93
2004	188	0.8960	168.44	2004	188	0.8960	168.44
2005	188	0.9200	172.95	2005	188	0.9200	172.95
2006	188	0.9440	177.46	2006	188	0.9440	177.46
2007	188	0.9680	181.97	2007	188	0.9680	181.97
2008	188	0.9920	186.48	2008	188	0.9920	186.48
2009	188	1.0160	190.99	2009	188	1.0160	190.99
2010	188	1.0400	195.50	2010	188	1.0400	195.50
2011	188	1.0640	199.51	2011	188	1.0640	199.51
2012	188	1.0880	203.52	2012	188	1.0880	203.52
2013	188	1.1120	207.53	2013	188	1.1120	207.53
2014	188	1.1360	211.54	2014	188	1.1360	211.54
2015	188	1.1600	215.55	2015	188	1.1600	215.55
2016	188	1.1840	219.56	2016	188	1.1840	219.56
2017	188	1.2080	223.57	2017	188	1.2080	223.57
2018	188	1.2320	227.58	2018	188	1.2320	227.58
2019	188	1.2560	231.59	2019	188	1.2560	231.59

Table 2
Water

Year	Therms	Rate	Annual	Year	Therms	Rate	Annual
2000	188	0.8000	150.40	2000	188	0.8000	150.40
2001	188	0.8240	154.91	2001	188	0.8240	154.91
2002	188	0.8480	159.42	2002	188	0.8480	159.42
2003	188	0.8720	163.93	2003	188	0.8720	163.93
2004	188	0.8960	168.44	2004	188	0.8960	168.44
2005	188	0.9200	172.95	2005	188	0.9200	172.95
2006	188	0.9440	177.46	2006	188	0.9440	177.46
2007	188	0.9680	181.97	2007	188	0.9680	181.97
2008	188	0.9920	186.48	2008	188	0.9920	186.48
2009	188	1.0160	190.99	2009	188	1.0160	190.99
2010	188	1.0400	195.50	2010	188	1.0400	195.50
2011	188	1.0640	199.51	2011	188	1.0640	199.51
2012	188	1.0880	203.52	2012	188	1.0880	203.52
2013	188	1.1120	207.53	2013	188	1.1120	207.53
2014	188	1.1360	211.54	2014	188	1.1360	211.54
2015	188	1.1600	215.55	2015	188	1.1600	215.55
2016	188	1.1840	219.56	2016	188	1.1840	219.56
2017	188	1.2080	223.57	2017	188	1.2080	223.57
2018	188	1.2320	227.58	2018	188	1.2320	227.58
2019	188	1.2560	231.59	2019	188	1.2560	231.59

Table 3
Water

Year	Therms	Rate	Annual	Year	Therms	Rate	Annual
2000	188	0.8000	150.40	2000	188	0.8000	150.40
2001	188	0.8240	154.91	2001	188	0.8240	154.91
2002	188	0.8480	159.42	2002	188	0.8480	159.42
2003	188	0.8720	163.93	2003	188	0.8720	163.93
2004	188	0.8960	168.44	2004	188	0.8960	168.44
2005	188	0.9200	172.95	2005	188	0.9200	172.95
2006	188	0.9440	177.46	2006	188	0.9440	177.46
2007	188	0.9680	181.97	2007	188	0.9680	181.97
2008	188	0.9920	186.48	2008	188	0.9920	186.48
2009	188	1.0160	190.99	2009	188	1.0160	190.99
2010	188	1.0400	195.50	2010	188	1.0400	195.50
2011	188	1.0640	199.51	2011	188	1.0640	199.51
2012	188	1.0880	203.52	2012	188	1.0880	203.52
2013	188	1.1120	207.53	2013	188	1.1120	207.53
2014	188	1.1360	211.54	2014	188	1.1360	211.54
2015	188	1.1600	215.55	2015	188	1.1600	215.55
2016	188	1.1840	219.56	2016	188	1.1840	219.56
2017	188	1.2080	223.57	2017	188	1.2080	223.57
2018	188	1.2320	227.58	2018	188	1.2320	227.58
2019	188	1.2560	231.59	2019	188	1.2560	231.59

Table 4
Water

Year	Therms	Rate	Annual	Year	Therms	Rate	Annual
2000	188	0.8000	150.40	2000	188	0.8000	150.40
2001	188	0.8240	154.91	2001	188	0.8240	154.91
2002	188	0.8480	159.42	2002	188	0.8480	159.42
2003	188	0.8720	163.93	2003	188	0.8720	163.93
2004	188	0.8960	168.44	2004	188	0.8960	168.44
2005	188	0.9200	172.95	2005	188	0.9200	172.95
2006	188	0.9440	177.46	2006	188	0.9440	177.46
2007	188	0.9680	181.97	2007	188	0.9680	181.97
2008	188	0.9920	186.48	2008	188	0.9920	186.48
2009	188	1.0160	190.99	2009	188	1.0160	190.99
2010	188	1.0400	195.50	2010	188	1.0400	195.50
2011	188	1.0640	199.51	2011	188	1.0640	199.51
2012	188	1.0880	203.52	2012	188	1.0880	203.52
2013	188	1.1120	207.53	2013	188	1.1120	207.53
2014	188	1.1360	211.54	2014	188	1.1360	211.54
2015	188	1.1600	215.55	2015	188	1.1600	215.55
2016	188	1.1840	219.56	2016	188	1.1840	219.56
2017	188	1.2080	223.57	2017	188	1.2080	223.57
2018	188	1.2320	227.58	2018	188	1.2320	227.58
2019	188	1.2560	231.59	2019	188	1.2560	231.59

Table 5
Water

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 PrograGas Rate Number Electric Rate Number

Gas Measure:	Furnace New Customer, New Dwelling New Main	Alternate Option: Att Fuel Type	Electric Resistance Furnace Electric
Allowance	\$200		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
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	180.0	0.0	180.0
3. Seasonal Rate			0.0
Total	180.0	0.0	180.0

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 40.55%

15. Average Life 19

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
Total Cust. Cost	\$1,027
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
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

	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	153	40	193	19	34	92		146
2002	157	41	198	18	35	95		148
2003	162	43	205	18	35	98		151
2004	167	44	211	17	36	101		153
2005	172	45	217	16	36	104		156
2006	177	46	223	15	37	107		159
2007	182	48	230	15	37	110		162
2008	188	49	237	14	38	114		165
2009	193	51	244	13	38	117		168
2010	199	52	251	13	39	121		172
2011	205	54	259	12	39	124		176
2012	211	56	267	11	40	128		179
2013	218	57	275	10	41	132		183
2014	224	59	283	10	42	136		187
2015	231	61	292	9	42	140		191
2016	238	62	300	8	43	144		196
2017	245	64	309	8	44	148		200
2018	252	66	318	7	45	153		205
2019	260	68	328	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	\$0.34517	\$0.50261	\$0.84778	153
2002	180	\$0.35553	\$0.51769	\$0.87322	157
2003	180	\$0.36619	\$0.53322	\$0.89941	162
2004	180	\$0.37710	\$0.54921	\$0.92640	167
2005	180	\$0.38850	\$0.56569	\$0.95419	172
2006	180	\$0.40015	\$0.58268	\$0.98281	177
2007	180	\$0.41216	\$0.60014	\$1.01230	182
2008	180	\$0.42452	\$0.61815	\$1.04267	188
2009	180	\$0.43728	\$0.63680	\$1.07395	193
2010	180	\$0.45037	\$0.65579	\$1.10616	199
2011	180	\$0.46388	\$0.67546	\$1.13935	205
2012	180	\$0.47780	\$0.69573	\$1.17353	211
2013	180	\$0.49214	\$0.71660	\$1.20874	218
2014	180	\$0.50690	\$0.73810	\$1.24500	224
2015	180	\$0.52211	\$0.76024	\$1.28235	231
2016	180	\$0.53777	\$0.78305	\$1.32082	238
2017	180	\$0.55390	\$0.80654	\$1.36044	245
2018	180	\$0.57052	\$0.83074	\$1.40126	252
2019	180	\$0.58763	\$0.85566	\$1.44329	260

Table 2

Furnace

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	40.55%	\$39
2001	8.24	98.88	40.55%	\$40
2002	8.48	101.85	40.55%	\$41
2003	8.74	104.80	40.55%	\$43
2004	9.00	108.05	40.55%	\$44
2005	9.27	111.29	40.55%	\$45
2006	9.55	114.83	40.55%	\$46
2007	9.84	118.07	40.55%	\$48
2008	10.13	121.61	40.55%	\$49
2009	10.44	125.28	40.55%	\$51
2010	10.75	128.92	40.55%	\$52
2011	11.07	132.80	40.55%	\$54
2012	11.41	136.87	40.55%	\$56
2013	11.75	140.98	40.55%	\$57
2014	12.10	145.21	40.55%	\$59
2015	12.46	149.56	40.55%	\$61
2016	12.84	154.05	40.55%	\$62
2017	13.22	158.67	40.55%	\$64
2018	13.62	163.43	40.55%	\$66
2019	14.03	168.34	40.55%	\$68

Table 4

Furnace

1	2	3	4	5	6	7	8	8'7'8'3'8
Year	Adm. Cost	Annual Adm. Cost	Development Mean	Supply Mean	Mem Cost	D & M %	Ratio Therms To Total Consumed	New Customer Adm. R. Main 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%	39
2011	7	83	183	0	183	7.83	40.55%	39
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	9	102	113	0	113	7.83	40.55%	45
2019	9	105	104	0	104	7.83	40.55%	46

Table 3

Furnace

1	2	3	4	5	6	7	8	7'6'8
Year	Supply Mean	Development Mean	Service Line	Mitar	Avg Cost of Del	Customer Cost	Ratio of Therms Consumed To Total	Carrying Chg Mean & Src
2000	0	293	620	114	4.71%	1027	40.55%	\$20
2001	0	283	598	110	4.71%	991	40.55%	\$19
2002	0	273	576	105	4.71%	954	40.55%	\$18
2003	0	263	554	100	4.71%	917	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	-1	203	422	70	4.71%	694	40.55%	\$13
2010	-1	193	400	65	4.71%	657	40.55%	\$13
2011	-1	183	378	60	4.71%	620	40.55%	\$12
2012	-1	173	356	55	4.71%	583	40.55%	\$11
2013	-1	163	334	50	4.71%	546	40.55%	\$10
2014	-1	153	312	45	4.71%	509	40.55%	\$10
2015	-1	143	290	40	4.71%	472	40.55%	\$9
2016	-1	133	268	35	4.71%	435	40.55%	\$8
2017	-1	123	246	30	4.71%	398	40.55%	\$8
2018	-1	113	224	25	4.71%	361	40.55%	\$7
2019	-1	104	202	9	4.71%	314	40.55%	\$6

Table 5

Furnace

1	2	3	4	5	6	7	137
Year	Therms	Water Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Del. Cost	Water 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: 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
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

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
Total Cust. Cost	\$1,027
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

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

	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	Dryer 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	41	11	52	5	9	25		39
2002	42	11	53	5	9	25		39
2003	43	11	54	5	9	26		40
2004	44	12	56	4	9	27		41
2005	46	12	58	4	10	28		42
2006	47	12	59	4	10	29		42
2007	49	13	62	4	10	29		43
2008	50	13	63	4	10	30		44
2009	52	14	66	4	10	31		45
2010	53	14	67	3	10	32		46
2011	55	14	69	3	11	33		47
2012	56	15	71	3	11	34		48
2013	58	15	73	3	11	35		49
2014	60	16	76	3	11	36		50
2015	62	16	78	2	11	37		51
2016	63	17	80	2	12	38		52
2017	65	17	82	2	12	40		53
2018	67	18	85	2	12	41		55
2019	69	18	87	2	12	42		56

Present Value
of Benefits \$575

\$483

Benefit/Cost Ratio	1.19
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Table 1

Dryw

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	\$0.34517	\$0.50261	\$0.84778	\$41
2002	48	\$0.35553	\$0.51769	\$0.87322	\$42
2003	48	\$0.36619	\$0.53322	\$0.89841	\$43
2004	48	\$0.37718	\$0.54821	\$0.92440	\$44
2005	48	\$0.38850	\$0.56369	\$0.95119	\$46
2006	48	\$0.40015	\$0.58266	\$0.98281	\$47
2007	48	\$0.41216	\$0.60014	\$1.01230	\$48
2008	48	\$0.42452	\$0.61815	\$1.04267	\$50
2009	48	\$0.43728	\$0.63669	\$1.07395	\$52
2010	48	\$0.45037	\$0.65579	\$1.10616	\$53
2011	48	\$0.46388	\$0.67548	\$1.13935	\$55
2012	48	\$0.47780	\$0.69573	\$1.17353	\$56
2013	48	\$0.49214	\$0.71660	\$1.20874	\$58
2014	48	\$0.50690	\$0.73810	\$1.24500	\$60
2015	48	\$0.52211	\$0.76024	\$1.28235	\$62
2016	48	\$0.53777	\$0.78305	\$1.32082	\$63
2017	48	\$0.55390	\$0.80654	\$1.36044	\$65
2018	48	\$0.57052	\$0.83074	\$1.40126	\$67
2019	48	\$0.58763	\$0.85568	\$1.44329	\$69

Table 2

Dryw

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	8.24	98.88	10.81%	\$11
2002	8.49	101.85	10.81%	\$11
2003	8.74	104.80	10.81%	\$11
2004	8.00	108.05	10.81%	\$12
2005	9.27	111.28	10.81%	\$12
2006	8.55	114.63	10.81%	\$12
2007	8.84	118.07	10.81%	\$13
2008	10.13	121.81	10.81%	\$13
2009	10.44	125.28	10.81%	\$14
2010	10.75	128.02	10.81%	\$14
2011	11.07	132.89	10.81%	\$14
2012	11.41	136.87	10.81%	\$15
2013	11.75	140.98	10.81%	\$15
2014	12.10	145.21	10.81%	\$16
2015	12.46	149.58	10.81%	\$16
2016	12.84	154.05	10.81%	\$17
2017	13.22	158.67	10.81%	\$17
2018	13.62	163.43	10.81%	\$18
2019	14.03	168.34	10.81%	\$18

Table 3

Dryw

1	2	3	4	5	6	7	8	7'6'8
Year	Supply Man	Development Man	Service Low	Meter	Arg Cost of Debt	Customer Cost	Ratio of Therma Consumed To Total	Carrying Chg Meter & Svc
2000	0	293	820	114	4.71%	1027	10.81%	\$5
2001	0	283	598	110	4.71%	991	10.81%	\$5
2002	0	273	576	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	466	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 4

Dryw

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 Therma To Total Consumed	New Customer Adm. & Main O&M
2000	5	60	293	0	293	7.83	10.81%	9
2001	5	62	283	0	283	7.83	10.81%	9
2002	5	64	273	0	273	7.83	10.81%	9
2003	5	66	263	0	263	7.83	10.81%	9
2004	6	68	253	0	253	7.83	10.81%	9
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 5

Dryw

1	2	3	4	5	6	7	107
Year	Therma	Winter Therma	Summer Therma	Commodity Gas Supply Cost	Trensp. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
2000	48	24	24	0.4687	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

Table 1

Dryw

1	2	3	4	5	5*2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
2000	48	\$0.33512	\$0.48797	\$0.82309	\$40
2001	48	\$0.34517	\$0.50281	\$0.84778	\$41
2002	48	\$0.35553	\$0.51769	\$0.87322	\$42
2003	48	\$0.36619	\$0.53322	\$0.89841	\$43
2004	48	\$0.37718	\$0.54921	\$0.92640	\$44
2005	48	\$0.38850	\$0.56569	\$0.95419	\$46
2006	48	\$0.40015	\$0.58268	\$0.98281	\$47
2007	48	\$0.41216	\$0.60014	\$1.01230	\$48
2008	48	\$0.42452	\$0.61815	\$1.04267	\$50
2009	48	\$0.43728	\$0.63669	\$1.07395	\$52
2010	48	\$0.45037	\$0.65579	\$1.10616	\$53
2011	48	\$0.46388	\$0.67546	\$1.13935	\$55
2012	48	\$0.47780	\$0.69573	\$1.17353	\$58
2013	48	\$0.49214	\$0.71660	\$1.20874	\$58
2014	48	\$0.50690	\$0.73810	\$1.24500	\$60
2015	48	\$0.52211	\$0.76024	\$1.28235	\$62
2016	48	\$0.53777	\$0.78305	\$1.32082	\$63
2017	48	\$0.55390	\$0.80654	\$1.36044	\$65
2018	48	\$0.57052	\$0.83074	\$1.40126	\$67
2019	48	\$0.58763	\$0.85566	\$1.44329	\$69

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	8.90	98.90	10.81%	\$10
2001	8.24	98.88	10.81%	\$11
2002	8.49	101.85	10.81%	\$11
2003	8.74	104.90	10.81%	\$11
2004	9.00	108.05	10.81%	\$12
2005	9.27	111.29	10.81%	\$12
2006	9.55	114.63	10.81%	\$12
2007	9.84	118.07	10.81%	\$13
2008	10.13	121.61	10.81%	\$13
2009	10.44	125.28	10.81%	\$14
2010	10.75	129.02	10.81%	\$14
2011	11.07	132.89	10.81%	\$14
2012	11.41	136.87	10.81%	\$15
2013	11.75	140.98	10.81%	\$15
2014	12.10	145.21	10.81%	\$16
2015	12.46	149.56	10.81%	\$16
2016	12.84	154.05	10.81%	\$17
2017	13.22	158.67	10.81%	\$17
2018	13.62	163.43	10.81%	\$18
2019	14.03	168.34	10.81%	\$18

Table 4

Dryw

1	2	3	4	5	6	7	8	8*7*8*3*8
Year	Adm. Cost	Annual Adm. Cost	Development Mem	Supply Mem	Main Cost	O & M %	Ratio Therms To Total Consumed	New Customer Adm. & Main O&M
1998	22	284	293	0	293	2.04	10.81%	29
1999	23	272	283	0	283	2.04	10.81%	30
2000	23	280	273	0	273	2.04	10.81%	31
2001	24	288	283	0	283	2.04	10.81%	32
2002	25	297	253	0	253	2.04	10.81%	33
2003	26	306	243	0	243	2.04	10.81%	34
2004	26	315	233	0	233	2.04	10.81%	35
2005	27	325	223	0	223	2.04	10.81%	36
2006	28	334	213	0	213	2.04	10.81%	37
2007	29	344	203	0	203	2.04	10.81%	38
2008	30	355	193	0	193	2.04	10.81%	39
2009	30	365	183	0	183	2.04	10.81%	40
2010	31	376	173	0	173	2.04	10.81%	41
2011	32	388	163	0	163	2.04	10.81%	42
2012	33	399	153	0	153	2.04	10.81%	43
2013	34	411	143	0	143	2.04	10.81%	45
2014	35	424	133	0	133	2.04	10.81%	46
2015	36	438	123	0	123	2.04	10.81%	47
2016	37	449	113	0	113	2.04	10.81%	48
2017	38	463	104	0	104	2.04	10.81%	50

Table 3

Dryw

1	2	3	4	5	6	7	8	7*8*8
Year	Supply Mem	Development Mem	Service Line	Meter	Avg Cost of Debt	Customer Cost	Ratio of Therms Consumed To Total	Carrying Chg Mem & Svc
2000	0	293	620	114	4.71%	1027	10.81%	45
2001	0	283	598	110	4.71%	991	10.81%	45
2002	0	273	576	105	4.71%	954	10.81%	45
2003	0	263	554	100	4.71%	917	10.81%	45
2004	0	253	532	95	4.71%	880	10.81%	44
2005	0	243	510	90	4.71%	843	10.81%	44
2006	0	233	488	85	4.71%	806	10.81%	44
2007	0	223	466	80	4.71%	769	10.81%	44
2008	0	213	444	75	4.71%	732	10.81%	44
2009	0	203	422	70	4.71%	695	10.81%	44
2010	0	193	400	65	4.71%	658	10.81%	43
2011	0	183	378	60	4.71%	621	10.81%	43
2012	0	173	356	55	4.71%	584	10.81%	43
2013	0	163	334	50	4.71%	547	10.81%	43
2014	0	153	312	45	4.71%	510	10.81%	43
2015	0	143	290	40	4.71%	473	10.81%	42
2016	0	133	268	35	4.71%	436	10.81%	42
2017	0	123	246	30	4.71%	399	10.81%	42
2018	0	113	224	25	4.71%	362	10.81%	42
2019	0	104	202	9	4.71%	315	10.81%	42

Table 5

Dryw

1	2	3	4	5	6	7	137
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
1998	48	23	23	0.4987	0.0000	1.00	\$23
1999	48	24	24	0.5137	0.0000	1.00	\$25
2000	48	24	24	0.5291	0.0000	1.00	\$25
2001	48	24	24	0.5448	0.0000	1.00	\$26
2002	48	24	24	0.5613	0.0000	1.00	\$27
2003	48	24	24	0.5781	0.0000	1.00	\$28
2004	48	24	24	0.5955	0.0000	1.00	\$29
2005	48	24	24	0.6133	0.0000	1.00	\$29
2006	48	24	24	0.6317	0.0000	1.00	\$30
2007	48	24	24	0.6507	0.0000	1.00	\$31
2008	48	24	24	0.6702	0.0000	1.00	\$32
2009	48	24	24	0.6903	0.0000	1.00	\$33
2010	48	24	24	0.7110	0.0000	1.00	\$34
2011	48	24	24	0.7324	0.0000	1.00	\$35
2012	48	24	24	0.7543	0.0000	1.00	\$36
2013	48	24	24	0.7770	0.0000	1.00	\$37
2014	48	24	24	0.8003	0.0000	1.00	\$38
2015	48	24	24	0.8243	0.0000	1.00	\$40
2016	48	24	24	0.8490	0.0000	1.00	\$41
2017	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:	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
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 & 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	\$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
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

	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	7	24	85	121
2001	41	11	52	\$5	7	25		37
2002	42	11	53	\$5	8	25		38
2003	43	11	54	\$5	8	26		39
2004	44	12	56	\$4	8	27		39
2005	46	12	58	\$4	8	28		40
2006	47	12	59	\$4	8	29		41
2007	49	13	62	\$4	8	29		42
2008	50	13	63	\$4	10	30		44
2009	52	14	66	\$4	9	31		44
2010	53	14	67	\$3	9	32		44
2011	55	14	69	\$3	9	33		46
2012	56	15	71	\$3	10	34		47
2013	58	15	73	\$3	10	35		48
2014	60	16	76	\$3	10	36		49
2015	62	16	78	\$2	10	37		50
2016	63	17	80	\$2	11	38		51
2017	65	17	82	\$2	11	40		53
2018	67	18	85	\$2	11	41		54
2019	69	18	87	\$2	12	42		56

Present Value
of Benefits \$574

Present Value
of Costs \$470

Benefit/Cost Ratio	1.22
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Table 1

Range

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	\$0.34517	\$0.50261	\$0.84778	\$41
2002	48	\$0.35553	\$0.51769	\$0.87322	\$42
2003	48	\$0.36619	\$0.53322	\$0.89841	\$43
2004	48	\$0.37718	\$0.54921	\$0.92640	\$44
2005	48	\$0.38850	\$0.56569	\$0.95419	\$46
2006	48	\$0.40015	\$0.58268	\$0.98281	\$47
2007	48	\$0.41216	\$0.60014	\$1.01230	\$49
2008	48	\$0.42452	\$0.61815	\$1.04267	\$50
2009	48	\$0.43728	\$0.63669	\$1.07395	\$52
2010	48	\$0.45037	\$0.65579	\$1.10616	\$53
2011	48	\$0.46388	\$0.67548	\$1.13935	\$55
2012	48	\$0.47780	\$0.69573	\$1.17353	\$56
2013	48	\$0.49214	\$0.71660	\$1.20874	\$58
2014	48	\$0.50690	\$0.73810	\$1.24500	\$60
2015	48	\$0.52211	\$0.76024	\$1.28235	\$62
2016	48	\$0.53777	\$0.78305	\$1.32082	\$63
2017	48	\$0.55390	\$0.80654	\$1.36044	\$65
2018	48	\$0.57052	\$0.83074	\$1.40126	\$67
2019	48	\$0.58763	\$0.85568	\$1.44329	\$69

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
2000	8.00	98.00	10.81%	\$10
2001	8.24	98.88	10.81%	\$11
2002	8.48	101.85	10.81%	\$11
2003	8.74	104.90	10.81%	\$11
2004	9.00	108.05	10.81%	\$12
2005	9.27	111.28	10.81%	\$12
2006	9.55	114.63	10.81%	\$12
2007	9.84	118.07	10.81%	\$13
2008	10.13	121.61	10.81%	\$13
2009	10.44	125.28	10.81%	\$14
2010	10.75	129.02	10.81%	\$14
2011	11.07	132.89	10.81%	\$14
2012	11.41	136.87	10.81%	\$15
2013	11.75	140.88	10.81%	\$15
2014	12.10	145.21	10.81%	\$16
2015	12.48	149.56	10.81%	\$16
2016	12.84	154.05	10.81%	\$17
2017	13.22	158.67	10.81%	\$17
2018	13.62	163.43	10.81%	\$18
2019	14.03	168.33	10.81%	\$18

Table 4

Range

1	2	3	4	5	6	7	8*0204*7+(3*7)
Year	Adm. Cost	Annual Adm. Cost	Development Man	Supply Man	Customer Cost	Ratio Therms To Total Consumed	New Customer Adm. & Main O&M
2000	5	60	293	0	293	10.81%	\$7
2001	5	62	283	0	283	10.81%	\$7
2002	5	64	273	0	273	10.81%	\$8
2003	5	66	263	0	263	10.81%	\$8
2004	6	68	253	0	253	10.81%	\$8
2005	6	70	243	0	243	10.81%	\$8
2006	6	72	233	0	233	10.81%	\$8
2007	6	74	223	0	223	10.81%	\$8
2008	6	76	213	0	213	10.81%	\$10
2009	7	78	203	0	203	10.81%	\$9
2010	7	81	193	0	193	10.81%	\$9
2011	7	83	183	0	183	10.81%	\$9
2012	7	86	173	0	173	10.81%	\$10
2013	7	88	163	0	163	10.81%	\$10
2014	8	91	153	0	153	10.81%	\$10
2015	8	93	143	0	143	10.81%	\$10
2016	8	96	133	0	133	10.81%	\$11
2017	8	99	124	0	124	10.81%	\$11
2018	9	102	114	0	114	10.81%	\$11
2019	9	105	105	0	105	10.81%	\$12

Table 3

Range

1	2	3	4	5	6	7	8	7*8*8
Year	Supply Man	Development Man	Service Line	Water Meter	Avg Cost of Debt	Customer Cost	Ratio Therms Cons.	Carrying Chg. Man & Svc
2000	0	293	620	114	4.71%	1,927	10.81%	\$5
2001	0	283	598	110	4.71%	991	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	466	80	4.71%	769	10.81%	\$4
2008	0	213	444	75	4.71%	732	10.81%	\$4
2009	-1	203	422	70	4.71%	694	10.81%	\$4
2010	-1	193	400	65	4.71%	657	10.81%	\$3
2011	-1	183	378	60	4.71%	620	10.81%	\$3
2012	-1	173	356	55	4.71%	583	10.81%	\$3
2013	-1	163	334	50	4.71%	546	10.81%	\$3
2014	-1	153	312	45	4.71%	509	10.81%	\$3
2015	-1	143	290	40	4.71%	472	10.81%	\$2
2016	-1	133	268	35	4.71%	435	10.81%	\$2
2017	-1	123	246	30	4.71%	398	10.81%	\$2
2018	-1	113	224	25	4.71%	361	10.81%	\$2
2019	-1	104	202	9	4.71%	314	10.81%	\$2

Table 5

Range

1	2	3	4	5	6	7	137
Year	Therms	Water Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cost	Water Multiplier	Gas Supply Cost
2000	48	24	24	0.4897	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	\$28
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 Dwg/Blg, New Main	Alternate Option:	Electric Resistance Water Heater 50 gallon All Fuel Type: Electric
Allowance:	\$300	Gas Utility:	Florida Public Utilities Company
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$235
2. Installation	521
Total Cust. Cost	\$756
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
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%

IV. Installed Cost Data

	\$
1. Equipment	\$247
2. Installation	190
Total Cust. Cost	\$437
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

5. Diversified KW

6. Billing KW

	Winter	Summer
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

2. Standard Rate

Therms Displaced	Winter	Summer
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	\$317	\$0	\$160	\$9	\$7	\$42	\$300	\$0	\$416	\$437	\$756	\$319
2001	\$326	\$0	\$165	\$9	\$7	\$43	0	0	\$120	0	0	0
2002	\$336	\$0	\$170	\$10	\$7	\$45	0	0	\$123	0	0	0
2003	\$346	\$0	\$175	\$10	\$8	\$46	0	0	\$127	0	0	0
2004	\$357	\$0	\$181	\$10	\$8	\$47	0	0	\$131	0	0	0
2005	\$367	\$0	\$186	\$10	\$8	\$49	0	0	\$135	0	0	0
2006	\$378	\$0	\$192	\$11	\$8	\$50	0	0	\$139	0	0	0
2007	\$390	\$0	\$197	\$11	\$9	\$52	0	0	\$143	0	0	0
2008	\$401	\$0	\$203	\$11	\$9	\$53	0	0	\$147	0	0	0
2009	\$413	\$0	\$209	\$12	\$9	\$55	0	0	\$152	0	0	0
2010	\$426	\$0	\$216	\$12	\$9	\$57	0	0	\$156	0	0	0
2011	\$438	\$0	\$222	\$12	\$10	\$58	0	0	\$161	0	0	0
2012	\$452	\$0	\$229	\$13	\$10	\$60	0	0	\$166	0	0	0
2013	\$465	\$0	\$236	\$13	\$10	\$62	0	0	\$171	0	0	0
2014	\$479	\$0	\$243	\$14	\$11	\$64	0	0	\$176	0	0	0
2015	\$494	\$0	\$250	\$14	\$11	\$66	0	0	\$181	0	0	0
2016	\$508	\$0	\$257	\$14	\$11	\$68	0	0	\$187	0	0	0
2017	\$524	\$0	\$265	\$15	\$12	\$70	0	0	\$192	0	0	0
2018	\$539	\$0	\$273	\$15	\$12	\$72	0	0	\$198	0	0	0
2019	\$555	\$0	\$281	\$16	\$12	\$74	0	0	\$204	0	0	0

Present Value
of Benefits \$1,492

Present Value
of Costs \$282

Benefit/Cost Ratio	5.30
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TABLE 1 Electric KW Cost WATER

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
2000	\$0.0728	3,751	16.00%	\$317
2001	\$0.0750	3,751	16.00%	\$326
2002	\$0.0772	3,751	16.00%	\$336
2003	\$0.0796	3,751	16.00%	\$346
2004	\$0.0819	3,751	16.00%	\$357
2005	\$0.0844	3,751	16.00%	\$367
2006	\$0.0869	3,751	16.00%	\$378
2007	\$0.0895	3,751	16.00%	\$390
2008	\$0.0922	3,751	16.00%	\$401
2009	\$0.0950	3,751	16.00%	\$413
2010	\$0.0978	3,751	16.00%	\$426
2011	\$0.1008	3,751	16.00%	\$438
2012	\$0.1038	3,751	16.00%	\$452
2013	\$0.1069	3,751	16.00%	\$465
2014	\$0.1101	3,751	16.00%	\$479
2015	\$0.1134	3,751	16.00%	\$494
2016	\$0.1168	3,751	16.00%	\$508
2017	\$0.1203	3,751	16.00%	\$524
2018	\$0.1239	3,751	16.00%	\$539
2019	\$0.1277	3,751	16.00%	\$555

TABLE 3 Gas Customer Charge

1	2	3	4	5	6	3*6+16.0%
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	37.84%	\$42
2001	\$8.24	\$98.88	168	444	37.84%	\$43
2002	\$8.49	\$101.85	168	444	37.84%	\$45
2003	\$8.74	\$104.90	168	444	37.84%	\$46
2004	\$9.00	\$108.05	168	444	37.84%	\$47
2005	\$9.27	\$111.29	168	444	37.84%	\$49
2006	\$9.55	\$114.63	168	444	37.84%	\$50
2007	\$9.84	\$118.07	168	444	37.84%	\$52
2008	\$10.13	\$121.61	168	444	37.84%	\$53
2009	\$10.44	\$125.26	168	444	37.84%	\$55
2010	\$10.75	\$129.02	168	444	37.84%	\$57
2011	\$11.07	\$132.89	168	444	37.84%	\$58
2012	\$11.41	\$136.87	168	444	37.84%	\$60
2013	\$11.75	\$140.98	168	444	37.84%	\$62
2014	\$12.10	\$145.21	168	444	37.84%	\$64
2015	\$12.46	\$149.56	168	444	37.84%	\$66
2016	\$12.84	\$154.05	168	444	37.84%	\$68
2017	\$13.22	\$158.67	168	444	37.84%	\$70
2018	\$13.62	\$163.43	168	444	37.84%	\$72
2019	\$14.03	\$168.34	168	444	37.84%	\$74

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	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

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:	Furnace		Electric Resistance Furnace
	New Customer, New Dwelling, New Main		Electric
Allowance:	\$300		
Gas Utility:	Florida Public Utilities Company		Electric Utility: Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$1,549
2. Installation	629
Total Cust. Cost	\$2,178
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
Total	180.0	0.0	180.0

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

III. Common Gas & Electric Data

1. Discount Rate 8.77%

IV. Installed Cost Data

	\$
1. Equipment	\$576
2. Installation	654
Total Cust. Cost	\$1,230
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

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	\$345	\$0	\$172	\$9	\$14	\$45	\$300	\$0	\$423	\$1,159	\$2,178	\$1,019
2001	\$355	\$0	\$177	\$9	\$14	\$47	0	0	\$126	0	0	0
2002	\$366	\$0	\$182	\$10	\$15	\$48	0	0	\$130	0	0	0
2003	\$377	\$0	\$188	\$10	\$15	\$49	0	0	\$134	0	0	0
2004	\$388	\$0	\$193	\$10	\$16	\$51	0	0	\$138	0	0	0
2005	\$400	\$0	\$199	\$10	\$16	\$52	0	0	\$142	0	0	0
2006	\$412	\$0	\$205	\$11	\$17	\$54	0	0	\$147	0	0	0
2007	\$424	\$0	\$211	\$11	\$17	\$56	0	0	\$151	0	0	0
2008	\$437	\$0	\$218	\$11	\$18	\$57	0	0	\$155	0	0	0
2009	\$450	\$0	\$224	\$12	\$18	\$59	0	0	\$160	0	0	0
2010	\$463	\$0	\$231	\$12	\$19	\$61	0	0	\$165	0	0	0
2011	\$477	\$0	\$238	\$12	\$19	\$63	0	0	\$170	0	0	0
2012	\$491	\$0	\$245	\$13	\$20	\$64	0	0	\$175	0	0	0
2013	\$506	\$0	\$252	\$13	\$21	\$66	0	0	\$180	0	0	0
2014	\$521	\$0	\$260	\$14	\$21	\$68	0	0	\$186	0	0	0
2015	\$537	\$0	\$268	\$14	\$22	\$70	0	0	\$191	0	0	0
2016	\$553	\$0	\$276	\$14	\$22	\$72	0	0	\$197	0	0	0
2017	\$570	\$0	\$284	\$15	\$23	\$75	0	0	\$203	0	0	0
2018	\$587	\$0	\$293	\$15	\$24	\$77	0	0	\$209	0	0	0
2019	\$604	\$0	\$301	\$16	\$25	\$79	0	0	\$215	0	0	0

Present Value
of Benefits \$1,687

Present Value
of Costs \$937

Benefit/Cost Ratio	1.80
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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	\$8.24	\$98.88	180	444	40.55%	\$47
2002	\$8.49	\$101.85	180	444	40.55%	\$48
2003	\$8.74	\$104.90	180	444	40.55%	\$49
2004	\$9.00	\$108.05	180	444	40.55%	\$51
2005	\$9.27	\$111.29	180	444	40.55%	\$52
2006	\$9.55	\$114.63	180	444	40.55%	\$54
2007	\$9.84	\$118.07	180	444	40.55%	\$56
2008	\$10.13	\$121.61	180	444	40.55%	\$57
2009	\$10.44	\$125.26	180	444	40.55%	\$59
2010	\$10.75	\$129.02	180	444	40.55%	\$61
2011	\$11.07	\$132.89	180	444	40.55%	\$63
2012	\$11.41	\$136.87	180	444	40.55%	\$64
2013	\$11.75	\$140.98	180	444	40.55%	\$66
2014	\$12.10	\$145.21	180	444	40.55%	\$68
2015	\$12.46	\$149.56	180	444	40.55%	\$70
2016	\$12.84	\$154.05	180	444	40.55%	\$72
2017	\$13.22	\$158.67	180	444	40.55%	\$75
2018	\$13.62	\$163.43	180	444	40.55%	\$77
2019	\$14.03	\$168.34	180	444	40.55%	\$79

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

I. Installed Cost Data

	\$
1. Equipment	\$425
2. Installation	202
Total Cust. Cost	\$627
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
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

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
Total Cust. Cost	\$488
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

5. Diversified KW

6. Billing KW

	Winter	Summer
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

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	\$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	\$13	0	0	\$69	0	0	0
2003	\$130	\$0	\$50	\$15	\$11	\$13	0	0	\$71	0	0	0
2004	\$133	\$0	\$52	\$16	\$11	\$14	0	0	\$73	0	0	0
2005	\$137	\$0	\$53	\$16	\$12	\$14	0	0	\$75	0	0	0
2006	\$142	\$0	\$55	\$17	\$12	\$14	0	0	\$77	0	0	0
2007	\$146	\$0	\$56	\$17	\$12	\$15	0	0	\$80	0	0	0
2008	\$150	\$0	\$58	\$18	\$13	\$15	0	0	\$82	0	0	0
2009	\$155	\$0	\$60	\$18	\$13	\$16	0	0	\$84	0	0	0
2010	\$159	\$0	\$62	\$19	\$13	\$16	0	0	\$87	0	0	0
2011	\$164	\$0	\$63	\$19	\$14	\$17	0	0	\$90	0	0	0
2012	\$169	\$0	\$65	\$20	\$14	\$17	0	0	\$92	0	0	0
2013	\$174	\$0	\$67	\$21	\$15	\$18	0	0	\$95	0	0	0
2014	\$179	\$0	\$69	\$21	\$15	\$18	0	0	\$98	0	0	0
2015	\$185	\$0	\$71	\$22	\$16	\$19	0	0	\$101	0	0	0
2016	\$190	\$0	\$74	\$22	\$16	\$19	0	0	\$104	0	0	0
2017	\$196	\$0	\$76	\$23	\$17	\$20	0	0	\$107	0	0	0
2018	\$202	\$0	\$78	\$24	\$17	\$20	0	0	\$110	0	0	0
2019	\$208	\$0	\$80	\$25	\$18	\$21	0	0	\$113	0	0	0

Present Value
of Benefits

\$822

Present Value
of Costs

\$128

Benefit/Cost Ratio	6.44
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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 Consumerd to Total	Gas Customer Charge
2000	\$8.00	\$96.00	48	444	10.81%	12
2001	\$8.24	\$98.88	48	444	10.81%	12
2002	\$8.49	\$101.85	48	444	10.81%	13
2003	\$8.74	\$104.90	48	444	10.81%	13
2004	\$9.00	\$108.05	48	444	10.81%	14
2005	\$9.27	\$111.29	48	444	10.81%	14
2006	\$9.55	\$114.63	48	444	10.81%	14
2007	\$9.84	\$118.07	48	444	10.81%	15
2008	\$10.13	\$121.61	48	444	10.81%	15
2009	\$10.44	\$125.26	48	444	10.81%	16
2010	\$10.75	\$129.02	48	444	10.81%	16
2011	\$11.07	\$132.89	48	444	10.81%	17
2012	\$11.41	\$136.87	48	444	10.81%	17
2013	\$11.75	\$140.98	48	444	10.81%	18
2014	\$12.10	\$145.21	48	444	10.81%	18
2015	\$12.46	\$149.56	48	444	10.81%	19
2016	\$12.84	\$154.05	48	444	10.81%	19
2017	\$13.22	\$158.67	48	444	10.81%	20
2018	\$13.62	\$163.43	48	444	10.81%	20
2019	\$14.03	\$168.34	48	444	10.81%	21

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 Measure		Gas Rate Number	Electric Rate Number	
Range:	Range:		Alternate Option:	Range:
	New Customer, New Dwelling, New Main		Alt Fuel Type:	Electric
Allowance:	185			
Gas Utility:	Florida Public Utilities Co.		Electric Utility:	Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$640
2. Installation	196
Total Cust. Cost	\$836
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
Total	24.0	24.0	48.0

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%

15. Average Life 19

III. Common Gas & Electric Data

1. Discount Rate 8.77%

IV. Installed Cost Data

	\$
1. Equipment	\$530
2. Installation	113
Total Cust. Cost	\$643
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

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

2. Standard Rate

Therms Displaced	Winter	Summer
2. Standard Rate		
Total	0.0	0.0

PARTICIPANTS COST EFFECTIVE RESULTS

Year	Electric KWH Cost <small>Table 1</small>	No. 2 Fuel Oil	Consumed -Conserved -Displaced Gas Therms <small>Table 2</small>	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge <small>Table 3</small>	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	\$13	0	0	\$69	0	0	0
2003	\$130	\$0	\$50	\$13	\$9	\$13	0	0	\$71	0	0	0
2004	\$133	\$0	\$52	\$14	\$9	\$14	0	0	\$73	0	0	0
2005	\$137	\$0	\$53	\$14	\$9	\$14	0	0	\$75	0	0	0
2006	\$142	\$0	\$55	\$14	\$10	\$14	0	0	\$77	0	0	0
2007	\$146	\$0	\$56	\$15	\$10	\$15	0	0	\$80	0	0	0
2008	\$150	\$0	\$58	\$15	\$10	\$15	0	0	\$82	0	0	0
2009	\$155	\$0	\$60	\$16	\$10	\$16	0	0	\$84	0	0	0
2010	\$159	\$0	\$62	\$16	\$11	\$16	0	0	\$87	0	0	0
2011	\$164	\$0	\$63	\$17	\$11	\$17	0	0	\$90	0	0	0
2012	\$169	\$0	\$65	\$17	\$11	\$17	0	0	\$92	0	0	0
2013	\$174	\$0	\$67	\$18	\$12	\$18	0	0	\$95	0	0	0
2014	\$179	\$0	\$69	\$18	\$12	\$18	0	0	\$98	0	0	0
2015	\$185	\$0	\$71	\$19	\$12	\$19	0	0	\$101	0	0	0
2016	\$190	\$0	\$74	\$19	\$13	\$19	0	0	\$104	0	0	0
2017	\$196	\$0	\$76	\$20	\$13	\$20	0	0	\$107	0	0	0
2018	\$202	\$0	\$78	\$20	\$14	\$20	0	0	\$110	0	0	0
2019	\$208	\$0	\$80	\$21	\$14	\$21	0	0	\$113	0	0	0

Present Value
of Benefits

\$822

Present Value
of Costs

\$177

Benefit/Cost Ratio	4.64
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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	\$8.24	\$98.88	48	444	10.81%	12
2002	\$8.49	\$101.85	48	444	10.81%	13
2003	\$8.74	\$104.90	48	444	10.81%	13
2004	\$9.00	\$108.05	48	444	10.81%	14
2005	\$9.27	\$111.29	48	444	10.81%	14
2006	\$9.55	\$114.63	48	444	10.81%	14
2007	\$9.84	\$118.07	48	444	10.81%	15
2008	\$10.13	\$121.61	48	444	10.81%	15
2009	\$10.44	\$125.26	48	444	10.81%	16
2010	\$10.75	\$129.02	48	444	10.81%	16
2011	\$11.07	\$132.89	48	444	10.81%	17
2012	\$11.41	\$136.87	48	444	10.81%	17
2013	\$11.75	\$140.98	48	444	10.81%	18
2014	\$12.10	\$145.21	48	444	10.81%	18
2015	\$12.46	\$149.56	48	444	10.81%	19
2016	\$12.84	\$154.05	48	444	10.81%	19
2017	\$13.22	\$158.67	48	444	10.81%	20
2018	\$13.62	\$163.43	48	444	10.81%	20
2019	\$14.03	\$168.34	48	444	10.81%	21

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	Rim B/C Ratio
Water Heater	330	1.76	1.26
Furnace	330	4.28	1.24
Clothes Dryer	50	2.98	1.36
Range	50	2.44	1.37

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:	Water Heater	40 gallon	Alternate Option:	Electric Resistance Water Heater	50 gallon
			Alt Fuel Type:	Electric	
Allowance:		\$330			
Gas Utility:	Florida Public Utilities Company		Electric Utility:	Florida Power & Light Co.	

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

II. Operating Data

1. Energy Factor	0.56
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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
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. New Customer Installation Costs

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

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	
	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	0.90	.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
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

	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	\$37	\$0	\$179	\$12	\$23	\$86	\$0		\$122
2002	\$147	\$38	\$0	\$185	\$12	\$24	\$89	\$0		\$125
2003	\$151	\$39	\$0	\$190	\$12	\$25	\$92	\$0		\$128
2004	\$156	\$41	\$0	\$197	\$11	\$26	\$94	\$0		\$131
2005	\$160	\$42	\$0	\$202	\$11	\$26	\$97	\$0		\$134
2006	\$165	\$43	\$0	\$208	\$10	\$27	\$100	\$0		\$137
2007	\$170	\$44	\$0	\$214	\$10	\$28	\$103	\$0		\$141
2008	\$175	\$46	\$0	\$221	\$9	\$29	\$106	\$0		\$144
2009	\$180	\$47	\$0	\$227	\$9	\$30	\$109	\$0		\$148
2010	\$186	\$48	\$0	\$234	\$8	\$31	\$113	\$0		\$151
2011	\$191	\$50	\$0	\$241	\$8	\$31	\$116	\$0		\$155
2012	\$197	\$51	\$0	\$248	\$8	\$32	\$119	\$0		\$159
2013	\$203	\$53	\$0	\$256	\$7	\$33	\$123	\$0		\$163
2014	\$209	\$54	\$0	\$263	\$6	\$34	\$127	\$0		\$167
2015	\$215	\$56	\$0	\$271	\$6	\$35	\$131	\$0		\$172
2016	\$222	\$58	\$0	\$280	\$6	\$36	\$134	\$0		\$177
2017	\$229	\$60	\$0	\$289	\$5	\$38	\$138	\$0		\$181
2018	\$235	\$61	\$0	\$296	\$5	\$39	\$143	\$0		\$186
2019	\$242	\$63	\$0	\$305	\$4	\$40	\$147	\$0		\$191

Present Value
of Benefits

\$2,004

Present Value
of Costs

\$1,619

Benefit/Cost
Ratio

1.24

Table 1 Rim Water

Year	Therms	Base Rate	PGA Rate	Total Rate
2000	168	\$0.3352	\$0.4877	\$0.8230
2001	168	\$0.3457	\$0.5026	\$0.8478
2002	168	\$0.3553	\$0.5176	\$0.8722
2003	168	\$0.3619	\$0.5322	\$0.8941
2004	168	\$0.3718	\$0.5481	\$0.9240
2005	168	\$0.3850	\$0.5659	\$0.9519
2006	168	\$0.4005	\$0.5826	\$0.9828
2007	168	\$0.4126	\$0.6004	\$1.0120
2008	168	\$0.4252	\$0.6185	\$1.0427
2009	168	\$0.4376	\$0.6369	\$1.0735
2010	168	\$0.4503	\$0.6557	\$1.1061
2011	168	\$0.4638	\$0.6746	\$1.1393
2012	168	\$0.4770	\$0.6937	\$1.1733
2013	168	\$0.4924	\$0.7160	\$1.2084
2014	168	\$0.5090	\$0.7310	\$1.2450
2015	168	\$0.5221	\$0.7504	\$1.2823
2016	168	\$0.5377	\$0.7635	\$1.3082
2017	168	\$0.5530	\$0.8064	\$1.3604
2018	168	\$0.5702	\$0.8204	\$1.4012
2019	168	\$0.5873	\$0.8556	\$1.4429

Table 2 Rim Water

Year	Customer Annual Change Consumed To Total	Ratio of Therms Consumed To Total	Annual Cust. Chg
2000	\$8.00	37.83%	\$37
2001	\$8.24	37.83%	\$37
2002	\$8.49	37.83%	\$38
2003	\$8.74	37.83%	\$39
2004	\$9.00	37.83%	\$41
2005	\$9.27	37.83%	\$42
2006	\$9.55	37.83%	\$43
2007	\$9.84	37.83%	\$44
2008	\$10.13	37.83%	\$46
2009	\$10.44	37.83%	\$47
2010	\$10.75	37.83%	\$48
2011	\$11.07	37.83%	\$50
2012	\$11.41	37.83%	\$51
2013	\$11.75	37.83%	\$53
2014	\$12.10	37.83%	\$54
2015	\$12.46	37.83%	\$56
2016	\$12.84	37.83%	\$58
2017	\$13.22	37.83%	\$60
2018	\$13.62	37.83%	\$61
2019	\$14.03	37.83%	\$63

Table 3 Rim Water

Year	Supply Main	Development Main	Service Line	Meter	Avg Cost of Debt	Customer	Carrying Chg Mains Svc
2000	0	0.00	620	110	4.71%	\$730	\$13
2001	0	0	598	106	4.71%	\$704	\$12
2002	0	0	576	101	4.71%	\$677	\$12
2003	0	0	554	97	4.71%	\$651	\$12
2004	0	0	532	92	4.71%	\$624	\$11
2005	0	0	510	88	4.71%	\$598	\$11
2006	0	0	488	84	4.71%	\$572	\$10
2007	0	0	466	79	4.71%	\$545	\$10
2008	0	0	356	59	4.71%	\$415	\$8
2009	0	0	334	55	4.71%	\$389	\$7
2010	0	0	312	51	4.71%	\$363	\$6
2011	0	0	290	47	4.71%	\$337	\$6
2012	0	0	268	43	4.71%	\$311	\$6
2013	0	0	246	39	4.71%	\$285	\$5
2014	0	0	224	35	4.71%	\$259	\$5
2015	0	0	202	32	4.71%	\$234	\$4
2016	0	0	0	0	4.71%	\$209	\$4
2017	0	0	0	0	4.71%	\$184	\$4
2018	0	0	0	0	4.71%	\$159	\$4
2019	0	0	0	0	4.71%	\$134	\$4

Table 4 Rim Water

Year	Admin Cost	Annual Admin Cost	Development Main	Supply Main	Customer Cost	Total Consumed Adm. & Main C&M
2000	5	60	0	0	0	\$23
2001	5	62	0	0	0	\$23
2002	5	64	0	0	0	\$24
2003	5	66	0	0	0	\$25
2004	6	69	0	0	0	\$26
2005	6	70	0	0	0	\$26
2006	6	72	0	0	0	\$27
2007	6	74	0	0	0	\$28
2008	6	76	0	0	0	\$29
2009	7	78	0	0	0	\$30
2010	7	81	0	0	0	\$31
2011	7	83	0	0	0	\$31
2012	7	86	0	0	0	\$32
2013	8	88	0	0	0	\$33
2014	8	91	0	0	0	\$34
2015	8	93	0	0	0	\$35
2016	8	96	0	0	0	\$36
2017	9	99	0	0	0	\$38
2018	9	102	0	0	0	\$39
2019	9	105	0	0	0	\$40

Table 5 Rim Water

Year	Therms	Water Therms	Summer Therms	Therms Supply Cost	Therms Capacity	Therms Peakng & Bal. Cost	Therms Multiplier	Gas Supply Cost
2000	168	101	67	0.4987	0.0000	0.0000	1.00	\$84
2001	168	101	67	0.5137	0.0000	0.0000	1.00	\$86
2002	168	101	67	0.5291	0.0000	0.0000	1.00	\$89
2003	168	101	67	0.5449	0.0000	0.0000	1.00	\$92
2004	168	101	67	0.5613	0.0000	0.0000	1.00	\$94
2005	168	101	67	0.5781	0.0000	0.0000	1.00	\$97
2006	168	101	67	0.5955	0.0000	0.0000	1.00	\$100
2007	168	101	67	0.6133	0.0000	0.0000	1.00	\$103
2008	168	101	67	0.6317	0.0000	0.0000	1.00	\$106
2009	168	101	67	0.6507	0.0000	0.0000	1.00	\$109
2010	168	101	67	0.6702	0.0000	0.0000	1.00	\$113
2011	168	101	67	0.6903	0.0000	0.0000	1.00	\$116
2012	168	101	67	0.7110	0.0000	0.0000	1.00	\$119
2013	168	101	67	0.7324	0.0000	0.0000	1.00	\$123
2014	168	101	67	0.7543	0.0000	0.0000	1.00	\$127
2015	168	101	67	0.7770	0.0000	0.0000	1.00	\$131
2016	168	101	67	0.8003	0.0000	0.0000	1.00	\$134
2017	168	101	67	0.8243	0.0000	0.0000	1.00	\$138
2018	168	101	67	0.8490	0.0000	0.0000	1.00	\$143
2019	168	101	67	0.8745	0.0000	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: Residential Appliance Replacement Program Gas Rate Number Electric Rate Number

Gas Measure:	Furnace	Alternate Option:	Furnace
		Alt Fuel Type:	Electric
Allowance:	\$330		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light 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	180.0	0.0	180.0
3. Seasonal Rate			0.0
Total	180.0	0.0	180.0

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	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%

IV. New Customer Installation Costs

	\$
1. Supply Main	0
2. Development Main	0
3. Service	620
4. Meter	114
Total Cust. Cost	\$734
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	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	0.90	.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
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

	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	Table 6	Table 7	
1	2	3	4	5	6	7	8	9	10	11
2000	\$148	\$39	\$0	\$187	\$14	\$24	\$90	\$0	\$330	\$458
2001	\$153	\$40	\$0	\$193	\$13	\$25	\$92	\$0		\$131
2002	\$157	\$41	\$0	\$198	\$13	\$26	\$95	\$0		\$134
2003	\$162	\$43	\$0	\$205	\$13	\$27	\$98	\$0		\$137
2004	\$167	\$44	\$0	\$211	\$12	\$27	\$101	\$0		\$141
2005	\$172	\$45	\$0	\$217	\$11	\$28	\$104	\$0		\$144
2006	\$177	\$46	\$0	\$223	\$11	\$29	\$107	\$0		\$147
2007	\$182	\$48	\$0	\$230	\$11	\$30	\$110	\$0		\$151
2008	\$188	\$49	\$0	\$237	\$10	\$31	\$114	\$0		\$155
2009	\$193	\$51	\$0	\$244	\$10	\$32	\$117	\$0		\$159
2010	\$199	\$52	\$0	\$251	\$9	\$33	\$121	\$0		\$162
2011	\$205	\$54	\$0	\$259	\$9	\$34	\$124	\$0		\$166
2012	\$211	\$56	\$0	\$267	\$8	\$35	\$128	\$0		\$171
2013	\$218	\$57	\$0	\$275	\$8	\$36	\$132	\$0		\$175
2014	\$224	\$59	\$0	\$283	\$7	\$37	\$136	\$0		\$179
2015	\$231	\$61	\$0	\$292	\$6	\$38	\$140	\$0		\$184
2016	\$238	\$62	\$0	\$300	\$6	\$39	\$144	\$0		\$189
2017	\$245	\$64	\$0	\$309	\$6	\$40	\$148	\$0		\$194
2018	\$252	\$66	\$0	\$318	\$5	\$41	\$153	\$0		\$200
2019	\$260	\$68	\$0	\$328	\$4	\$43	\$157	\$0		\$205

Present Value
of Benefits \$2,153

Present Value
of Costs \$1,715

Benefit/Cost Ratio	1.26
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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	\$0.34517	\$0.50261	\$0.84778	\$153
2002	180	\$0.35563	\$0.51769	\$0.87322	\$157
2003	180	\$0.36619	\$0.53322	\$0.89941	\$162
2004	180	\$0.37718	\$0.54921	\$0.92640	\$167
2005	180	\$0.38850	\$0.56569	\$0.95419	\$172
2006	180	\$0.40015	\$0.58266	\$0.98281	\$177
2007	180	\$0.41216	\$0.60014	\$1.01230	\$182
2008	180	\$0.42452	\$0.61815	\$1.04267	\$188
2009	180	\$0.43726	\$0.63669	\$1.07395	\$193
2010	180	\$0.45037	\$0.65579	\$1.10616	\$199
2011	180	\$0.46388	\$0.67546	\$1.13935	\$205
2012	180	\$0.47780	\$0.69573	\$1.17353	\$211
2013	180	\$0.49214	\$0.71660	\$1.20874	\$218
2014	180	\$0.50690	\$0.73810	\$1.24500	\$224
2015	180	\$0.52211	\$0.76024	\$1.28235	\$231
2016	180	\$0.53777	\$0.78305	\$1.32082	\$238
2017	180	\$0.55390	\$0.80654	\$1.36044	\$245
2018	180	\$0.57052	\$0.83074	\$1.40126	\$252
2019	180	\$0.58763	\$0.85566	\$1.44329	\$260

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	\$8.24	\$99	40.55%	\$40
2002	\$8.49	\$102	40.55%	\$41
2003	\$8.74	\$105	40.55%	\$43
2004	\$9.00	\$108	40.55%	\$44
2005	\$9.27	\$111	40.55%	\$45
2006	\$9.55	\$115	40.55%	\$46
2007	\$9.84	\$118	40.55%	\$48
2008	\$10.13	\$122	40.55%	\$49
2009	\$10.44	\$125	40.55%	\$51
2010	\$10.75	\$129	40.55%	\$52
2011	\$11.07	\$133	40.55%	\$54
2012	\$11.41	\$137	40.55%	\$56
2013	\$11.75	\$141	40.55%	\$57
2014	\$12.10	\$145	40.55%	\$59
2015	\$12.46	\$150	40.55%	\$61
2016	\$12.84	\$154	40.55%	\$62
2017	\$13.22	\$159	40.55%	\$64
2018	\$13.62	\$163	40.55%	\$66
2019	\$14.03	\$168	40.55%	\$68

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%	\$26
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
Allowance:	\$50	Alt Fuel Type:	Electric
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
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
12. Taxes & Fees	16.00%
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 & 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
Total Cust. Cost	\$734

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)		\$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

	Now	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
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

	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	\$41	\$11	\$0	\$52	\$4	\$7	\$25	\$0		\$35
2002	\$42	\$11	\$0	\$53	\$3	\$7	\$25	\$0		\$36
2003	\$43	\$11	\$0	\$54	\$3	\$7	\$26	\$0		\$37
2004	\$44	\$12	\$0	\$56	\$3	\$7	\$27	\$0		\$38
2005	\$46	\$12	\$0	\$58	\$3	\$8	\$28	\$0		\$38
2006	\$47	\$12	\$0	\$59	\$3	\$8	\$29	\$0		\$39
2007	\$49	\$13	\$0	\$62	\$3	\$8	\$29	\$0		\$40
2008	\$50	\$13	\$0	\$63	\$3	\$8	\$30	\$0		\$41
2009	\$52	\$14	\$0	\$66	\$3	\$8	\$31	\$0		\$42
2010	\$53	\$14	\$0	\$67	\$2	\$9	\$32	\$0		\$43
2011	\$55	\$14	\$0	\$69	\$2	\$9	\$33	\$0		\$44
2012	\$56	\$15	\$0	\$71	\$2	\$9	\$34	\$0		\$46
2013	\$58	\$15	\$0	\$73	\$2	\$10	\$35	\$0		\$47
2014	\$60	\$16	\$0	\$76	\$2	\$10	\$36	\$0		\$48
2015	\$62	\$16	\$0	\$78	\$2	\$10	\$37	\$0		\$49
2016	\$63	\$17	\$0	\$80	\$2	\$10	\$38	\$0		\$50
2017	\$65	\$17	\$0	\$82	\$2	\$11	\$40	\$0		\$52
2018	\$67	\$18	\$0	\$85	\$1	\$11	\$41	\$0		\$53
2019	\$69	\$18	\$0	\$87	\$1	\$11	\$42	\$0		\$55

Present Value
of Benefits

\$575

Present Value
Of Costs

\$422

Benefit/Cost
Ratio

1.36

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	\$0.34517	\$0.50261	\$0.84778	\$41
2002	48	\$0.35553	\$0.51769	\$0.87322	\$42
2003	48	\$0.36619	\$0.53322	\$0.89941	\$43
2004	48	\$0.37718	\$0.54921	\$0.92640	\$44
2005	48	\$0.38850	\$0.56569	\$0.95419	\$46
2006	48	\$0.40015	\$0.58266	\$0.98281	\$47
2007	48	\$0.41216	\$0.60014	\$1.01230	\$49
2008	48	\$0.42452	\$0.61815	\$1.04267	\$50
2009	48	\$0.43726	\$0.63669	\$1.07395	\$52
2010	48	\$0.45037	\$0.65579	\$1.10616	\$53
2011	48	\$0.46388	\$0.67546	\$1.13935	\$55
2012	48	\$0.47780	\$0.69573	\$1.17353	\$56
2013	48	\$0.49214	\$0.71660	\$1.20874	\$58
2014	48	\$0.50690	\$0.73810	\$1.24500	\$60
2015	48	\$0.52211	\$0.76024	\$1.28235	\$62
2016	48	\$0.53777	\$0.78305	\$1.32082	\$63
2017	48	\$0.55390	\$0.80654	\$1.36044	\$65
2018	48	\$0.57052	\$0.83074	\$1.40126	\$67
2019	48	\$0.58763	\$0.85566	\$1.44329	\$69

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	8.24	\$99	10.81%	\$11
2002	8.49	\$102	10.81%	\$11
2003	8.74	\$105	10.81%	\$11
2004	9.00	\$108	10.81%	\$12
2005	9.27	\$111	10.81%	\$12
2006	9.55	\$115	10.81%	\$12
2007	9.84	\$118	10.81%	\$13
2008	10.13	\$122	10.81%	\$13
2009	10.44	\$125	10.81%	\$14
2010	10.75	\$129	10.81%	\$14
2011	11.07	\$133	10.81%	\$14
2012	11.41	\$137	10.81%	\$15
2013	11.75	\$141	10.81%	\$15
2014	12.10	\$145	10.81%	\$16
2015	12.46	\$150	10.81%	\$16
2016	12.84	\$154	10.81%	\$17
2017	13.22	\$159	10.81%	\$17
2018	13.62	\$163	10.81%	\$18
2019	14.03	\$168	10.81%	\$18

Table 4

Dryer

Year	Adm. Cost	Annual Adm. Cost	Ratio Therms 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	\$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

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	Alternate Option:	Range
		Alt Fuel Type:	Electric
Allowance:	\$50		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light 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
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
Total Cust. Cost	\$734
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
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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	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	\$41	\$10	\$0	\$51	\$2	\$7	\$25	\$0		\$34
2002	\$42	\$11	\$0	\$53	\$2	\$7	\$25	\$0		\$35
2003	\$43	\$11	\$0	\$54	\$2	\$7	\$26	\$0		\$36
2004	\$44	\$11	\$0	\$55	\$2	\$7	\$27	\$0		\$37
2005	\$46	\$12	\$0	\$58	\$2	\$8	\$28	\$0		\$37
2006	\$47	\$12	\$0	\$59	\$2	\$8	\$29	\$0		\$38
2007	\$49	\$12	\$0	\$61	\$2	\$8	\$29	\$0		\$39
2008	\$50	\$13	\$0	\$63	\$2	\$8	\$30	\$0		\$40
2009	\$52	\$13	\$0	\$65	\$2	\$8	\$31	\$0		\$42
2010	\$53	\$13	\$0	\$66	\$2	\$9	\$32	\$0		\$43
2011	\$55	\$14	\$0	\$69	\$2	\$9	\$33	\$0		\$44
2012	\$56	\$14	\$0	\$70	\$2	\$9	\$34	\$0		\$45
2013	\$58	\$15	\$0	\$73	\$1	\$10	\$35	\$0		\$46
2014	\$60	\$15	\$0	\$75	\$1	\$10	\$36	\$0		\$47
2015	\$62	\$16	\$0	\$78	\$1	\$10	\$37	\$0		\$49
2016	\$63	\$16	\$0	\$79	\$1	\$10	\$38	\$0		\$50
2017	\$65	\$17	\$0	\$82	\$1	\$11	\$40	\$0		\$51
2018	\$67	\$17	\$0	\$84	\$1	\$11	\$41	\$0		\$53
2019	\$69	\$18	\$0	\$87	\$1	\$11	\$42	\$0		\$54

Present Value
Of Benefits \$570

Present Value
Of Costs \$415

Benefit/Cost Ratio	1.37
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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	\$0.34517	\$0.50261	\$0.84778	\$41
2002	48	\$0.35553	\$0.51769	\$0.87322	\$42
2003	48	\$0.36619	\$0.53322	\$0.89941	\$43
2004	48	\$0.37718	\$0.54921	\$0.92640	\$44
2005	48	\$0.38850	\$0.56569	\$0.95419	\$46
2006	48	\$0.40015	\$0.58266	\$0.98281	\$47
2007	48	\$0.41216	\$0.60014	\$1.01230	\$49
2008	48	\$0.42452	\$0.61815	\$1.04267	\$50
2009	48	\$0.43726	\$0.63669	\$1.07395	\$52
2010	48	\$0.45037	\$0.65579	\$1.10616	\$53
2011	48	\$0.46388	\$0.67546	\$1.13935	\$55
2012	48	\$0.47780	\$0.69573	\$1.17353	\$56
2013	48	\$0.49214	\$0.71660	\$1.20874	\$58
2014	48	\$0.50690	\$0.73810	\$1.24500	\$60
2015	48	\$0.52211	\$0.76024	\$1.28235	\$62
2016	48	\$0.53777	\$0.78305	\$1.32082	\$63
2017	48	\$0.55390	\$0.80654	\$1.36044	\$65
2018	48	\$0.57052	\$0.83074	\$1.40126	\$67
2019	48	\$0.58763	\$0.85566	\$1.44329	\$69

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	8.24	\$99	10.81%	\$11
2002	8.49	\$102	10.81%	\$11
2003	8.74	\$105	10.81%	\$11
2004	9.00	\$108	10.81%	\$12
2005	9.27	\$111	10.81%	\$12
2006	9.55	\$115	10.81%	\$12
2007	9.84	\$118	10.81%	\$13
2008	10.13	\$122	10.81%	\$13
2009	10.44	\$125	10.81%	\$14
2010	10.75	\$129	10.81%	\$14
2011	11.07	\$133	10.81%	\$14
2012	11.41	\$137	10.81%	\$15
2013	11.75	\$141	10.81%	\$15
2014	12.10	\$145	10.81%	\$16
2015	12.46	\$150	10.81%	\$16
2016	12.84	\$154	10.81%	\$17
2017	13.22	\$159	10.81%	\$17
2018	13.62	\$163	10.81%	\$18
2019	14.03	\$168	10.81%	\$18

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	\$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: Residential Appliance Replacement Program
Gas Rate Number

Electric Rate Number

Gas Measure:	Water Heater	40 Gallon	Alternate Option:	Electric Resistance Water Heater	50 Gallons
			Alt Fuel Type:	Electric	
Allowance:	330				
Gas Utility:	Florida Public Utilities Company		Electric Utility:	Florida Power & Light Co.	

I. Installed Cost Data

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

II. Operating Data

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

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
Total Cust. Cost	437
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 Winter Summer

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 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	317	0	143	9	7	35	330	0	471	413	755	342
2001	326	0	147	9	7	36	0	0	89	0	0	0
2002	336	0	152	10	7	37	0	0	91	0	0	0
2003	346	0	156	10	8	38	0	0	94	0	0	0
2004	357	0	161	10	8	40	0	0	97	0	0	0
2005	367	0	166	10	8	41	0	0	100	0	0	0
2006	378	0	171	11	8	42	0	0	103	0	0	0
2007	390	0	176	11	9	43	0	0	106	0	0	0
2008	401	0	181	11	9	45	0	0	109	0	0	0
2009	413	0	186	12	9	46	0	0	112	0	0	0
2010	426	0	192	12	9	47	0	0	116	0	0	0
2011	438	0	198	12	10	49	0	0	119	0	0	0
2012	452	0	204	13	10	50	0	0	123	0	0	0
2013	465	0	210	13	10	52	0	0	127	0	0	0
2014	479	0	216	14	11	53	0	0	130	0	0	0
2015	494	0	223	14	11	55	0	0	134	0	0	0
2016	508	0	229	14	11	57	0	0	138	0	0	0
2017	524	0	236	15	12	58	0	0	142	0	0	0
2018	539	0	243	15	12	60	0	0	147	0	0	0
2019	555	0	250	16	12	62	0	0	151	0	0	0

Present Value
of Benefits

\$1,344

Present Value
of Costs

\$314

Benefit/Cost Ratio	4.28
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Part.
TABLE 1 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%	\$348
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%	35
2001	8.24	98.88	168	444	37.83%	36
2002	8.49	101.85	168	444	37.83%	37
2003	8.74	104.90	168	444	37.83%	38
2004	9.00	108.05	168	444	37.83%	40
2005	9.27	111.29	168	444	37.83%	41
2006	9.55	114.63	168	444	37.83%	42
2007	9.84	118.07	168	444	37.83%	43
2008	10.13	121.61	168	444	37.83%	45
2009	10.44	125.26	168	444	37.83%	46
2010	10.75	129.02	168	444	37.83%	47
2011	11.07	132.89	168	444	37.83%	49
2012	11.41	136.87	168	444	37.83%	50
2013	11.75	140.98	168	444	37.83%	52
2014	12.10	145.21	168	444	37.83%	53
2015	12.46	149.56	168	444	37.83%	55
2016	12.84	154.05	168	444	37.83%	57
2017	13.22	158.67	168	444	37.83%	58
2018	13.62	163.43	168	444	37.83%	60
2019	14.03	168.34	168	444	37.83%	62

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 Fuel Type:	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
Total Cust. Cost	2178
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
Total	180	0	180

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

III. Common Gas & Electric Data

1. Discount Rate 8.77%

IV. Installed Cost Data

	\$
1. Equipment	576
2. Installation	654
Total Cust. Cost	\$1,159
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

5. Diversified KW
6. Billing KW

	Winter	Summer
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

	Winter	Summer
1. Energy Factor		1
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	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%	120.29
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 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	1.10616	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

Participants Cost Effectiveness Test Data

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

Gas Program: Residential Appliance Replacement Program

Electric Rate Number

Gas Rate Number

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

I. Installed Cost Data

	\$
1. Equipment	\$640
2. Installation	\$196
Total Cust. Cost	\$836
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
Total	24	24	48

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
Total Cust. Cost	\$643
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

Therms Displaced	Winter	Summer
1. Energy Factor		1
2. Standard Rate		
Total	0	0

PARTICIPANTS COST EFFECTIVE RESULTS

Range

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	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	13	0	0	35	0	0	0
2003	95	0	50	13	9	13	0	0	36	0	0	0
2004	98	0	52	14	9	14	0	0	37	0	0	0
2005	101	0	53	14	9	14	0	0	38	0	0	0
2006	104	0	55	14	10	14	0	0	39	0	0	0
2007	107	0	56	15	10	15	0	0	41	0	0	0
2008	110	0	58	15	10	15	0	0	42	0	0	0
2009	113	0	60	16	10	16	0	0	43	0	0	0
2010	117	0	62	16	11	16	0	0	44	0	0	0
2011	120	0	63	17	11	17	0	0	46	0	0	0
2012	124	0	65	17	11	17	0	0	47	0	0	0
2013	128	0	67	18	12	18	0	0	49	0	0	0
2014	131	0	69	18	12	18	0	0	50	0	0	0
2015	135	0	71	19	12	19	0	0	51	0	0	0
2016	139	0	74	19	13	19	0	0	53	0	0	0
2017	144	0	76	20	13	20	0	0	55	0	0	0
2018	148	0	78	20	14	20	0	0	56	0	0	0
2019	152	0	80	21	14	21	0	0	58	0	0	0

Present Value
of Benefits \$426

Present Value
of Costs \$177

Benefit/Cost Ratio	2.40
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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%	103.76
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%	120.29
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	8.24	98.88	48	444	10.81%	12.40
2002	8.49	101.85	48	444	10.81%	12.77
2003	8.74	104.90	48	444	10.81%	13.16
2004	9.00	108.05	48	444	10.81%	13.55
2005	9.27	111.29	48	444	10.81%	13.96
2006	9.55	114.63	48	444	10.81%	14.38
2007	9.84	118.07	48	444	10.81%	14.81
2008	10.13	121.61	48	444	10.81%	15.25
2009	10.44	125.26	48	444	10.81%	15.71
2010	10.75	129.02	48	444	10.81%	16.18
2011	11.07	132.89	48	444	10.81%	16.66
2012	11.41	136.87	48	444	10.81%	17.16
2013	11.75	140.98	48	444	10.81%	17.68
2014	12.10	145.21	48	444	10.81%	18.21
2015	12.46	149.56	48	444	10.81%	18.76
2016	12.84	154.05	48	444	10.81%	19.32
2017	13.22	158.67	48	444	10.81%	19.90
2018	13.62	163.43	48	444	10.81%	20.50
2019	14.03	168.34	48	444	10.81%	21.11

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

Residential Propane Distribution Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Water Heater	275	98.31	1.24
Furnace	275	4.45	1.31
Clothes Dryer Outlet	75	30.39	1.25
Range	75	18.59	1.25

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 Fuel Type:	Electric	
Gas Utility:	Florida Public Utilities Company		Electric Utility:	Florida Power & Light 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	
8. 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	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

	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
	\$	\$	\$	\$	\$	\$	\$	\$
1	138	36	175	18	25	84	275	402
2	142	37	179	18	26	86		130
3	147	39	186	17	26	89		132
4	151	40	191	16	27	92		135
5	156	41	197	16	28	94		138
6	160	42	202	15	28	97		141
7	165	43	208	14	29	100		143
8	170	45	215	14	30	103		146
9	175	46	221	13	30	106		150
10	180	47	227	12	31	109		153
11	186	49	235	12	32	113		156
12	191	50	241	11	33	116		160
13	197	52	249	10	34	119		164
14	203	53	256	10	35	123		167
15	209	55	264	9	36	127		171
16	215	57	272	8	36	131		175
17	222	58	280	8	37	134		180
18	229	60	289	7	38	138		184
19	235	62	297	6	39	143		189
20	242	64	306	6	41	147		193

Present Value
of Benefits \$2,008Present Value
of Costs \$1,623Benefit/Cost
Ratio

1.24

Table 1

Water

1	2	3	4	5	5*2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
1	168	0.33512	0.48797	0.82309	138
2	168	0.34517	0.50261	0.84778	142
3	168	0.35553	0.51769	0.87322	147
4	168	0.36619	0.53322	0.89941	151
5	168	0.37718	0.54921	0.92640	156
6	168	0.38850	0.56569	0.95419	160
7	168	0.40015	0.58266	0.98281	165
8	168	0.41216	0.60014	1.01230	170
9	168	0.42452	0.61815	1.04267	175
10	168	0.43726	0.63669	1.07395	180
11	168	0.45037	0.65579	1.10616	186
12	168	0.46388	0.67546	1.13935	191
13	168	0.47780	0.69573	1.17353	197
14	168	0.49214	0.71660	1.20874	203
15	168	0.50690	0.73810	1.24500	209
16	168	0.52211	0.76024	1.28235	215
17	168	0.53777	0.78305	1.32082	222
18	168	0.55390	0.80654	1.36044	229
19	168	0.57052	0.83074	1.40126	235
20	168	0.58763	0.85566	1.44329	242

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.
1	8.00	96.00	37.83%	136
2	8.24	98.88	37.83%	137
3	8.49	101.85	37.83%	139
4	8.74	104.90	37.83%	140
5	9.00	108.05	37.83%	141
6	9.27	111.29	37.83%	142
7	9.55	114.63	37.83%	143
8	9.84	118.07	37.83%	145
9	10.13	121.61	37.83%	146
10	10.44	125.26	37.83%	147
11	10.75	129.02	37.83%	148
12	11.07	132.89	37.83%	150
13	11.41	136.87	37.83%	152
14	11.75	140.98	37.83%	153
15	12.10	145.21	37.83%	155
16	12.46	149.56	37.83%	157
17	12.84	154.05	37.83%	158
18	13.22	158.67	37.83%	160
19	13.62	163.43	37.83%	162
20	14.03	168.34	37.83%	164

Table 3

Water

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 Total	Carrying Chg Mains & Svc
1	0	293	620	115	4.71%	1028	37.83%	118
2	0	283	598	110	4.71%	991	37.83%	118
3	0	273	576	105	4.71%	954	37.83%	117
4	0	263	554	100	4.71%	917	37.83%	116
5	0	253	532	95	4.71%	880	37.83%	116
6	0	243	510	90	4.71%	843	37.83%	115
7	0	233	488	85	4.71%	806	37.83%	114
8	0	223	466	80	4.71%	769	37.83%	114
9	0	213	444	75	4.71%	732	37.83%	113
10	-1	203	422	70	4.71%	694	37.83%	112
11	-1	193	400	65	4.71%	657	37.83%	112
12	-1	183	378	60	4.71%	620	37.83%	111
13	-1	173	356	55	4.71%	583	37.83%	110
14	-1	163	334	50	4.71%	546	37.83%	110
15	-1	153	312	45	4.71%	509	37.83%	109
16	-1	143	290	40	4.71%	472	37.83%	108
17	-1	133	268	36	4.71%	436	37.83%	108
18	-1	123	246	32	4.71%	400	37.83%	107
19	-1	113	224	28	4.71%	364	37.83%	106
20	-1	104	202	13	4.71%	318	37.83%	106

Table 4

Water

1	2	3	4	5	6	7	8	6*7*8+3*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
1	5	60	293	0	293	7.83%	37.83%	25
2	5	62	283	0	283	7.83%	37.83%	26
3	5	64	273	0	273	7.83%	37.83%	26
4	5	66	263	0	263	7.83%	37.83%	27
5	6	68	253	0	253	7.83%	37.83%	28
6	6	70	243	0	243	7.83%	37.83%	28
7	6	72	233	0	233	7.83%	37.83%	29
8	6	74	223	0	223	7.83%	37.83%	30
9	6	76	213	0	213	7.83%	37.83%	30
10	7	78	203	(1)	203	7.83%	37.83%	31
11	7	81	193	(1)	193	7.83%	37.83%	32
12	7	83	183	(1)	183	7.83%	37.83%	33
13	7	86	173	(1)	173	7.83%	37.83%	34
14	7	88	163	(1)	163	7.83%	37.83%	35
15	8	91	153	(1)	153	7.83%	37.83%	36
16	8	93	143	(1)	143	7.83%	37.83%	36
17	8	96	133	(1)	133	7.83%	37.83%	37
18	8	99	123	(1)	123	7.83%	37.83%	38
19	9	102	113	(1)	113	7.83%	37.83%	39
20	9	105	104	(1)	104	7.83%	37.83%	41

Table 5

Water

1	2	3	4	5	6	7	137
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
1	168	101	67	0.4987	0.0000	1.00	194
2	168	101	67	0.5137	0.0000	1.00	196
3	168	101	67	0.5291	0.0000	1.00	199
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	100
8	168	101	67	0.6133	0.0000	1.00	103
9	168	101	67	0.6317	0.0000	1.00	106
10	168	101	67	0.6507	0.0000	1.00	109
11	168	101	67	0.6702	0.0000	1.00	113
12	168	101	67	0.6903	0.0000	1.00	116
13	168	101	67	0.7110	0.0000	1.00	119
14	168	101	67	0.7324	0.0000	1.00	123
15	168	101	67	0.7543	0.0000	1.00	127
16	168	101	67	0.7770	0.0000	1.00	131
17	168	101	67	0.8003	0.0000	1.00	134
18	168	101	67	0.8243	0.0000	1.00	138
19	168	101	67	0.8490	0.0000	1.00	143
20	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: Residential Propane Gas Rate Number Electric Rate Number
Distribution Program

Gas Measure:	Furnace	Alternate Option:	Electric Resistance Furnace
		Alt Fuel Type:	Electric
Allowance:	\$275		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
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	180.0	0.0	180.0
3. Seasonal Rate			0.0
Total	180.0	0.0	180.0

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 40.55%

15. Average Life 19

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
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

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
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

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	165	39	204	20	34	90	275	418
2	168	40	208	19	34	92		146
3	173	41	214	18	35	95		148
4	178	43	221	18	35	98		151
5	183	44	227	17	36	101		153
6	189	45	234	16	36	104		156
7	194	46	240	15	37	107		159
8	200	48	248	15	37	110		162
9	206	49	255	14	38	114		165
10	212	51	263	13	38	117		168
11	219	52	271	13	39	121		172
12	225	54	279	12	39	124		176
13	232	56	288	11	40	128		179
14	239	57	296	10	41	132		183
15	246	59	305	10	42	136		187
16	253	61	314	9	38	140		187
17	261	62	323	8	43	144		196
18	269	64	333	8	44	148		200
19	277	66	343	7	45	153		205
20	285	68	353	6	46	157		209

Present Value
of Benefits \$2,322

Present Value
of Costs \$1,768

Benefit/Cost Ratio	1.31
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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	Alternate Option:	Dryer
		Alt Fuel Type:	Electric
Allowance:	\$75		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
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 13

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
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

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

Dryer

	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	23	75	110
2	41	11	52	5	7	25		37
3	42	11	53	5	8	25		38
4	43	11	54	5	8	26		39
5	44	12	56	4	8	27		39
6	46	12	58	4	8	28		40
7	47	12	59	4	8	29		41
8	49	13	62	4	8	29		42
9	50	13	63	4	9	30		43
10	52	14	66	4	9	31		44
11	53	14	67	3	9	32		45
12	55	14	69	3	9	33		46
13	56	15	71	3	10	34		47
14	58	15	73	3	10	35		48
15	60	16	76	3	10	36		49
16	62	16	78	2	10	37		50
17	63	17	80	2	11	38		51
18	65	17	82	2	11	40		53
19	67	18	85	2	11	41		54
20	69	18	87	2	12	42		55

Present Value
of Benefits \$575

Present Value
of Costs \$459

Benefit/Cost Ratio	1.25
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Table 1

Dryer

1	2	3	4	5	5*2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
1	48	\$0.33512	\$0.48797	\$0.82309	\$40
2	48	\$0.34517	\$0.50261	\$0.84778	\$41
3	48	\$0.35553	\$0.51769	\$0.87322	\$42
4	48	\$0.36618	\$0.53322	\$0.89941	\$43
5	48	\$0.37718	\$0.54921	\$0.92640	\$44
6	48	\$0.38850	\$0.56569	\$0.95419	\$46
7	48	\$0.40015	\$0.58266	\$0.98281	\$47
8	48	\$0.41216	\$0.60014	\$1.01230	\$49
9	48	\$0.42452	\$0.61815	\$1.04267	\$50
10	48	\$0.43726	\$0.63669	\$1.07395	\$52
11	48	\$0.45037	\$0.65579	\$1.10616	\$53
12	48	\$0.46388	\$0.67546	\$1.13935	\$55
13	48	\$0.47780	\$0.69573	\$1.17353	\$56
14	48	\$0.49214	\$0.71660	\$1.20874	\$58
15	48	\$0.50690	\$0.73810	\$1.24500	\$60
16	48	\$0.52211	\$0.76024	\$1.28235	\$62
17	48	\$0.53777	\$0.78305	\$1.32082	\$63
18	48	\$0.55390	\$0.80654	\$1.36044	\$65
19	48	\$0.57052	\$0.83074	\$1.40126	\$67
20	48	\$0.58763	\$0.85566	\$1.44329	\$69

Table 2

Dryer

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%	\$10
2	8.24	98.88	10.81%	\$11
3	8.49	101.85	10.81%	\$11
4	8.74	104.90	10.81%	\$11
5	9.00	108.05	10.81%	\$12
6	9.27	111.29	10.81%	\$12
7	9.55	114.63	10.81%	\$12
8	9.84	118.07	10.81%	\$13
9	10.13	121.61	10.81%	\$13
10	10.44	125.26	10.81%	\$14
11	10.75	129.02	10.81%	\$14
12	11.07	132.89	10.81%	\$14
13	11.41	136.87	10.81%	\$15
14	11.75	140.98	10.81%	\$15
15	12.10	145.21	10.81%	\$16
16	12.46	149.58	10.81%	\$16
17	12.84	154.05	10.81%	\$17
18	13.22	158.67	10.81%	\$17
19	13.62	163.43	10.81%	\$18
20	14.03	168.34	10.81%	\$18

Table 3

Dryer

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 Total	Carrying Chg Mains & Svc
1	0	293	620	115	4.71%	1028	10.81%	\$5
2	0	283	598	110	4.71%	991	10.81%	\$5
3	0	273	576	105	4.71%	954	10.81%	\$5
4	0	263	554	100	4.71%	917	10.81%	\$5
5	0	253	532	95	4.71%	880	10.81%	\$4
6	0	243	510	90	4.71%	843	10.81%	\$4
7	0	233	488	85	4.71%	806	10.81%	\$4
8	0	223	466	80	4.71%	769	10.81%	\$4
9	0	213	444	75	4.71%	732	10.81%	\$4
10	-1	203	422	70	4.71%	694	10.81%	\$4
11	-1	193	400	65	4.71%	657	10.81%	\$3
12	-1	183	378	60	4.71%	620	10.81%	\$3
13	-1	173	356	55	4.71%	583	10.81%	\$3
14	-1	163	334	50	4.71%	546	10.81%	\$3
15	-1	153	312	45	4.71%	509	10.81%	\$3
16	-1	143	290	40	4.71%	472	10.81%	\$2
17	-1	133	268	36	4.71%	436	10.81%	\$2
18	-1	123	246	32	4.71%	400	10.81%	\$2
19	-1	113	224	28	4.71%	364	10.81%	\$2
20	-1	104	202	13	4.71%	318	10.81%	\$2

Table 4

Dryer

1	2	3	4	5	6	7	8	6*7*8+3*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
1	5	60	293	0	293	7.83%	10.81%	7
2	5	62	283	0	283	7.83%	10.81%	7
3	5	64	273	0	273	7.83%	10.81%	8
4	5	66	263	0	263	7.83%	10.81%	8
5	6	68	253	0	253	7.83%	10.81%	8
6	6	70	243	0	243	7.83%	10.81%	8
7	6	72	233	0	233	7.83%	10.81%	8
8	6	74	223	0	223	7.83%	10.81%	8
9	6	76	213	0	213	7.83%	10.81%	9
10	7	78	203	(1)	203	7.83%	10.81%	9
11	7	81	193	(1)	193	7.83%	10.81%	9
12	7	83	183	(1)	183	7.83%	10.81%	9
13	7	86	173	(1)	173	7.83%	10.81%	10
14	7	88	163	(1)	163	7.83%	10.81%	10
15	8	91	153	(1)	153	7.83%	10.81%	10
16	8	93	143	(1)	143	7.83%	10.81%	10
17	8	96	133	(1)	133	7.83%	10.81%	11
18	8	99	123	(1)	123	7.83%	10.81%	11
19	9	102	113	(1)	113	7.83%	10.81%	11
2017	9	105	104	(1)	104	7.83%	10.81%	12

Table 5

Dryer

1	2	3	4	5	6	7	137
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
1	48	23	23	0.4987	0.0000	1.00	\$23
2	48	24	24	0.5137	0.0000	1.00	\$25
3	48	24	24	0.5291	0.0000	1.00	\$25
4	48	24	24	0.5449	0.0000	1.00	\$26
5	48	24	24	0.5613	0.0000	1.00	\$27
6	48	24	24	0.5781	0.0000	1.00	\$28
7	48	24	24	0.5955	0.0000	1.00	\$29
8	48	24	24	0.6133	0.0000	1.00	\$29
9	48	24	24	0.6317	0.0000	1.00	\$30
10	48	24	24	0.6507	0.0000	1.00	\$31
11	48	24	24	0.6702	0.0000	1.00	\$32
12	48	24	24	0.6903	0.0000	1.00	\$33
13	48	24	24	0.7110	0.0000	1.00	\$34
14	48	24	24	0.7324	0.0000	1.00	\$35
15	48	24	24	0.7543	0.0000	1.00	\$36
16	48	24	24	0.7770	0.0000	1.00	\$37
17	48	24	24	0.8003	0.0000	1.00	\$38
18	48	24	24	0.8243	0.0000	1.00	\$40
19	48	24	24	0.8490	0.0000	1.00	\$41
20	48	24	24	0.8745	0.0000	1.00	\$42

Rate Impact Measure Test Data

All Costs in 2000 Analysis Start Year: 2000 Number of Years: 20
 Gas Program: Residential Propane Gas Rate Number Electric Rate Number
 Distribution Program

Gas Measure:	Range	Alternate Option:	Range
Allowance:	\$75	Alt Fuel Type:	Electric
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
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 & 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 Table 1	Gas Customer Charge Table 2	Total Columns 2 thru 3 4	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	Total Columns 6 thru 9 9
1	2	3	4	5	6	7	8	9
	\$	\$	\$	\$	\$	\$	\$	\$
1	40	10	50	\$5	7	24	75	111
2	41	11	52	\$5	7	25	.	37
3	42	11	53	\$5	7	25		38
4	43	11	54	\$5	8	26		39
5	44	12	56	\$4	8	27		39
6	46	12	58	\$4	8	28		40
7	47	12	59	\$4	8	29		41
8	49	13	62	\$4	8	29		42
9	50	13	63	\$4	9	30		43
10	52	14	66	\$4	9	31		44
11	53	14	67	\$3	9	32		44
12	55	14	69	\$3	9	33		45
13	56	15	71	\$3	10	34		47
14	58	15	73	\$3	10	35		48
15	60	16	76	\$3	10	36		49
16	62	16	78	\$2	10	37		50
17	63	17	80	\$2	11	38		51
18	65	17	82	\$2	11	40		53
19	67	18	85	\$2	11	41		54
20	69	18	87	\$2	12	42		56

Present Value
of Benefits \$574

Present Value
of Costs \$460

Benefit/Cost Ratio	1.25
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Table 4

Year	1	2	3	4	5	6	7
Therms * Total Rate	40	44	42	42	44	44	44
Base Rate	\$0.3812	\$0.4278	\$0.4272	\$0.4272	\$0.4272	\$0.4272	\$0.4272
Therms	104	104	104	104	104	104	104
Rate	\$0.3812	\$0.4278	\$0.4272	\$0.4272	\$0.4272	\$0.4272	\$0.4272
PGA Rate	\$0.4879	\$0.5205	\$0.5205	\$0.5205	\$0.5205	\$0.5205	\$0.5205
Total Rate	\$0.8691	\$0.9483	\$0.9477	\$0.9477	\$0.9477	\$0.9477	\$0.9477
Admin. Cost	60	62	64	66	68	70	72
Annual Development	293	283	272	263	253	243	233
Supply Main	0	0	0	0	0	0	0
Customer Cost	0	0	0	0	0	0	0
Ratio Therms to New Customer	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Admin. & Main O&M	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ratio Total Consumed	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
6 * 0.0204 * 7 + (3 * 7)	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Range

Table 5

Year	1	2	3	4	5	6	7
Therms	48	48	48	48	48	48	48
Winter	24	24	24	24	24	24	24
Summer	24	24	24	24	24	24	24
Commodity Gas	0.4987	0.5291	0.5449	0.5613	0.5781	0.5955	0.6133
Supply Cost	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Peaking & Bal. Cost	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Transp. Capacity	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Water	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Gas Supply Cost	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Range

Table 1

Year	1	2	3	4	5
Therms * Total Rate	40	44	42	42	44
Base Rate	\$0.3812	\$0.4278	\$0.4272	\$0.4272	\$0.4272
Therms	104	104	104	104	104
Rate	\$0.3812	\$0.4278	\$0.4272	\$0.4272	\$0.4272
PGA Rate	\$0.4879	\$0.5205	\$0.5205	\$0.5205	\$0.5205
Total Rate	\$0.8691	\$0.9483	\$0.9477	\$0.9477	\$0.9477
Admin. Cost	60	62	64	66	68
Annual Development	293	283	272	263	253
Supply Main	0	0	0	0	0
Customer Cost	0	0	0	0	0
Ratio Therms to New Customer	0.0000	0.0000	0.0000	0.0000	0.0000
Admin. & Main O&M	1.00	1.00	1.00	1.00	1.00
Ratio Total Consumed	0.0000	0.0000	0.0000	0.0000	0.0000
6 * 0.0204 * 7 + (3 * 7)	1.00	1.00	1.00	1.00	1.00

Range

Table 2

Year	1	2	3	4
Customer Annual	98.00	96.00	96.00	96.00
Customer Annual	98.00	96.00	96.00	96.00
Rate of Therms	10.81%	10.81%	10.81%	10.81%
Consumed to Total	10.81%	10.81%	10.81%	10.81%
Ratio Annual	10.81%	10.81%	10.81%	10.81%
Customer Annual	98.00	96.00	96.00	96.00
Customer Annual	98.00	96.00	96.00	96.00
Rate of Therms	10.81%	10.81%	10.81%	10.81%
Consumed to Total	10.81%	10.81%	10.81%	10.81%
Ratio Annual	10.81%	10.81%	10.81%	10.81%

Range

Table 3

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Supply Main	293	283	273	263	253	243	233	223	213	203	193	183	173	163	153	143	133	123	113	104
Development Main	620	598	576	554	532	510	488	466	444	422	400	378	356	334	312	290	268	246	224	202
Service Meter	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%	4.71%
Avg Cost of Unit	1.028	991	954	917	880	843	806	769	732	695	658	621	584	547	510	473	437	401	365	319
Customer Rate	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%	10.81%
Therms Cost	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Carrying Chg	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Main Mains & Svc	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Range

Table 1

Range

1	2	3	4	5	5*2
Year	Therms	Base Rate	PGA Rate	Total Rate	Therms * Total Rate
1	48	\$0.33512	\$0.48797	\$0.82309	\$40
2	48	\$0.34517	\$0.50261	\$0.84778	\$41
3	48	\$0.35553	\$0.51769	\$0.87322	\$42
4	48	\$0.36619	\$0.53322	\$0.89941	\$43
5	48	\$0.37718	\$0.54921	\$0.92640	\$44
6	48	\$0.38850	\$0.56569	\$0.95419	\$46
7	48	\$0.40015	\$0.58266	\$0.98281	\$47
8	48	\$0.41216	\$0.60014	\$1.01230	\$49
9	48	\$0.42452	\$0.61815	\$1.04267	\$50
10	48	\$0.43726	\$0.63669	\$1.07395	\$52
11	48	\$0.45037	\$0.65579	\$1.10616	\$53
12	48	\$0.46388	\$0.67546	\$1.13935	\$55
13	48	\$0.47780	\$0.69573	\$1.17353	\$56
14	48	\$0.49214	\$0.71660	\$1.20874	\$58
15	48	\$0.50690	\$0.73810	\$1.24500	\$60
16	48	\$0.52211	\$0.76024	\$1.28235	\$62
17	48	\$0.53777	\$0.78305	\$1.32082	\$63
18	48	\$0.55390	\$0.80654	\$1.36044	\$65
19	48	\$0.57052	\$0.83074	\$1.40126	\$67
20	48	\$0.58763	\$0.85566	\$1.44329	\$69

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%	\$10
2	8.24	98.88	10.81%	\$11
3	8.49	101.85	10.81%	\$11
4	8.74	104.90	10.81%	\$11
5	9.00	108.05	10.81%	\$12
6	9.27	111.29	10.81%	\$12
7	9.55	114.63	10.81%	\$12
8	9.84	118.07	10.81%	\$13
9	10.13	121.61	10.81%	\$13
10	10.44	125.26	10.81%	\$14
11	10.75	129.02	10.81%	\$14
12	11.07	132.89	10.81%	\$14
13	11.41	136.87	10.81%	\$15
14	11.75	140.98	10.81%	\$15
15	12.10	145.21	10.81%	\$16
16	12.46	149.56	10.81%	\$16
17	12.84	154.05	10.81%	\$17
18	13.22	158.67	10.81%	\$17
19	13.62	163.43	10.81%	\$18
20	14.03	168.33	10.81%	\$18

Table 3

Range

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

Table 4

Range

1	2	3	4	5	6	7	6*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 D&M
1	5	60	293	0	293	10.81%	\$7
2	5	62	283	0	283	10.81%	\$7
3	5	64	273	0	273	10.81%	\$7
4	5	66	263	0	263	10.81%	\$8
5	6	68	253	0	253	10.81%	\$8
6	6	70	243	0	243	10.81%	\$8
7	6	72	233	0	233	10.81%	\$8
8	6	74	223	0	223	10.81%	\$8
9	6	76	213	0	213	10.81%	\$9
10	7	78	203	0	203	10.81%	\$9
11	7	81	193	0	193	10.81%	\$9
12	7	83	183	0	183	10.81%	\$9
13	7	86	173	0	173	10.81%	\$10
14	7	88	163	0	163	10.81%	\$10
15	8	91	153	0	153	10.81%	\$10
16	8	93	143	0	143	10.81%	\$10
17	8	96	133	0	133	10.81%	\$11
18	8	99	123	0	123	10.81%	\$11
19	9	102	113	0	113	10.81%	\$11
20	9	105	104	0	104	10.81%	\$12

Table 5

Range

1	2	3	4	5	6	7	137
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Peaking & Bal. Cost	Winter Multiplier	Gas Supply Cost
1	48	24	24	0.4987	0.0000	1.00	\$24
2	48	24	24	0.5137	0.0000	1.00	\$25
3	48	24	24	0.5291	0.0000	1.00	\$25
4	48	24	24	0.5449	0.0000	1.00	\$26
5	48	24	24	0.5613	0.0000	1.00	\$27
6	48	24	24	0.5781	0.0000	1.00	\$28
7	48	24	24	0.5955	0.0000	1.00	\$29
8	48	24	24	0.6133	0.0000	1.00	\$29
9	48	24	24	0.6317	0.0000	1.00	\$30
10	48	24	24	0.6507	0.0000	1.00	\$31
11	48	24	24	0.6702	0.0000	1.00	\$32
12	48	24	24	0.6903	0.0000	1.00	\$33
13	48	24	24	0.7110	0.0000	1.00	\$34
14	48	24	24	0.7324	0.0000	1.00	\$35
15	48	24	24	0.7543	0.0000	1.00	\$36
16	48	24	24	0.7770	0.0000	1.00	\$37
17	48	24	24	0.8003	0.0000	1.00	\$38
18	48	24	24	0.8243	0.0000	1.00	\$40
19	48	24	24	0.8490	0.0000	1.00	\$41
20	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 Propane Distribution Program Gas Rate Number Electric Rate Number

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

I. Installed Cost Data

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

II. Operating Data

1. Energy Factor	0.56		
	Therms Consumed		Total
	Winter	Summer	
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
Total Cust. Cost	\$438
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
2. Standard Rate			
Total	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	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	\$0	\$0	\$116	\$0	\$0	\$0
2	\$326	\$0	\$165	\$9	\$7	\$43	0	0	\$120	0	0	0
3	\$336	\$0	\$170	\$10	\$7	\$45	0	0	\$123	0	0	0
4	\$346	\$0	\$175	\$10	\$8	\$46	0	0	\$127	0	0	0
5	\$356	\$0	\$181	\$10	\$8	\$47	0	0	\$131	0	0	0
6	\$367	\$0	\$186	\$10	\$8	\$49	0	0	\$135	0	0	0
7	\$378	\$0	\$192	\$11	\$8	\$50	0	0	\$139	0	0	0
8	\$390	\$0	\$197	\$11	\$9	\$52	0	0	\$143	0	0	0
9	\$401	\$0	\$203	\$11	\$9	\$53	0	0	\$147	0	0	0
10	\$413	\$0	\$209	\$12	\$9	\$55	0	0	\$152	0	0	0
11	\$426	\$0	\$216	\$12	\$9	\$57	0	0	\$156	0	332	332
12	\$438	\$0	\$222	\$12	\$10	\$58	0	0	\$161	0	0	0
13	\$452	\$0	\$229	\$13	\$10	\$60	0	0	\$166	352	0	(352)
14	\$465	\$0	\$236	\$13	\$10	\$62	0	0	\$171	0	0	0
15	\$479	\$0	\$243	\$14	\$11	\$64	0	0	\$176	0	0	0
16	\$493	\$0	\$250	\$14	\$11	\$66	0	0	\$181	0	0	0
17	\$508	\$0	\$257	\$14	\$11	\$68	0	0	\$186	0	0	0
18	\$524	\$0	\$265	\$15	\$12	\$70	0	0	\$192	0	0	0
19	\$539	\$0	\$273	\$15	\$12	\$72	0	0	\$198	0	0	0
20	\$555	\$0	\$281	\$16	\$12	\$74	0	0	\$204	0	0	0

Present Value of Benefits \$1,337

Present Value of Costs \$14

Benefit/Cost Ratio	98.31
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TABLE 1 Electric KW Cost WATER

1	2	3	4	3*2*4
Year	KWH Cost	Annual KWH	Tax & Fees	Electric Cost
1	\$0.0728	3,751	16.00%	\$317
2	\$0.0750	3,751	16.00%	\$326
3	\$0.0772	3,751	16.00%	\$336
4	\$0.0795	3,751	16.00%	\$346
5	\$0.0819	3,751	16.00%	\$356
6	\$0.0844	3,751	16.00%	\$367
7	\$0.0869	3,751	16.00%	\$378
8	\$0.0895	3,751	16.00%	\$390
9	\$0.0922	3,751	16.00%	\$401
10	\$0.0950	3,751	16.00%	\$413
11	\$0.0978	3,751	16.00%	\$426
12	\$0.1008	3,751	16.00%	\$438
13	\$0.1038	3,751	16.00%	\$452
14	\$0.1069	3,751	16.00%	\$465
15	\$0.1101	3,751	16.00%	\$479
16	\$0.1134	3,751	16.00%	\$493
17	\$0.1168	3,751	16.00%	\$508
18	\$0.1203	3,751	16.00%	\$524
19	\$0.1239	3,751	16.00%	\$539
20	\$0.1276	3,751	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
1	\$0.8231	168	16.00%	\$160
2	\$0.8478	168	16.00%	\$165
3	\$0.8732	168	16.00%	\$170
4	\$0.8994	168	16.00%	\$175
5	\$0.9264	168	16.00%	\$181
6	\$0.9542	168	16.00%	\$186
7	\$0.9828	168	16.00%	\$192
8	\$1.0123	168	16.00%	\$197
9	\$1.0427	168	16.00%	\$203
10	\$1.0739	168	16.00%	\$209
11	\$1.1062	168	16.00%	\$216
12	\$1.1393	168	16.00%	\$222
13	\$1.1735	168	16.00%	\$229
14	\$1.2087	168	16.00%	\$236
15	\$1.2450	168	16.00%	\$243
16	\$1.2823	168	16.00%	\$250
17	\$1.3208	168	16.00%	\$257
18	\$1.3604	168	16.00%	\$265
19	\$1.4013	168	16.00%	\$273
20	\$1.4433	168	16.00%	\$281

TABLE 3 Gas Customer Charge WATER

1	2	3	4	5	6	3*6+16.0%
Year	Monthly Cust. Chrg	Annual Cust. Chrg	Wtr. Htr Annual Therms	Total Annual Therms	Ratio Therm Consumerd to Total	Gas Customer Charge
1	\$8.00	\$96.00	168	444	37.84%	\$42
2	\$8.24	\$98.88	168	444	37.84%	\$43
3	\$8.49	\$101.85	168	444	37.84%	\$45
4	\$8.74	\$104.90	168	444	37.84%	\$46
5	\$9.00	\$108.05	168	444	37.84%	\$47
6	\$9.27	\$111.29	168	444	37.84%	\$49
7	\$9.55	\$114.63	168	444	37.84%	\$50
8	\$9.84	\$118.07	168	444	37.84%	\$52
9	\$10.13	\$121.61	168	444	37.84%	\$53
10	\$10.44	\$125.26	168	444	37.84%	\$55
11	\$10.75	\$129.02	168	444	37.84%	\$57
12	\$11.07	\$132.89	168	444	37.84%	\$58
13	\$11.41	\$136.87	168	444	37.84%	\$60
14	\$11.75	\$140.98	168	444	37.84%	\$62
15	\$12.10	\$145.21	168	444	37.84%	\$64
16	\$12.46	\$149.56	168	444	37.84%	\$66
17	\$12.84	\$154.05	168	444	37.84%	\$68
18	\$13.22	\$158.67	168	444	37.84%	\$70
19	\$13.62	\$163.43	168	444	37.84%	\$72
20	\$14.03	\$168.34	168	444	37.84%	\$74

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:	Furnace	Alternate Option:	Electric Resistance Furnace
		Alt Fuel Type:	Electric
Allowance:	\$275		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$1,549
2. Installation	629
Total Cust. Cost	\$2,178

3. Utility Rebate	\$275
4. Other Rebate	

II. Operating Data

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

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
Total Cust. Cost	\$1,230

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		

Total	0.0	0.0
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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	\$0	\$0	\$123	\$0	\$0	\$0
2	\$355	\$0	\$177	\$9	\$14	\$47	0	0	\$126	0	0	0
3	\$366	\$0	\$182	\$10	\$15	\$48	0	0	\$130	0	0	0
4	\$377	\$0	\$188	\$10	\$15	\$49	0	0	\$134	0	0	0
5	\$388	\$0	\$193	\$10	\$16	\$51	0	0	\$138	0	0	0
6	\$400	\$0	\$199	\$10	\$16	\$52	0	0	\$142	0	0	0
7	\$412	\$0	\$205	\$11	\$17	\$54	0	0	\$146	0	0	0
8	\$424	\$0	\$211	\$11	\$17	\$56	0	0	\$151	0	0	0
9	\$437	\$0	\$218	\$11	\$18	\$57	0	0	\$155	0	0	0
10	\$450	\$0	\$224	\$12	\$18	\$59	0	0	\$160	0	0	0
11	\$463	\$0	\$231	\$12	\$19	\$61	0	0	\$165	0	0	0
12	\$477	\$0	\$238	\$12	\$19	\$62	0	0	\$170	0	0	0
13	\$491	\$0	\$245	\$13	\$20	\$64	0	0	\$175	0	0	0
14	\$506	\$0	\$252	\$13	\$21	\$66	0	0	\$180	0	0	0
15	\$521	\$0	\$260	\$14	\$21	\$68	0	0	\$186	871	0	(871)
16	\$537	\$0	\$268	\$14	\$22	\$70	0	0	\$191	0	0	0
17	\$553	\$0	\$276	\$14	\$22	\$72	0	0	\$197	0	0	0
18	\$570	\$0	\$284	\$15	\$23	\$75	0	0	\$203	0	2560	2560
19	\$587	\$0	\$293	\$15	\$24	\$77	0	0	\$209	0	0	0
20	\$604	\$0	\$301	\$16	\$25	\$79	\$0	0	\$215	0	0	0

Present Value
of Benefits \$1,411Present Value
of Costs \$317Benefit/Cost
Ratio 4.45

TABLE 1 Electric KW Cost Furnace

1	2	3	4	3*2*4
Year	KVH Cost	Annual KVH	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 Consumer/d to Total	Gas Customer Charge
1	\$8.00	\$96.00	180	444	40.54%	\$45
2	\$8.24	\$98.88	180	444	40.54%	\$47
3	\$8.49	\$101.85	180	444	40.54%	\$48
4	\$8.74	\$104.90	180	444	40.54%	\$49
5	\$9.00	\$108.05	180	444	40.54%	\$51
6	\$9.27	\$111.29	180	444	40.54%	\$52
7	\$9.55	\$114.63	180	444	40.54%	\$54
8	\$9.84	\$118.07	180	444	40.54%	\$56
9	\$10.13	\$121.61	180	444	40.54%	\$57
10	\$10.44	\$125.26	180	444	40.54%	\$59
11	\$10.75	\$129.02	180	444	40.54%	\$61
12	\$11.07	\$132.89	180	444	40.54%	\$62
13	\$11.41	\$136.87	180	444	40.54%	\$64
14	\$11.75	\$140.98	180	444	40.54%	\$66
15	\$12.10	\$145.21	180	444	40.54%	\$68
16	\$12.46	\$149.56	180	444	40.54%	\$70
17	\$12.84	\$154.05	180	444	40.54%	\$72
18	\$13.22	\$158.67	180	444	40.54%	\$75
19	\$13.62	\$163.43	180	444	40.54%	\$77
20	\$14.03	\$168.34	180	444	40.54%	\$79

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:	Dryer	Alternate Option:	Dryer
		Air Fuel Type:	Electric
Allowance:	\$75		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$425
2. Installation	202
Total Cust. Cost	\$627

3. Utility Rebate	\$75
4. Other Rebate	

II. Operating Data

1. Energy Factor	0.72		
	Therms Consumed	Winter	Summer
2. Standard Rate		24.0	24.0
3. Seasonal Rate			0.0
	Total	24.0	24.0
		48.0	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
14. Ratio of Therms Consumed to Total	10.81%
15. Average Life	13

III. Common Gas & Electric Data

1. Discount Rate	8.65%
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IV. Installed Cost Data

	\$
1. Equipment	\$375
2. Installation	113
Total Cust. Cost	\$488

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	
	Therms Displaced	Winter
2. Standard Rate		Summer
	Total	0.0
		0.0

PARTICIPANTS COST EFFECTIVE RESULTS

Dryer

Program Year	Electric KWH Cost	No. 2 Fuel Oil	Consumed -Conserve -Displaced Gas Therm	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge	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
	Table 1		Table 2			Table 3						
1	2	3	4	5	6	7	8	9	10	11	12	13
1	\$119	\$0	\$46	\$14	\$10	\$10	\$0	\$0	\$67	\$0	\$0	\$0
2	\$122	\$0	\$47	\$14	\$10	\$10	0	0	\$69	0	0	0
3	\$126	\$0	\$49	\$15	\$11	\$11	0	0	\$71	0	0	0
4	\$130	\$0	\$50	\$15	\$11	\$11	0	0	\$73	0	0	0
5	\$133	\$0	\$52	\$16	\$11	\$11	0	0	\$75	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	\$80	0	0	0
8	\$146	\$0	\$56	\$17	\$12	\$12	0	0	\$82	0	0	0
9	\$150	\$0	\$58	\$18	\$13	\$13	0	0	\$84	0	0	0
10	\$155	\$0	\$60	\$18	\$13	\$13	0	0	\$87	0	0	0
11	\$159	\$0	\$62	\$19	\$13	\$14	0	0	\$90	0	0	0
12	\$164	\$0	\$63	\$19	\$14	\$14	0	0	\$92	519	588	69
13	\$169	\$0	\$65	\$20	\$14	\$14	0	0	\$95	0	0	0
14	\$174	\$0	\$67	\$21	\$15	\$15	0	0	\$98	0	0	0
15	\$179	\$0	\$69	\$21	\$15	\$15	0	0	\$101	0	0	0
16	\$185	\$0	\$71	\$22	\$16	\$16	0	0	\$104	0	0	0
17	\$190	\$0	\$74	\$22	\$16	\$16	0	0	\$107	0	0	0
18	\$196	\$0	\$76	\$23	\$17	\$17	0	0	\$110	0	0	0
19	\$202	\$0	\$78	\$24	\$17	\$17	0	0	\$113	0	0	0
20	\$208	\$0	\$80	\$25	\$18	\$18	0	0	\$117	0	0	0

Present Value of Benefits \$767

Present Value of Costs \$25

Benefit/Cost Ratio	30.39
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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	\$0.8231	48	16.00%	\$46
2	\$0.8478	48	16.00%	\$47
3	\$0.8732	48	16.00%	\$49
4	\$0.8994	48	16.00%	\$50
5	\$0.9264	48	16.00%	\$52
6	\$0.9542	48	16.00%	\$53
7	\$0.9828	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	\$6.50	\$78.00	48	423	11.35%	10
2	\$6.70	\$80.34	48	423	11.35%	10
3	\$6.90	\$82.75	48	423	11.35%	11
4	\$7.10	\$85.23	48	423	11.35%	11
5	\$7.32	\$87.79	48	423	11.35%	11
6	\$7.54	\$90.42	48	423	11.35%	12
7	\$7.76	\$93.14	48	423	11.35%	12
8	\$7.99	\$95.93	48	423	11.35%	12
9	\$8.23	\$98.81	48	423	11.35%	13
10	\$8.48	\$101.77	48	423	11.35%	13
11	\$8.74	\$104.83	48	423	11.35%	14
12	\$9.00	\$107.97	48	423	11.35%	14
13	\$9.27	\$111.21	48	423	11.35%	14
14	\$9.55	\$114.55	48	423	11.35%	15
15	\$9.83	\$117.98	48	423	11.35%	15
16	\$10.13	\$121.52	48	423	11.35%	16
17	\$10.43	\$125.17	48	423	11.35%	16
18	\$10.74	\$128.92	48	423	11.35%	17
19	\$11.07	\$132.79	48	423	11.35%	17
20	\$11.40	\$136.77	48	423	11.35%	18

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:	Range	Alternate Option:	Range
		Alt Fuel Type:	Electric
Allowance:	\$75		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$640
2. Installation	196
Total Cust. Cost	\$836

3. Utility Rebate	\$75
4. Other Rebate	

II. Operating Data

1. Energy Factor	0.72
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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

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%
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
Total Cust. Cost	\$643

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		
Total	0.0	0.0

PARTICIPANTS COST EFFECTIVE RESULTS

Range

Year	Electric KWH Cost Table 1	No. 2 Fuel Oil	Consumed -Conserve -Displaced as Therm	Alternate Appliance O&M	Gas Appliance O&M	Gas Customer Charge	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
	Table 1		Table 2			Table 3						
1	2	3	4	5	6	7	8	9	10	11	12	13
1	\$119	\$0	\$46	\$12	\$8	\$12	\$0	\$0	\$65	\$0	\$0	\$0
2	\$122	\$0	\$47	\$12	\$8	\$12	0	0	\$67	0	0	0
3	\$126	\$0	\$49	\$13	\$8	\$13	0	0	\$69	0	0	0
4	\$130	\$0	\$50	\$13	\$9	\$13	0	0	\$71	0	0	0
5	\$133	\$0	\$52	\$14	\$9	\$14	0	0	\$73	0	0	0
6	\$137	\$0	\$53	\$14	\$9	\$14	0	0	\$75	0	0	0
7	\$142	\$0	\$55	\$14	\$10	\$14	0	0	\$77	0	0	0
8	\$146	\$0	\$56	\$15	\$10	\$15	0	0	\$80	0	0	0
9	\$150	\$0	\$58	\$15	\$10	\$15	0	0	\$82	0	0	0
10	\$155	\$0	\$60	\$16	\$10	\$16	0	0	\$84	0	0	0
11	\$159	\$0	\$62	\$16	\$11	\$16	0	0	\$87	0	0	0
12	\$164	\$0	\$63	\$17	\$11	\$17	0	0	\$90	0	0	0
13	\$169	\$0	\$65	\$17	\$11	\$17	0	0	\$92	0	0	0
14	\$174	\$0	\$67	\$18	\$12	\$18	0	0	\$95	0	0	0
15	\$179	\$0	\$69	\$18	\$12	\$18	0	0	\$98	0	0	0
16	\$185	\$0	\$71	\$19	\$12	\$19	0	0	\$101	0	0	0
17	\$190	\$0	\$74	\$19	\$13	\$19	0	0	\$104	0	0	0
18	\$196	\$0	\$76	\$20	\$13	\$20	0	0	\$107	876	1,058	182
19	\$202	\$0	\$78	\$20	\$14	\$20	0	0	\$110	0	0	0
20	\$208	\$0	\$80	\$21	\$14	\$21	0	0	\$113	0	0	0

Present Valu
of Benefits

\$744

Present Valu
of Costs

\$40

Benefit/Cos Ratio	18.59
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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	\$0.8231	48	16.00%	\$46
2	\$0.8478	48	16.00%	\$47
3	\$0.8732	48	16.00%	\$49
4	\$0.8994	48	16.00%	\$50
5	\$0.9264	48	16.00%	\$52
6	\$0.9542	48	16.00%	\$53
7	\$0.9828	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 Consumerd to Total	Gas Customer Charge
1	\$8.00	\$96.00	48	444	10.81%	12
2	\$8.24	\$98.88	48	444	10.81%	12
3	\$8.49	\$101.85	48	444	10.81%	13
4	\$8.74	\$104.90	48	444	10.81%	13
5	\$9.00	\$108.05	48	444	10.81%	14
6	\$9.27	\$111.29	48	444	10.81%	14
7	\$9.55	\$114.63	48	444	10.81%	14
8	\$9.84	\$118.07	48	444	10.81%	15
9	\$10.13	\$121.61	48	444	10.81%	15
10	\$10.44	\$125.26	48	444	10.81%	16
11	\$10.75	\$129.02	48	444	10.81%	16
12	\$11.07	\$132.89	48	444	10.81%	17
13	\$11.41	\$136.87	48	444	10.81%	17
14	\$11.75	\$140.98	48	444	10.81%	18
15	\$12.10	\$145.21	48	444	10.81%	18
16	\$12.46	\$149.56	48	444	10.81%	19
17	\$12.84	\$154.05	48	444	10.81%	19
18	\$13.22	\$158.67	48	444	10.81%	20
19	\$13.62	\$163.43	48	444	10.81%	20
20	\$14.03	\$168.34	48	444	10.81%	21

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

Residential Water Heater Retention Program

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Run B/C Ratio
Water Heater	350	121.68	1.74

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 Measure: Water Heater Gas Rate Number: 40 gallon

Electric Rate Number
Alternate Option: Electric Resistance Water Heater 50 gallon
Alt FuelType: Electric

Allowance: \$350

Gas Utility: Florida Public Utilities Company

Electric Utility: Florida Power & Light Co.

IV. New Customer Installation Costs

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

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

II. Operating Data

1. Energy Factor 0.56

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

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

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

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

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

13. Customer Chg	\$8.00
14. Ratio of Therms Consumed to Total	37.83%
15. Average Life	12

Therms Displaced	Winter	Summer	Total
2. Standard Rate	0.00	0.00	0.00
Total	0.00	0.00	0.00

III. Common Gas & Electric Data

1. Discount Rate 8.77%

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	142	37		179	0	0	86	0		86
2000	147	39		186	0	0	89	0		89
2001	151	40		191	0	0	92	0		92
2002	156	41		197	0	0	94	0		94
2003	160	42		202	0	0	97	0		97
2004	165	43		208	0	0	100	0		100
2005	170	45		215	0	0	103	0		103
2006	175	46		221	0	0	106	0		106
2007	180	47		227	0	0	109	0		109
2008	186	49		235	0	0	113	0		113
2009	191	50		241	0	0	116	0		116
2010	197	52		249	0	0	119	0		119
2011	203	53		256	0	0	123	0		123
2012	209	55		264	0	0	127	0		127
2013	215	57		272	0	0	131	0		131
2014	222	58		280	0	0	134	0		134
2015	229	60		289	0	0	138	0		138
2016	235	62		297	0	0	143	0		143
2017	242	64		306	0	0	147	0		147

Present Value \$2,241
of Benefits

Present Value \$1,286
of Costs

Benefit/Cost Ratio 1.74

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	0.34517	0.50261	0.84778	142
2002	168	0.35553	0.51769	0.87322	147
2003	168	0.36619	0.53322	0.89941	151
2004	168	0.37718	0.54921	0.92640	156
2005	168	0.38850	0.56569	0.95419	160
2006	168	0.40015	0.58266	0.98281	165
2007	168	0.41216	0.60014	1.01230	170
2008	168	0.42452	0.61815	1.04267	175
2009	168	0.43726	0.63669	1.07395	180
2010	168	0.45037	0.65579	1.10616	186
2011	168	0.46388	0.67546	1.13935	191
2012	168	0.47780	0.69573	1.17353	197
2013	168	0.49214	0.71660	1.20874	203
2014	168	0.50690	0.73810	1.24500	209
2015	168	0.52211	0.76024	1.28235	215
2016	168	0.53777	0.78305	1.32082	222
2017	168	0.55390	0.80654	1.36044	229
2018	168	0.57052	0.83074	1.40126	235
2019	168	0.58763	0.85566	1.44329	242

Table 5

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 eaking & 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	8.24	99	37.83%	\$37
2002	8.49	102	37.83%	\$39
2003	8.74	105	37.83%	\$40
2004	9.00	108	37.83%	\$41
2005	9.27	111	37.83%	\$42
2006	9.55	115	37.83%	\$43
2007	9.84	118	37.83%	\$45
2008	10.13	122	37.83%	\$46
2009	10.44	125	37.83%	\$47
2010	10.75	129	37.83%	\$49
2011	11.07	133	37.83%	\$50
2012	11.41	137	37.83%	\$52
2013	11.75	141	37.83%	\$53
2014	12.10	145	37.83%	\$55
2015	12.46	150	37.83%	\$57
2016	12.84	154	37.83%	\$58
2017	13.22	159	37.83%	\$60
2018	13.62	163	37.83%	\$62
2019	14.03	168	37.83%	\$64

**FLORIDA PUBLIC UTILITIES COMPANY
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	Rim B/C Ratio
Robur/Equivalent	1200	1.44	1.34

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	Cooling Total Columns 6 thru 9
1	2	3	4	5	6	7	8	9
\$	\$	\$	\$	\$	\$	\$	\$	\$
2000	740	96	836	50	83	449	1248	1780
2001	762	99	861	49	84	463		547
2002	785	102	887	47	85	477		562
2003	808	105	913	46	86	491		577
2004	833	108	941	44	88	506		593
2005	858	111	969	43	89	521		610
2006	883	115	998	41	90	537		627
2007	910	118	1028	40	92	553		645
2008	937	122	1059	39	94	569		663
2009	965	125	1090	37	95	586		682
2010	994	129	1123	36	97	604		701
2011	1024	133	1157	35	99	622		721
2012	1055	137	1192	34	101	641		742
2013	1086	141	1227	33	103	660		763
2014	1119	145	1264	32	105	680		785
2015	1152	150	1302	30	107	700		807
2016	1187	154	1341	29	110	721		831
2017	1223	159	1381	29	112	743		855
2018	1259	163	1423	28	115	765		880
2019	1297	168	1465	27	117	788		905

Present Value
of Benefits \$9,615Present Value
of Costs \$7,179Benefit/Cost
Ratio 1.34

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	0.84566	762
2002	901	0.33512	0.51769	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	0.56569	0	0.95179	858
2006	901	0.33512	0.58266	0	0.98035	883
2007	901	0.33512	0.60014	0	1.00876	910
2008	901	0.33512	0.61815	0	1.04005	937
2009	901	0.33512	0.63669	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	0.71660	0	1.20571	1086
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	0.85566	0	1.43968	1297

Table 4

Cooling
6*7*8+3*8

1	2	3	4	5	6	7	8	8
Year	Adm. Cost	Annual Adm. Cost	Developmen 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	66	265	0	265	7.83	1	86
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
9010	7	81	209	0	209	7.83	1	97
2011	7	83	203	0	203	7.83	1	99
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	8.24	99	1	99
2002	8.49	102	1	102
2003	8.74	105	1	105
2004	9.00	108	1	108
2005	9.27	111	1	111
2006	9.55	115	1	115
2007	9.84	118	1	118
2008	10.13	122	1	122
2009	10.44	125	1	125
2010	10.75	129	1	129
2011	11.07	133	1	133
2012	11.41	137	1	137
2013	11.75	141	1	141
2014	12.10	145	1	145
2015	12.46	150	1	150
2016	12.84	154	1	154
2017	13.22	159	1	159
2018	13.62	163	1	163
2019	14.03	168	1	168

Table 5

Cooling

1	2	3	4	5	6	7	3*5*7+4*5+2*6
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity Leaking & 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	586
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

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 Total	Carrying Chg Mains & Svc
2000	0	283	620	114	4.91%	1027	1	50
2001	0	283	600	110	4.91%	993	1	49
2002	0	274	580	107	4.91%	960	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%	868	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	168	350	64	4.91%	581	1	28
2018	0	160	339	62	4.91%	561	1	28
2019	0	155	328	60	4.91%	543	1	27

Cooling

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:	Robur 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.
I. Installed Cost Data		IV. Installed Cost Data	
	\$		\$
1. Equipment	\$4,403	1. Equipment	\$1,969
2. Installation	3,019	2. Installation	1,275
Total Cust. Cost	<u>\$7,422</u>	Total Cust. Cost	<u>\$3,244</u>
3. Utility Rebate	\$1,200	3. Utility Allowance	\$0
4. Other Rebate		4. Other Allowance	
II. Operating Data		V. Energy Conserved Data	
i. Energy Factor			New Existing
Therms Consumed	Winter Summer Total	1. Energy Factor	1.00 1.00
2. Standard Rate	112 579 691	2. Annual KWH	14,912 14,912
3. Seasonal Rate	0 210 210	3. Annual Oil Gallons	0 0
	Total 112 789 901	4. Annual Gas Therms	0 0
			Winter Summer
4. Electric Consumption in KWH	0	5. Diversified KW	
5. O&M (excluding energy)	\$133	6. Billing KW	
		7. O&M (excluding energy)	\$18
		8. Monthly Utility Incentive	\$0
		9. Average Life in Yrs	12
		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
		Therms Displaced	Winter Summer
		2. Standard Rate	
		Total	0.0 0.0
III. Common Gas & Electric Data			
1. Discount Rate	8.77%		

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	\$115	0	0	\$398	0	0	0
2002	\$1,336	\$0	\$686	\$19	\$141	\$118	0	0	\$410	0	0	0
2003	\$1,376	\$0	\$706	\$20	\$145	\$122	0	0	\$422	0	0	0
2004	\$1,417	\$0	\$728	\$20	\$150	\$125	0	0	\$435	0	0	0
2005	\$1,460	\$0	\$749	\$21	\$154	\$129	0	0	\$448	0	0	0
2006	\$1,504	\$0	\$772	\$21	\$159	\$133	0	0	\$461	0	0	0
2007	\$1,549	\$0	\$795	\$22	\$164	\$137	0	0	\$475	0	0	0
2008	\$1,595	\$0	\$819	\$23	\$168	\$141	0	0	\$490	0	0	0
2009	\$1,643	\$0	\$844	\$23	\$174	\$145	0	0	\$504	0	0	0
2010	\$1,692	\$0	\$869	\$24	\$179	\$150	0	0	\$519	0	0	0
2011	\$1,743	\$0	\$895	\$25	\$184	\$154	0	0	\$535	0	0	0
2012	\$1,795	\$0	\$922	\$26	\$190	\$159	0	0	\$551	0	0	0
2013	\$1,849	\$0	\$949	\$26	\$195	\$164	0	0	\$567	0	0	0
2014	\$1,905	\$0	\$978	\$27	\$201	\$168	0	0	\$585	0	0	0
2015	\$1,962	\$0	\$1,007	\$28	\$207	\$173	0	0	\$602	0	0	0
2016	\$2,021	\$0	\$1,037	\$29	\$213	\$179	0	0	\$620	0	0	0
2017	\$2,081	\$0	\$1,069	\$30	\$220	\$184	0	0	\$639	0	0	0
2018	\$2,144	\$0	\$1,101	\$31	\$226	\$190	0	0	\$658	0	0	0
2019	\$2,208	\$0	\$1,134	\$32	\$233	\$195	0	0	\$678	0	0	0

Present Value
of Benefits

\$5,549

Present Value
of Costs

\$3,841

Benefit/Cost
Ratio 1.44

TABLE 1 Cooling

1 Year	2 KWH Cost	3 Annual KWH	4 Tax & Fees	5 3*2*4 Electric Cost
2000	\$0.0728	14,912	16.00%	\$1,259
2001	\$0.0750	14,912	16.00%	\$1,297
2002	\$0.0772	14,912	16.00%	\$1,336
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 Year	2 Therm Cost	3 Load Enh. Therms	4 Tax Fees	5 Winter Therms	6 1st 30 Therms/mos	7 Therm Cost	8 Non-Enh Cost	9 Electric KWH	10 \$ per KWH	11 (3*2+9*10+8)*4 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	\$666
2002	\$0.8732	579	16.00%	112	0	0.87322	98	0	0.0772	\$686
2003	\$0.8994	579	16.00%	112	0	0.89941	101	0	0.0796	\$706
2004	\$0.9264	579	16.00%	112	0	0.92640	104	0	0.0819	\$728
2005	\$0.9542	579	16.00%	112	0	0.95419	107	0	0.0844	\$749
2006	\$0.9828	579	16.00%	112	0	0.98281	110	0	0.0869	\$772
2007	\$1.0123	579	16.00%	112	0	1.01230	113	0	0.0895	\$795
2008	\$1.0427	579	16.00%	112	0	1.04267	117	0	0.0922	\$819
2009	\$1.0739	579	16.00%	112	0	1.07395	120	0	0.0950	\$844
2010	\$1.1062	579	16.00%	112	0	1.10616	124	0	0.0978	\$869
2011	\$1.1393	579	16.00%	112	0	1.13935	128	0	0.1008	\$895
2012	\$1.1735	579	16.00%	112	0	1.17353	131	0	0.1038	\$922
2013	\$1.2087	579	16.00%	112	0	1.20874	135	0	0.1069	\$949
2014	\$1.2450	579	16.00%	112	0	1.24500	139	0	0.1101	\$978
2015	\$1.2823	579	16.00%	112	0	1.28235	144	0	0.1134	\$1,007
2016	\$1.3208	579	16.00%	112	0	1.32082	148	0	0.1168	\$1,037
2017	\$1.3604	579	16.00%	112	0	1.36044	152	0	0.1203	\$1,069
2018	\$1.4013	579	16.00%	112	0	1.40126	157	0	0.1239	\$1,101
2019	\$1.4433	579	16.00%	112	0	1.44329	162	0	0.1277	\$1,134

TABLE 3 Cooling

1 Year	2 Monthly Cust. Chrg	3 Annual Cust. Chrg	4 Cooling Annual Therms	5 Total Annual Therms	6 Ratio Therm Consumerd to Total	7 3*6+16.0% Gas Customer Charge
2000	\$8.00	\$96.00	789	901	100.00%	\$111
2001	\$8.24	\$98.88	789	901	100.00%	\$115
2002	\$8.49	\$101.85	789	901	100.00%	\$118
2003	\$8.74	\$104.90	789	901	100.00%	\$122
2004	\$9.00	\$108.05	789	901	100.00%	\$125
2005	\$9.27	\$111.29	789	901	100.00%	\$129
2006	\$9.55	\$114.63	789	901	100.00%	\$133
2007	\$9.84	\$118.07	789	901	100.00%	\$137
2008	\$10.13	\$121.61	789	901	100.00%	\$141
2009	\$10.44	\$125.26	789	901	100.00%	\$145
2010	\$10.75	\$129.02	789	901	100.00%	\$150
2011	\$11.07	\$132.89	789	901	100.00%	\$154
2012	\$11.41	\$136.87	789	901	100.00%	\$159
2013	\$11.75	\$140.98	789	901	100.00%	\$164
2014	\$12.10	\$145.21	789	901	100.00%	\$168
2015	\$12.46	\$149.56	789	901	100.00%	\$173
2016	\$12.84	\$154.05	789	901	100.00%	\$179
2017	\$13.22	\$158.67	789	901	100.00%	\$184
2018	\$13.62	\$163.43	789	901	100.00%	\$190
2019	\$14.03	\$168.34	789	901	100.00%	\$195

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

Natural Gas Space Conditioning

Installed Appliances	Incentive Amount (\$)	Participants B/C Ratio	Rim B/C Ratio
Engine Dr. Chiller	50/ton	1.86	1.2

Rate Impact Measure Test Data

All Costs in 2000 dollars Number of Years: 20

Analysis Start Year: 1998

Gas Program: Natural Gas Space Gas Rate Number Electric Rate Number
Conditioning for Residential Homes

Gas Measure:	Robur/Equivalent Unit	Alternate Option:	3 Ton - 10 Seer Straight Cool A/C
		Alt Fuel Type:	Electric
Allowance:	\$1200		
Gas Utility:	Florida Public Utilities Company	Electric Utility:	Florida Power & Light Co.

	\$
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	112	210	322
3. Seasonal Rate		579	579
Total	112	789	901

0

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	1

15. Average Life

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
Total Cust. Cost	1027
5. Utility Allowance	1200
6. Program Cost	48
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 C	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
Total	0	0	0

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	411	96	507	56	83	249	1248	1580
2001	423	99	522	54	84	257		341
2002	436	102	537	52	85	265		350
2003	449	105	553	50	86	272		359
2004	462	108	570	48	87	281		368
2005	476	111	587	46	89	289		378
2006	490	115	605	44	90	298		388
2007	505	118	623	42	91	307		398
2008	520	122	642	40	93	316		409
2009	536	125	661	38	94	325		420
2010	552	129	681	36	96	335		431
2011	568	133	701	34	97	345		443
2012	585	137	722	32	99	356		455
2013	603	141	744	30	101	366		467
2014	621	145	766	28	103	377		480
2015	640	150	789	26	105	388		493
2016	659	154	813	24	107	400		507
2017	679	159	837	22	109	412		521
2018	699	163	862	20	111	425		536
2019	720	168	888	18	113	437		551

Present Value
of Benefits \$5,827Present Value
of Costs \$4,870Benefit/Cost
Ratio 1.20

Table 1 Cooling

1	3	4	5	6	6*3
Year	Therms	Base Rate	PGA Rate	Therm Rate Rate	Therms * Total Rate
2000	500	0.33512	0.48797	0.82103	411
2001	500	0.34517	0.50261	0.84566	423
2002	500	0.35553	0.51769	0.87103	436
2003	500	0.36619	0.53322	0.89716	449
2004	500	0.37718	0.54921	0.92407	462
2005	500	0.38850	0.56569	0.95179	476
2006	500	0.40015	0.58266	0.98035	490
2007	500	0.41216	0.60014	1.00976	505
2008	500	0.42452	0.61815	1.04005	520
2009	500	0.43726	0.63669	1.07125	536
2010	500	0.45037	0.65579	1.10339	552
2011	500	0.46388	0.67546	1.13649	568
2012	500	0.47780	0.69573	1.17059	585
2013	500	0.49214	0.71660	1.20571	603
2014	500	0.50690	0.73810	1.24188	621
2015	500	0.52211	0.76024	1.27913	640
2016	500	0.53777	0.78305	1.31751	659
2017	500	0.55390	0.80654	1.35703	679
2018	500	0.57052	0.83074	1.39774	699
2019	500	0.58763	0.85566	1.43968	720

Table 4

1	2	3	4	5	6	7	8
Year	Adm. Cost	Annual Adm. Cost	Developme Main	Supply Main	Main Cost	O & M %	atio Therms T total Consume New Customer dm. & Main O&M
2000	5	60	293	0	293	4.71	1 83
2001	5.2	62	283	0	283	4.71	1 84
2002	5.3	64	273	0	273	4.71	1 85
2003	5.5	66	263	0	263	4.71	1 86
2004	5.6	68	253	0	253	4.71	1 87
2005	5.8	70	243	0	243	4.71	1 89
2006	6.0	72	233	0	233	4.71	1 90
2007	6.1	74	223	0	223	4.71	1 91
2008	6.3	76	213	0	213	4.71	1 93
2009	6.5	78	203	0	203	4.71	1 94
2010	6.7	81	193	0	193	4.71	1 96
2011	6.9	83	183	0	183	4.71	1 97
2012	7.1	86	173	0	173	4.71	1 99
2013	7.3	88	163	0	163	4.71	1 101
2014	7.6	91	153	0	153	4.71	1 103
2015	7.8	93	143	0	143	4.71	1 105
2016	8.0	96	133	0	133	4.71	1 107
2017	8.3	99	124	0	124	4.71	1 109
2018	8.5	102	114	0	114	4.71	1 111
2019	8.8	105	105	0	105	4.71	1 113

Cooling
6*7*8+3*8

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	8.24	99	1	99
2002	8.49	102	1	102
2003	8.74	105	1	105
2004	9.00	108	1	108
2005	9.27	111	1	111
2006	9.55	115	1	115
2007	9.84	118	1	118
2008	10.13	122	1	122
2009	10.44	125	1	125
2010	10.75	129	1	129
2011	11.07	133	1	133
2012	11.41	137	1	137
2013	11.75	141	1	141
2014	12.10	145	1	145
2015	12.46	150	1	150
2016	12.84	154	1	154
2017	13.22	159	1	159
2018	13.62	163	1	163
2019	14.03	168	1	168

Table 5 Cooling

1	2	3	4	5	6	7	32
Year	Therms	Winter Therms	Summer Therms	Commodity Gas Supply Cost	Transp. Capacity eaking & Bal. Co	Winter Multiplier	Gas Supply Cost
2000	500	0	500	0.4987	0.0000	1.00	249
2001	500	0	500	0.5137	0.0000	1.00	257
2002	500	0	500	0.5291	0.0000	1.00	265
2003	500	0	500	0.5449	0.0000	1.00	272
2004	500	0	500	0.5613	0.0000	1.00	281
2005	500	0	500	0.5781	0.0000	1.00	289
2006	500	0	500	0.5955	0.0000	1.00	298
2007	500	0	500	0.6133	0.0000	1.00	307
2008	500	0	500	0.6317	0.0000	1.00	316
2009	500	0	500	0.6507	0.0000	1.00	325
2010	500	0	500	0.6702	0.0000	1.00	335
2011	500	0	500	0.6903	0.0000	1.00	345
2012	500	0	500	0.7110	0.0000	1.00	356
2013	500	0	500	0.7324	0.0000	1.00	366
2014	500	0	500	0.7543	0.0000	1.00	377
2015	500	0	500	0.7770	0.0000	1.00	388
2016	500	0	500	0.8003	0.0000	1.00	400
2017	500	0	500	0.8243	0.0000	1.00	412
2018	500	0	500	0.8490	0.0000	1.00	425
2019	500	0	500	0.8745	0.0000	1.00	437

Table 3

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	293	620	114	4.71%	48	1	56
2001	0	283	598	111	4.71%	47	1	54
2002	0	273	576	107	4.71%	45	1	52
2003	0	263	554	104	4.71%	43	1	50
2004	0	253	532	101	4.71%	42	1	48
2005	0	243	510	98	4.71%	40	1	46
2006	0	233	488	95	4.71%	38	1	44
2007	0	223	466	93	4.71%	37	1	42
2008	0	213	444	90	4.71%	35	1	40
2009	0	203	422	87	4.71%	34	1	38
2010	0	193	400	85	4.71%	32	1	36
2011	0	183	378	82	4.71%	30	1	34
2012	0	173	356	80	4.71%	29	1	32
2013	0	163	334	78	4.71%	27	1	30
2014	0	153	312	75	4.71%	25	1	28
2015	0	143	290	73	4.71%	24	1	26
2016	0	133	268	71	4.71%	22	1	24
2017	0	124	246	69	4.71%	21	1	22
2018	0	114	224	67	4.71%	19	1	20
2019	0	105	202	65	4.71%	18	1	18

Cooling

Participants Cost Effectiveness Test Data

All Costs in 2000 dollars 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: Rober/Equivalent Unit

Alternate Option:

10 SEER Heat Pump

Air Fuel Type:

Electric

Allowance: \$1,200

Gas Utility: Florida Public Utilities Company

Electric Utility:

Florida Power & Light Co.

I. Installed Cost Data

	\$
1. Equipment	\$4,403
2. Installation	3,019
Total Cust. Cost	\$7,422
3. Utility Rebate	\$1,200
4. Other Rebate	

II. Operating Data

1. Energy Factor

Therms Consumed	Winter	Summer	Total
2. Standard Rate	112	579	691
3. Seasonal Rate	0	210	210
Total	112	789	901

4. Electric Consumption in KWH	900
5. O&M (excluding energy)	\$125

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

III. Common Gas & Electric Data

1. Discount Rate 8.77%

IV. Installed Cost Data

	\$
1. Equipment	\$1,888
2. Installation	1,353
Total Cust. Cost	\$3,241
3. Utility Allowance	\$0
4. Other Allowance	

V. Energy Conserved Data

	New	Existing
1. Energy Factor	1.00	1.00
2. Annual KWH	14,912	14,912
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)	\$18
8. Monthly Utility Incentive	\$0
9. Average Life in Yrs	12
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

	Winter	Summer
1. Energy Factor		1.00
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	\$514	\$18	\$125	\$111	\$1,200	\$0	\$1,727	\$3,241	\$7,422	\$4,181
2001	\$1,297	\$0	\$530	\$19	\$129	\$115	0	0	\$543	0	0	0
2002	\$1,336	\$0	\$546	\$19	\$133	\$118	0	0	\$559	0	0	0
2003	\$1,376	\$0	\$562	\$20	\$137	\$122	0	0	\$576	0	0	0
2004	\$1,417	\$0	\$579	\$20	\$141	\$125	0	0	\$593	0	0	0
2005	\$1,460	\$0	\$596	\$21	\$145	\$129	0	0	\$611	0	0	0
2006	\$1,504	\$0	\$614	\$21	\$149	\$133	0	0	\$629	0	0	0
2007	\$1,549	\$0	\$632	\$22	\$154	\$137	0	0	\$648	0	0	0
2008	\$1,595	\$0	\$651	\$23	\$158	\$141	0	0	\$667	0	0	0
2009	\$1,643	\$0	\$671	\$23	\$163	\$145	0	0	\$687	0	0	0
2010	\$1,692	\$0	\$691	\$24	\$168	\$150	0	0	\$708	0	0	0
2011	\$1,743	\$0	\$712	\$25	\$173	\$154	0	0	\$729	0	0	0
2012	\$1,795	\$0	\$733	\$26	\$178	\$159	0	0	\$751	0	0	0
2013	\$1,849	\$0	\$755	\$26	\$184	\$164	0	0	\$774	0	0	0
2014	\$1,905	\$0	\$778	\$27	\$189	\$168	0	0	\$797	0	0	0
2015	\$1,962	\$0	\$801	\$28	\$195	\$173	0	0	\$821	0	0	0
2016	\$2,021	\$0	\$825	\$29	\$201	\$179	0	0	\$845	0	0	0
2017	\$2,081	\$0	\$850	\$30	\$207	\$184	0	0	\$871	0	0	0
2018	\$2,144	\$0	\$875	\$31	\$213	\$190	0	0	\$897	0	0	0
2019	\$2,208	\$0	\$902	\$32	\$219	\$195	0	0	\$924	0	0	0

Present Value
of Benefits \$7,163

Present Value
of Costs \$3,844

Benefit/Cost Ratio	1.86
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ATTACHMENT C

ATTACHMENT D

