

State of Florida



# Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

**-M-E-M-O-R-A-N-D-U-M-**

**DATE:** December 5, 2013

**TO:** Office of Commission Clerk (Stauffer)

**FROM:** Division of Economics (S. Brown, Ortega, Harlow) *SB* *AO* *JSH* *CB* *J.W.D.*  
 Division of Engineering (Ellis, Jopling, Vickery) *FBE* *PV*  
 Office of the General Counsel (Corbari, Teitzman) *KFC* *AT*

**RE:** Docket No. 130167-EG – Petition for approval of natural gas energy conservation programs for commercial customers, by Associated Gas Distributors of Florida.

**AGENDA:** 12/17/13 – Regular Agenda – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Brown

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

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 CLERK

### Case Background

Section 366.81, Florida Statutes (F.S.), the Florida Energy Efficiency Conservation Act (FEECA), gives the Florida Public Service Commission (Commission) the authority to set conservation goals and approve programs for certain electric and natural gas utilities. Only Peoples Gas System meets the eligibility requirements for the Commission to set goals for natural gas local distribution companies (LDC) under FEECA. However, the remaining gas utilities have voluntarily offered gas expansion programs under the auspices of this statute. On April 18, 1996, the Commission adopted Rule 25-17.009, Florida Administrative Code (F.A.C.), which sets forth the cost-effectiveness methodology for natural gas programs that are filed for approval. Pursuant to Rule 25-17.015, F.A.C., natural gas utilities may recover the costs associated with implementing approved programs.

The Associated Gas Distributors of Florida (AGDF) is a trade association which represents the seven investor-owned natural gas utilities: Florida City Gas, Florida Public Utilities Company, including Florida Public Utilities Company – Indiantown Division and Central Florida Gas Division, Peoples Gas System, Sebring Gas System, and St. Joe Natural Gas. These companies are collectively referred to as LDCs and are all subject to the jurisdiction of the Commission. AGDF previously represented its members in the petition for approval of natural gas conservation programs for residential customers in Docket Nos. 090122-EG and 100186-GU.<sup>1</sup>

On June 17, 2013, AGDF filed a petition on behalf of the above-mentioned LDCs seeking adoption of new gas programs for commercial end-use customers. AGDF seeks approval of Commercial New Construction, Commercial Retrofit, and Commercial Retention appliance rebate programs. In support of its petition, AGDF states that “the proposed commercial rebate programs meet the policies and rules of the Commission and advance the stated objectives set forth in Rule 25-17.001, F.A.C.” However, the specific requirements of this rule are directed specifically toward: (1) electric utilities and their responsibility in reducing the growth rate of weather sensitive peak demand, (2) reducing the fuel costs of the most expensive forms of electric generation, (3) benefits of deferring the need for construction of additional generating capacity, and (4) the use of demand-side goals, general goals and methods to increase the overall efficiency of the bulk electric power system in Florida.

Rule 25-17.0021, F.A.C., relates to demand-side management goals for electric utilities. The Commission is responsible for reducing the growth rates of weather-sensitive peak demand and reducing and controlling the growth rates of electric consumption through establishing numerical goals. When the Commission evaluates proposed or modified demand-side management programs for electric utilities, the goals that were approved during the goal-setting process are the basis of the evaluation process to determine whether or not the proposed program will offer energy savings as well as meet the cost-effectiveness criteria as prescribed in 25-17.008, F.A.C. The Commission requires electric utilities to consider: (1) rebound effects, (2) free riders, (3) interactions with building codes, (4) appliance efficiency standards, and (5) the utility’s latest monitoring and evaluation of conservation programs and measures. Natural gas utilities, on the other hand, do not have demand-side management goals and have a separate rule prescribing the cost-effectiveness methodology.

The Commission has jurisdiction over this matter pursuant to Sections 366.81 and 366.82, F.S.

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<sup>1</sup> See Order Nos. PSC-10-0013-PAA-EG, issued February 25, 2010, Docket No. 090122-EG, In re: Petition for approval of modifications to approved energy conservation programs, by Associated Gas Distributors of Florida; and PSC-10-0551-PAA-EG, issued September 2, 2010, in Docket No. 100186-EG, In re: Petition for approval of natural gas residential energy conservation programs by Associated Gas Distributors of Florida.

### **Discussion of Issues**

**Issue 1:** Should the Commission approve the Associated Gas Distributors of Florida's (AGDF) petition on behalf of its member local distribution companies (LDCs) to offer Natural Gas Energy Conservation Programs for Commercial Users?

**Recommendation:** Yes. The Commission should approve AGDF's petition to offer Natural Gas Energy Conservation Programs for Commercial Users because the programs meet the filing requirements of Rule 25-17.009, F.A.C., and based on the standards in this rule, appear to be cost-effective. To ensure that the programs remain cost-effective, staff intends to monitor the participation rates, rebate levels, and program costs as part of the Commission's Natural Gas Cost Recovery Clause proceedings. (S. Brown, Ortega, Harlow, Ellis)

**Staff Analysis:** Pursuant to Rule 25-17.009, F.A.C., each gas utility that seeks to recover costs for an existing, new, or modified demand-side management program shall file the cost-effectiveness test results of the Participants Test and the Gas Rate Impact Measure (G-RIM) Test in the format set forth in the Form PSC/RAD 14-G (4/96), entitled the *Florida Public Service Commission Cost-Effectiveness Manual for Natural Gas Utility Demand-Side Management Programs (Cost-Effectiveness Manual)*. AGDF contracted with the Florida Solar Energy Center (FSEC) to develop a modified cost-effectiveness model specifically for the commercial customer market at issue in the instant docket. Programs offered are considered to be cost-effective if they pass the Participants and G-RIM Tests with a score of one (1.00) or greater, indicating that estimated program benefits exceed estimated costs.

### **Program Compliance with FEECA Objectives**

The goal of the proposed commercial conservation programs is to increase the direct end-use of efficient natural gas appliances and equipment in Florida buildings consistent with Section 366.81, F.S. In its petition, AGDF states "increasing the direct end-use of gas by consumers can ultimately reduce the total quantities of natural gas used in Florida." In support of its assertion, AGDF cited a study prepared by Black & Veatch for the American Gas Foundation entitled *Direct Use of Natural Gas: Implications for Power Generation, Energy Efficiency, and Carbon Emissions*. Staff has reviewed this study and in general, finds its conclusion to be reasonable. It should be noted that the Commission historically has not approved gas programs on the basis of displacing electric generation, nor is this a requirement under existing rules for approving programs.

### **Discussion of the Proposed Programs**

AGDF states that the proposed commercial programs are somewhat similar to the residential conservation programs previously approved by the Commission<sup>2</sup> and would act as a supplement to various commercial energy conservation programs currently offered by some of the AGDF member utilities. Should the proposed programs be approved, each utility offering

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<sup>2</sup> See Order No. PSC-10-0551-PAA-EG, issued September 2, 2010, in Docket No. 100186-EG, In re: Petition for approval of natural gas residential energy conservation programs by Associated Gas Distributors of Florida.

previously approved commercial programs would be responsible for ensuring that none of the respective commercial customers receive double incentive amounts.

AGDF has proposed to offer five programs for its commercial customers. AGDF states that the purpose of the proposed programs is to educate, inform, and encourage its commercial customers either to build with natural gas (New Construction), to continue using natural gas (Retention), or to convert to natural gas (Retrofit) for their energy needs. The programs offer cash incentives to assist with defraying the costs associated with the installation of natural gas supply lines, internal piping, venting and equipment. The names of the proposed commercial programs are:

- Small Commercial Food Service Rebate Program
- Large Commercial Non-Food Service Program
- Large Commercial Food Service Program
- Large Commercial Hospitality Program
- Large Commercial Cleaning Service Program

The proposed programs will allow the companies to provide natural gas appliance incentives to new construction, retrofit, or retention customer types. The incentives could then be used towards the purchase and installation of the following appliances for specific building types and market sizes:

- tank water heaters
- tankless water heaters
- ranges/ovens
- fryers
- dryers

AGDF contends that the creation of a uniform Commercial appliance rebate program for all its member LDCs allows the utilities to promote the programs in a concise and consistent manner throughout the entire state of Florida. This is similar to how AGDF companies currently market their residential programs, which AGDF believes allows utilities to achieve more value for their advertising dollar.

AGDF contends that the proposed incentives will be the same for all LDCs with the exception of Indiantown because of Indiantown's smaller customer base which impacts the calculation of the program costs across its customer base. AGDF further states the reason for the variation is due to the differences in the G-RIM and Participants scores. AGDF asserts that having uniform incentive amounts will allow for a collaborative marketing effort throughout the

state that could lead to lower marketing and communication costs. While AGDF has proposed to offer rebates for the proposed appliances ranging from \$450 to \$3,000, some LDCs do not plan to offer rebates in every market category. The proposed incentive amounts for specific appliances by each company program can be found in Attachment A.

AGDF states that in addition to statewide marketing efforts, each LDC will have the flexibility to craft individual marketing campaigns to promote the proposed programs to its respective customer bases. Most of the proposed commercial conservation programs marketing strategies will be similar to those of the previously approved residential conservation programs in that the utilities will also employ a collaborative effort to promote the proposed programs. These marketing strategies include posting information regarding the programs with the Department of Agriculture and Consumer Services Energy Office Energy Clearinghouse, and the Florida Natural Gas Association, as well as on each utility's website.

### **Cost-Effectiveness**

AGDF provided an analysis of the proposed commercial programs for each member LDC. The analysis included cost-effectiveness tests for each of the five programs based on building size. The proposed commercial programs were evaluated using the Participants Test and the G-RIM, as required by Rule 25-17.009, F.A.C. The rule requires that each gas utility that seeks to recover costs for existing, new, or modified demand-side management programs shall perform a cost-effectiveness assessment using these tests. As long as the proposed program passes with a score of one (1.00) or greater, the program is considered to be cost-effective. These programs are considered beneficial for a utility to offer to its customers because the estimated benefits of the program are expected to be greater than the costs.

AGDF used the Commission's *Cost-Effectiveness Manual* as a baseline to determine the cost-effectiveness of its proposed programs and employed the Florida Solar Energy Center to develop a modified model specifically for the commercial customer market. The modified model included information gathered from FSEC's knowledge of Florida-specific commercial building energy consumption and appliance data. The projected commercial program participants were derived using Florida Public Utilities Company's historical participation rates from its residential rebate programs because Florida Public Utilities Company has a diverse customer base with high concentrations of customers in South and Central Florida. Florida Public Utilities Company also maintains internal accounting itemization of residential rebate cost data. AGDF estimated the projected commercial program participation by first establishing a baseline of residential participation rates. Next, AGDF applied that ratio to each member LDC's commercial customer base. The FSEC model also estimated carbon dioxide (CO<sub>2</sub>) reductions realized by utilizing end-use natural gas appliances benchmarked against similar electric appliances. Staff notes that the CO<sub>2</sub> reductions were not included in the cost-effectiveness benefits.

Staff reviewed the cost-effectiveness analysis conducted for each LDC and found that overall, the sources of the data were reasonable and the tests were conducted as instructed by the Commission's *Cost-Effectiveness Manual*. In addition, each program for each LDC passed the Participant Test and the G-RIM with scores above 1.00, indicating the programs are cost-effective and beneficial for each utility to offer to its customers.

Figure 1 below illustrates the range of the G-RIM and Participant Test scores calculated for all the AGDF utilities. The individual program results of the cost-effectiveness tests, along with the proposed incentives for each appliance for each utility are provided in Attachment A.

**Figure 1: Range of G-RIM and Participant Test Scores for Proposed Commercial Programs**

Commercial Building Type	G-RIM		Participant Test	
	Lowest Score	Highest Score	Lowest Score	Highest Score
Small Food Service	1.164	2.006	1.004	2.979
Large Non-Food Service	1.005	1.701	1.374	2.372
Large Food Service	1.005	1.837	1.085	2.993
Large Hospitality	1.004	1.855	1.012	2.931
Large Cleaning Service	1.003	2.167	1.141	3.037

Staff is concerned, however, with AGDF’s assumption that bases future participation of commercial customers in the proposed programs on historic participation rates of the previously approved residential programs. Although staff agrees with the cost-effectiveness methodology utilized by FSEC, staff believes that residential and commercial customers make investment decisions differently. As a result, staff is concerned that uncertainty exists in the G-RIM Test scores for the proposed commercial programs. Staff also notes that AGDF assumed full participation rates in the first year of each program. If these participation rates are not achieved in the early years of the program, this assumption would tend to overstate the positive G-RIM economic benefits.

Participation rates are also influenced by the incentive levels offered by the utilities. One aspect of this factor is “free riders.” Free riders are customers who receive incentives for measures they would have likely undertaken even without the incentives, and therefore, should not receive incentive funds paid by a utility’s general body of ratepayers. Staff submitted a data request to AGDF inquiring whether the concept of free riders was considered in AGDF’s evaluation of the proposed programs. AGDF, on behalf of its member LDCs, responded that “only electric utilities are required to address this issue,” and that free riders are typically addressed during the DSM goal setting phase.” AGDF further stated in their response to data requests that “PSC Rules do not require the Natural Gas DSM Programs to project a 10-year participation forecast, and that free riders were not addressed within the design of the cost-effectiveness model.”

Rule 25-17.0021(3), F.A.C., – the requirements for electric utilities – addresses free riders during the goal-setting process for electric utilities. Currently, Rule 25-17.0021, F.A.C., does not require natural gas utilities to address the concept of free riders. Since this is a key factor in determining whether or not the programs are cost-effective and are in the best interest of the general body of ratepayers, staff intends to conduct workshops with industry to review if additional factors should be considered in future petitions filed by natural gas utilities. Staff believes that natural gas conservation programs are generally in the public interest. However, as

discussed further below, staff intends to explore through workshops whether the current natural gas conservation rules require the necessary information to fully assess the benefits and costs of these types of programs.

**Ratepayer Impact**

The costs of AGDF’s proposed commercial programs will be recovered through the Natural Gas Cost Recovery Clause and will be spread across all ratepayer classes, including the residential customers, subject to Commission review. AGDF provided the estimated effect of the proposed programs on each utility’s average residential bill. The estimated impact on a residential customer’s monthly bill ranges from \$0.12 to \$0.45. Figure 2 below illustrates the monthly bill impact for a typical residential gas customer who uses 20 therms per month.

**Figure 2: Residential Bill Impact**

Company	Monthly Impact per Consumer Bill*
Florida Division of Chesapeake Utilities Corp.	\$ 0.12
Florida City Gas	\$ 0.24
Florida Public Utilities Company	\$ 0.18
Indiantown Gas Company	\$ 0.14
Peoples Gas System	\$ 0.14
St. Joe Natural Gas Company	\$ 0.43
Sebring Gas System	\$ 0.45

\*Assuming consumption at 20 therms/month

**Program Monitoring**

As previously discussed above, AGDF assumes that participation in the proposed commercial appliance conservation programs will mirror the historic participation rates observed in the approved residential appliance conservation programs. AGDF also assumes that the proposed commercial programs will experience full participation from year one of implementing the programs. Staff is concerned that commercial customers may not participate in conservation programs in the same manner as residential customers and that the free rider issue is not fully addressed. However, under the existing rules, there is no requirement that these and other factors affecting the economic impact of gas programs be reported as a condition of approving the programs. To ensure that the programs remain cost-effective, staff intends to monitor the participation rates, rebate levels, and program costs as part of the Commission’s Natural Gas Cost Recovery Clause proceedings.

**Conclusion**

Staff recommends the approval of the proposed natural gas energy conservation programs for commercial customers as the programs both meet the Commission’s current rules and appear to be cost-effective under the Commission’s required methodology. The natural gas industry can lower costs to all customers by expanding sales up to the point that capital expansion costs to

serve this new load plus incentive payments are less than the marginal revenues generated by the programs. Under such conditions, load expansion programs can offer benefits for all customers and it is on this basis that staff has a relatively high degree of confidence that these programs are beneficial. To ensure that the programs remain cost-effective, staff intends to monitor the participation rates, rebate levels, and program costs as part of the Commission's Natural Gas Cost Recovery Clause proceedings.

The Commission's electric rules on energy conservation contain more guidelines than those currently encompassed in the natural gas conservation rules. Staff believes the appropriateness of similar principles contained in the electric rules should be explored for natural gas utilities. As such, staff intends to initiate discussions with the industry through workshops to determine whether the current natural gas conservation rules should be revised in order to be more consistent with the filing requirements for the electric utilities.



Docket No. 130167-EG  
Date: December 5, 2013

**Issue 2:** Should this docket be closed?

**Recommendation:** Yes. If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a Consummating Order. (Corbari)

**Staff Analysis:** If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a Consummating Order.

Gas Utility Appliance Cost-Effectiveness Results

Small Food Service Program	Cntl FL Gas			FL City Gas			FPUC			Indiantown			Peoples			St. Joe			Sebring Gas			
	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	
<i>New Construction:</i>																						
Tank W/H	\$ 1,000	1.231	1.347	\$1,000	1.651	1.623	\$1,000	1.551	1.859	\$1,000	2.436	1.069	\$1,000	1.343	1.323	\$1,000	1.387	1.616	\$1,000	1.402	1.964	
Tankless W/H	\$ 2,000	1.495	1.342	\$2,000	2.053	1.518	\$2,000	1.930	1.729	\$1,500	2.976	1.029	\$2,000	1.671	1.266	\$2,000	1.716	1.543	\$2,000	1.744	1.841	
Range/Oven	\$ 1,000	1.574	1.305	\$1,000	1.302	1.350	\$1,000	1.954	1.755	\$1,000	2.960	1.019	\$1,000	1.708	1.282	\$1,000	1.749	1.560	\$1,000	1.775	1.867	
Fryer	\$ 3,000	1.004	1.174	\$3,000	2.077	1.549	\$3,000	1.223	1.519	\$1,000	1.748	1.025	\$3,000	1.067	1.168	\$3,000	1.093	1.391	\$3,000	1.110	1.626	
<i>Retrofit:</i>																						
Tank W/H	\$ 1,500	1.215	1.378	\$1,500	1.661	1.594	\$1,500	1.561	1.822	\$1,000	2.436	1.069	\$1,500	1.352	1.307	\$1,500	1.395	1.591	\$1,500	1.411	1.928	
Tankless W/H	\$ 2,500	1.505	1.323	\$2,500	2.067	1.483	\$2,500	1.943	1.687	\$1,500	2.976	1.030	\$2,500	1.682	1.246	\$2,500	1.728	1.513	\$2,500	1.756	1.798	
Range/Oven	\$ 1,500	1.574	1.305	\$1,500	2.098	1.488	\$1,500	1.960	1.767	\$1,000	2.960	1.019	\$1,500	1.717	1.244	\$1,500	1.767	1.510	\$1,500	1.794	1.793	
Fryer	\$ 3,000	1.004	1.174	\$3,000	1.302	1.350	\$3,000	1.228	1.528	\$1,000	1.748	1.025	\$3,000	1.061	1.164	\$3,000	1.093	1.391	\$3,000	1.110	1.626	
<i>Retention:</i>																						
Tank W/H	\$ 1,000	1.218	1.454	\$1,000	1.656	1.733	\$1,000	1.556	2.006	\$1,000	2.438	1.132	\$1,000	1.350	1.410	\$1,000	1.388	1.699	\$1,000	1.404	2.089	
Tankless W/H	\$ 2,000	1.500	1.424	\$2,000	2.061	1.629	\$2,000	1.938	1.877	\$1,500	2.979	1.097	\$2,000	1.682	1.358	\$2,000	1.719	1.629	\$2,000	1.748	1.967	
Range/Oven	\$ 1,000	1.566	1.409	\$1,000	2.091	1.648	\$1,000	1.973	1.900	\$1,000	2.965	1.085	\$1,000	1.717	1.371	\$1,000	1.772	1.630	\$1,000	1.792	1.985	
Fryer	\$ 3,000	1.009	1.228	\$3,000	1.311	1.425	\$3,000	1.236	1.625	\$1,000	1.751	1.091	\$3,000	1.073	1.242	\$3,000	1.108	1.444	\$3,000	1.120	1.714	

Gas Utility Appliance Cost-Effectiveness Results

Large Non-Food Service Program	Cntrl FL Gas			FL City Gas			FPUC			Indiantown			Peoples			St. Joe			Sebring Gas			
	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	
<i>New Construction:</i>																						
Tank W/H	\$ 1,500	1.374	1.220	\$1,500	1.761	1.342	\$1,500	1.674	1.515	\$ 400	2.275	1.040	\$1,500	1.482	1.161	\$1,500	1.391	1.520	\$1,500	1.548	1.617	
Tankless W/H	\$ 2,000	1.549	1.102	\$2,000	1.946	1.154	\$2,000	1.860	1.294	\$ 450	2.349	1.005	\$2,000	1.658	1.044	\$2,000	1.828	1.448	\$2,000	1.773	1.390	
<i>Retrofit:</i>																						
Tank W/H	\$ 2,000	1.403	1.167	\$2,000	1.794	1.254	\$2,000	1.709	1.413	\$ 400	2.257	1.039	\$2,000	1.513	1.108	\$2,000	1.403	1.489	\$2,000	1.581	1.512	
Tankless W/H	\$ 2,500	1.585	1.045	\$2,500	1.991	1.070	\$2,500	1.903	1.195	\$ 450	2.374	1.007	\$2,500	1.681	1.009	\$2,500	1.843	1.410	\$2,500	1.773	1.287	
<i>Retention:</i>																						
Tank W/H	\$ 1,500	1.386	1.279	\$1,500	1.608	1.613	\$1,500	1.692	1.611	\$ 400	2.263	1.098	\$1,500	1.509	1.228	\$1,500	1.393	1.557	\$1,500	1.558	1.701	
Tankless W/H	\$ 2,000	1.566	1.150	\$2,000	1.972	1.209	\$2,000	1.885	1.364	\$ 450	1.846	1.583	\$2,000	1.695	1.097	\$2,000	1.830	1.481	\$2,000	1.746	1.451	

Gas Utility Appliance Cost-Effectiveness Results

Large Food Service Program	Cntrl FL Gas			FL City Gas			FPUC			Indiantown			Peoples			St. Joe			Sebring Gas			
	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	Rebate Amount	Prtcptnt Test	RIM Test	
<i>New Construction:</i>																						
Tank W/H	\$ 1,500	1.314	1.290	\$1,500	1.712	1.571	\$1,500	1.638	1.753	\$1,000	2.449	1.055	\$1,500	1.422	1.271	\$1,500	1.451	1.556	\$1,500	1.578	1.736	
Tankless W/H	\$ 2,000	1.628	1.255	\$2,000	2.109	1.503	\$2,000	2.020	1.673	\$1,500	2.740	1.008	\$2,000	1.757	1.234	\$2,000	1.794	1.501	\$2,000	1.949	1.660	
Range/Oven	\$ 1,500	1.681	1.234	\$1,500	2.153	1.463	\$1,500	2.066	1.625	\$1,000	2.983	1.005	\$1,500	1.805	1.211	\$1,500	1.848	1.467	\$1,500	1.999	1.616	
Fryer	\$ 3,000	1.085	1.107	\$3,000	1.355	1.324	\$3,000	1.298	1.462	\$1,000	1.796	1.011	\$3,000	1.130	1.131	\$3,000	1.158	1.348	\$3,000	1.255	1.460	
<i>Retrofit:</i>																						
Tank W/H	\$ 2,000	1.323	1.275	\$2,000	1.723	1.541	\$2,000	1.531	1.674	\$1,000	2.449	1.055	\$2,000	1.431	1.255	\$2,000	1.460	1.532	\$2,000	1.588	1.703	
Tankless W/H	\$ 2,500	1.639	1.236	\$2,500	2.124	1.467	\$2,500	2.034	1.631	\$1,500	2.989	1.016	\$2,500	1.769	1.214	\$2,500	1.807	1.471	\$2,500	1.962	1.620	
Range/Oven	\$ 1,500	1.681	1.234	\$1,500	1.355	1.324	\$1,500	2.066	1.625	\$1,000	2.983	1.005	\$1,500	1.805	1.211	\$1,500	1.848	1.467	\$1,500	1.999	1.616	
Fryer	\$ 3,000	1.085	1.107	\$3,000	2.153	1.463	\$3,000	1.298	1.462	\$1,000	1.796	1.011	\$3,000	1.130	1.131	\$3,000	1.158	1.348	\$3,000	1.255	1.460	
<i>Retention:</i>																						
Tank W/H	\$ 1,500	1.318	1.316	\$1,500	1.718	1.618	\$1,500	1.643	1.837	\$1,000	2.451	1.097	\$1,500	1.429	1.302	\$1,500	1.452	1.583	\$1,500	1.581	1.792	
Tankless W/H	\$ 2,000	1.634	1.279	\$2,000	2.118	1.547	\$2,000	2.029	1.749	\$1,500	2.993	1.055	\$2,000	1.769	1.263	\$2,000	1.797	1.525	\$2,000	1.954	1.712	
Range/Oven	\$ 1,500	1.691	1.257	\$1,500	2.167	1.504	\$1,500	2.080	1.697	\$1,000	2.989	1.044	\$1,500	1.825	1.240	\$1,500	1.853	1.490	\$1,500	2.007	1.664	
Fryer	\$ 3,000	1.091	1.125	\$3,000	1.364	1.358	\$3,000	1.308	1.520	\$1,000	1.799	1.050	\$3,000	1.143	1.155	\$3,000	1.161	1.368	\$3,000	1.260	1.500	

Gas Utility Appliance Cost-Effectiveness Results

Large Hospitality Program	Cntl FL Gas			FL City Gas			FPUC			Indiantown			Peoples			St. Joe			Sebring Gas			
	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	
<i>New Construction:</i>																						
Tank W/H	\$ 1,500	1.222	1.294	\$1,500	1.588	1.600	\$1,500	1.801	1.520	\$1,000	2.268	1.070	\$1,500	1.315	1.290	\$1,500	1.343	1.578	\$1,500	1.475	1.756	
Tankless W/H	\$ 2,000	1.564	1.270	\$2,000	2.020	1.551	\$2,000	1.937	1.740	\$1,500	2.856	1.042	\$2,000	1.680	1.265	\$2,000	1.715	1.539	\$2,000	1.881	1.703	
Range/Oven	\$ 1,500	1.671	1.223	\$1,500	2.218	1.461	\$1,500	2.025	1.705	\$1,000	2.926	1.006	\$1,500	1.783	1.212	\$1,500	1.828	1.463	\$1,500	1.992	1.602	
Fryer	\$ 3,000	1.079	1.097	\$3,000	1.339	1.321	\$3,000	1.285	1.465	\$1,000	1.760	1.012	\$3,000	1.115	1.214	\$3,000	1.145	1.344	\$3,000	1.251	1.446	
Dryer	\$ 1,500	1.012	1.291	\$1,500	1.480	1.294	\$1,500	1.434	1.435	\$ 500	1.878	1.004	\$1,500	1.257	1.117	\$1,500	1.277	1.321	\$1,500	1.387	1.417	
<i>Retrofit:</i>																						
Tank W/H	\$ 2,000	1.228	1.284	\$2,000	1.595	1.580	\$2,000	1.528	1.772	\$1,000	2.268	1.070	\$2,000	1.321	1.279	\$2,000	1.349	1.561	\$2,000	1.482	1.733	
Tankless W/H	\$ 2,500	1.571	1.257	\$2,500	2.030	1.527	\$2,500	1.947	1.709	\$1,500	2.856	1.042	\$2,500	1.688	1.251	\$2,500	1.724	1.518	\$2,500	1.890	1.674	
Range/Oven	\$ 1,500	1.671	1.223	\$1,500	1.339	1.321	\$1,500	2.046	1.631	\$1,000	2.926	1.006	\$1,500	1.783	1.214	\$1,500	1.828	1.463	\$1,500	1.992	1.602	
Fryer	\$ 3,000	1.079	1.097	\$3,000	2.128	1.461	\$3,000	1.285	1.465	\$1,000	1.760	1.012	\$3,000	1.115	1.133	\$3,000	1.145	1.344	\$3,000	1.251	1.446	
Dryer	\$ 1,500	1.176	1.131	\$1,500	1.480	1.295	\$1,500	1.434	1.435	\$ 500	1.878	1.004	\$1,500	1.257	1.117	\$1,500	1.277	1.321	\$1,500	1.387	1.417	
<i>Retention:</i>																						
Tank W/H	\$ 1,500	1.224	1.316	\$1,500	1.592	1.633	\$1,500	1.525	1.855	\$1,000	2.269	1.098	\$1,500	1.319	1.312	\$1,500	1.344	1.596	\$1,500	1.477	1.794	
Tankless W/H	\$ 2,000	1.568	1.291	\$2,000	2.026	1.583	\$2,000	1.943	1.794	\$1,500	2.858	1.070	\$2,000	1.687	1.285	\$2,000	1.717	1.556	\$2,000	1.884	1.739	
Range/Oven	\$ 1,500	1.681	1.242	\$1,500	2.142	1.488	\$1,500	2.039	1.756	\$1,000	2.931	1.032	\$1,500	1.802	1.233	\$1,500	1.833	1.478	\$1,500	2.001	1.633	
Fryer	\$ 3,000	1.085	1.112	\$3,000	1.348	1.343	\$3,000	1.294	1.503	\$1,000	1.763	1.038	\$3,000	1.128	1.149	\$3,000	1.148	1.357	\$3,000	1.256	1.472	
Dryer	\$ 1,500	1.176	1.147	\$1,500	1.480	1.315	\$1,500	1.434	1.459	\$ 500	1.878	1.029	\$1,500	1.257	1.132	\$1,500	1.277	1.333	\$1,500	1.387	1.442	

Gas Utility Appliance Cost-Effectiveness Results

Large Cleaning Service Program	Cntrl FL Gas			FL City Gas			FPUC			Indiantown			Peoples			St. Joe			Sebring Gas		
	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test	Rebate Amount	Prtcpt Test	RIM Test
<i>New Construction:</i>																					
Tank W/H	\$ 1,500	1.329	1.214	\$1,500	1.622	1.531	\$1,500	1.603	1.721	\$1,000	2.363	1.039	\$1,500	1.410	1.223	\$1,500	1.357	1.573	\$1,500	1.500	1.737
Tankless W/H	\$ 2,000	1.754	1.185	\$2,000	2.171	1.442	\$2,000	2.095	1.614	\$1,250	3.036	1.003	\$2,000	1.848	1.175	\$2,000	1.734	1.534	\$2,000	1.965	1.636
Dryer	\$ 1,500	1.076	1.144	\$1,500	1.330	1.393	\$1,500	1.286	1.555	\$ 500	1.766	1.032	\$1,500	1.142	1.147	\$1,500	1.282	1.319	\$1,500	1.205	1.580
<i>Retrofit:</i>																					
Tank W/H	\$ 2,000	1.340	1.195	\$2,000	1.676	1.492	\$2,000	1.616	1.675	\$1,000	2.361	1.039	\$2,000	1.422	1.202	\$2,000	1.364	1.556	\$2,000	1.044	2.167
Tankless W/H	\$ 2,500	1.761	1.146	\$2,500	2.188	1.397	\$2,500	2.112	1.560	\$1,250	3.003	1.003	\$2,500	1.864	1.149	\$2,500	1.742	1.515	\$2,500	1.980	1.579
Dryer	\$ 1,500	1.074	1.144	\$1,500	1.329	1.393	\$1,500	1.284	1.556	\$ 500	1.763	1.032	\$1,500	1.141	1.147	\$1,500	1.282	1.319	\$1,500	1.204	1.580
<i>Retention:</i>																					
Tank W/H	\$ 1,500	1.328	1.215	\$1,500	1.668	1.558	\$1,500	1.609	1.752	\$1,000	2.364	1.055	\$1,500	1.420	1.238	\$1,500	1.358	1.577	\$1,500	1.503	1.770
Tankless W/H	\$ 2,000	1.754	1.185	\$2,000	2.181	1.466	\$2,000	2.106	1.641	\$1,250	3.037	1.018	\$2,000	1.865	1.188	\$2,000	1.736	1.538	\$2,000	1.970	1.665
Dryer	\$ 1,500	1.074	1.158	\$1,500	1.329	1.415	\$1,500	1.284	1.580	\$ 500	1.763	1.047	\$1,500	1.141	1.160	\$1,500	1.282	1.327	\$1,500	1.204	1.607