MESSER CAPARELLO & SELF, P.A.

Attorneys At Law

www.lawfla.com

March 12, 2009

BY HAND DELIVERY

Ms. Ann Cole, Commission Clerk Office of Commission Clerk Room 110, Easley Building Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, Florida 32399-0850

090122

Dear Ms. Cole:

Enclosed for filing on behalf of Associated Gas Distributors of Florida is an original and fifteen copies of Associated Gas Distributors of Florida's Petition for Approval of Modifications to Approved Energy Conservation Programs.

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

Thank you for your assistance with this filing.

Sincerely yours,

Norman H. Horton, Jr.

NHH/amb **Enclosures**

Parties of Record

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OPC

RCP SSC

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Regional Center Office Park / 2618 Centennial Place / Tallahassee, Florida 32308 Mailing Address: P.O. Box 15579 / Tallahassee, Florida 32317 Main Telephone: (850) 222-0720 / Fax: (850) 224-4359

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Approval of Energy)	
Conservation Programs)	DOCKET No. 090122
)	Filed: March 12, 2009

PETITION OF ASSOCIATED GAS DISTRIBUTORS OF FLORIDA FOR APPROVAL OF MODIFICATIONS TO APPROVED ENERGY CONSERVATION PROGRAMS

Associated Gas Distributors of Florida ("Petitioner" or "AGDF"), by and through its undersigned counsel petitions the Florida Public Service Commission ("Commission") on behalf of its members for approval of new and modified energy conservation programs, and in support of its petition states:

1. The exact name and address of the principal office of the Petitioner is as follows:

Associated Gas Distributors of Florida P.O. Box 11026 Tallahassee, Florida 32302

2. Notices and communications with respect to this petition and docket should be addressed to the following:

> Norman H. Horton, Jr. Messer, Caparello & Self, P. A. Post Office Box 15579 Tallahassee, FL 32317 (850)222-0720 (850)222-4359 fax Attorneys for AGDF

and

Stuart Shoaf, President Associated Gas Distributors of Florida c/o St. Joe Natural Gas Company, Inc. P.O. Box 549 Port St. Joe, Florida 32456

DOCUMENT NUMBER-DATE

02169 MAR 128

FPSC-COMMISSION CLERK

- 3. AGDF is a trade association representing the following investor-owned natural gas utilities which are subject to the jurisdiction of the Florida Public Service Commission ("FPSC") under Chapter 366, F.S.: Florida City Gas ("City Gas"), Florida Division of Chesapeake Utilities Company ("Chesapeake"), Florida Public Utilities Company ("FPUC"), Indiantown Gas Company ("Indiantown"), Peoples Gas System ("Peoples Gas"), Sebring Gas System ("Sebring") and St. Joe Natural Gas Company ("St. Joe"). These member companies are all of the investor owned natural gas local distribution companies (LDCs) subject to the jurisdiction of the FPSC.
- 4. AGDF was originally formed as a Florida Corporation Not For Profit in 1985 to represent the interests of its members before the Federal Energy Regulatory Authority (FERC) during Florida Gas Transmission rate and open access proceedings. Subsequently, AGDF has participated in numerous rate case and other pipeline proceedings at the FERC, conducted research on the gas quality and pipeline integrity impacts of adding LNG to transmission pipeline gas streams, and at the state level has played an active role on behalf of its members in the Florida Commission's gas unbundling proceedings, developed the "Get Gas Florida" joint state-wide advertising campaign, and participated in numerous other regulatory, research and business activities on behalf of its members.
- 5. The purpose of this and subsequent petitions is to seek approval of modifications to the energy conservation programs of each LDC either through addition of programs or modification of existing programs such that when this process is complete, the programs of each company will be similar and the rebates available through each company will be similar. Having common programs and

incentives statewide would enable AGDF to expand and improve the conservation related Get Gas Florida advertising and consumer education activities conducted on behalf of the LDCs. Each of the member LDCs have conservation programs, but there may be differences in the description or allowances in the case of similar programs, and one, or more, of the members may have a program that the others do not. The goal of the members is to have common core residential and commercial programs and allowance amounts for each member, in part to facilitate the conservation related advertising conducted through the Get Gas Florida campaign on behalf of AGDF members. This requires modification of one or more programs for each member and to aid the process, AGDF will file a series of petitions that will result in the members having common core programs. The Energy Conservation Cost Recovery (ECCR) factors for each LDC would continue to be established based on individual company calculations in the annual Commission docket established for that purpose. The ECCR factor determination would be made consistent with the process and schedule in that docket and nothing in this petition is intended to affect the currently approved factors for the individual companies.

6. This petition is being filed by AGDF on behalf of all of its members, each of whom has standing to bring a similar petition in their own right. AGDF has an interest in this petition as well because of the past representation of the LDCs as described and relationship of the energy programs to AGDF sponsored education and marketing efforts for the member LDCs. Standing for AGDF to file this petition is therefore appropriate pursuant to Florida Home Builders Association vs. Department of Labor and Security, 412 So.2d 351 (Fla. 1982),

and Farm Worker Rights Organization, Inc. v. Dept. of Health and Rehabilitative Services, 417 So.2d 753, (1st DCA, 1982). AGDF would also note that the instant petition replaces seven (7) separate petitions and facilitates the review and decision process required by staff and the Commission thereby contributing to administrative economies. The Commission has frequently consolidated dockets involving multiple companies when the issues and objectives are similar and when administrative efficiencies are served and it would be within the authority and appropriate for the Commission to accept and process this petition from AGDF.

SUMMARY OF PETITION

- 7. By this petition, AGDF seeks Commission approval pursuant to Rule 25-17 F.A.C., for the adoption of the following energy conservation programs to be offered by its member LDCs:
 - Conservation Demonstration and Development Program. The program
 would support research efforts to monitor, and modify as needed, program
 standards and consumer participation strategies related to current
 conservation activities; develop and demonstrate the effectiveness of new
 programs and/or technologies; and contribute to obtaining the efficiency,
 conservation and climate change data necessary to design and implement
 effective programs.
 - Propane Distribution System Conversion Program. The program would contribute to the reduction in electric demand by promoting the use of propane gas in residential developments that are beyond the economic extension of the natural gas utility and encouraging conversion of such

systems, through the payment of homeowner conversion incentives, when natural gas becomes available.

BACKGROUND

- 8. Each of the state's investor-owned natural gas Local Distribution Companies (LDCs) currently administer Commission approved conservation programs and participate in the Energy Conservation Cost Recovery process as provided in Commission Rule 25-17.015, F.A.C. All AGDF member LDCs offer residential conservation programs. Certain LDCs also offer non-residential programs for businesses and industrial customers. Attachment 1 to this petition provides a summary of the approved gas conservation programs offered by each LDC.
- 9. The principal intent of the currently-adopted gas conservation programs is to increase the direct end-use of efficient natural gas appliances and equipment in Florida buildings. Gas conservation programs are supportive of the finding by the Legislature expressed in the Florida Energy Efficiency and Conservation Act (FEECA) that, "[r]eduction in, and control of, the growth rates of electric consumption and of weather-sensitive peak demand are of particular importance." (sec. 366.81, F.S.). In addition, gas programs play an important role in meeting FEECA's objective of, "...increasing the overall efficiency and cost effectiveness of ... natural gas production and use." (sec. 366.81, F.S.). The direct use of natural gas in residences and businesses contribute to achieving FEECA conservation objectives in two important ways, i) natural gas appliances and equipment displace electricity consumption and demand at the site of end-use and, ii) given the energy lost in the generation and transmission of electricity and

the significant use of natural gas for electricity generation in Florida, increasing the direct end-use of gas by consumers can ultimately reduce the total quantities of natural gas used in Florida. A 2008 study conducted for the American Gas Foundation by Black and Veatch Engineering quantified the national impact of the direct use of natural gas on energy consumption. Black and Veatch found that if, by the year 2030, six-percent (6%) of U.S. residential and commercial energy requirements shifted from electricity to natural gas would result in an energy savings of 1.25 to 2.00 quadrillion Btus, which would equal enough gas to serve all of Florida's requirements for two years. By 2016 Florida will rely on natural gas for 45% of its electric generation fuel according to Facts and Figures of the Florida Utility Industry, March 2008, published by the Commission. The direct use market penetration of natural gas is low in Florida (approximately 8% of Florida residences use natural gas) compared to most states (the national average is approximately 50% of households according to 2007 data from the Energy Information Administration and US Census). The opportunity to achieve substantive energy savings by increasing the direct use of gas by Florida consumers may, on a relative basis, exceed national estimates.

10. The majority of natural gas conservation expenditures are targeted to increase the installation of gas appliances in new home construction, replace electric appliances with natural gas in existing residences and businesses, and retain natural gas as the selected fuel when consumers replace an appliance at the end of the appliance's service life. Increasing the direct end-use of natural gas through the new construction and electric conversion incentives offered in the gas programs reduces consumption and demand on the electric grid. The gas

retention programs also mitigate electric load growth as well as supporting the general conservation of natural gas resources by encouraging existing gas consumers to replace old inefficient gas appliances with new highly-efficient gas appliances, such as tankless water heaters. The retention allowances also help an LDC avoid the cost of meter removal and, ultimately, the cost of cutting and capping service lines as is required by Commission Rule 25-12.045, F.A.C., Inactive Gas Service Lines. When a customer is lost, the typical cost to remove the meter and cut and cap the service is approximately \$400. If a consumer replaces gas appliances with electricity, it not only works against the objectives of FEECA, but may also be a factor in future rate increases for gas ratepayers.

11. Natural gas conservation programs also make a substantive contribution to achieving Florida's carbon reduction and climate protection goals. The displacement of electric appliances with gas appliances and the efficiency upgrade of older existing gas appliances reduce both source-based electric generation carbon emissions and site-based gas appliance emissions. The Black and Veatch Engineering study referenced above found that millions of tons of CO₂ emissions would be reduced by a six-percent shift of residential and commercial loads from electricity to natural gas by 2030. The reduction of greenhouse gas emissions through actions by power generators, energy efficiency improvements in Florida buildings, the increased use of renewable energy resources and improvements in transportation fuel and efficiencies has been mandated by both the Governor in Executive Order (07-127) and subsequently by the 2008 Legislature with the passage of the HB 7135. In addition to establishing specific emission reduction targets for electric generators

and the transportation sector, the Legislature mandated a 50% increase in the stringency of the Florida Energy Code for Building Construction over the next decade. These more rigorous building efficiency standards were directly linked to the state's climate protection policies. Increasing the direct end-use of natural gas through active LDC promotion of new construction gas conservation programs can help residential and commercial builders meet the emerging, more efficient code standards. Perhaps of greater overall impact is the opportunity to retrofit the millions of existing older buildings in Florida. A June 2007 study by the American Council for an Energy- Efficient Economy (ACEEE), with contributions from the Florida Solar Energy Center, entitled, Potential for Energy Efficiency and Renewable Energy to Meet Florida's Growing Energy Demand, outlined a number of Florida specific building and appliance related utility sponsored efficiency programs that could result in demand savings of over 5,800 MW by 2023. A recent study by Peoples Gas found that the conversion of 1,000 electric water heaters to natural gas could save 500 KW of annual generation capacity, reduce overall annual gas use by 163,000 therms (reduction in generation fuel requirements) and reduce carbon emissions by 3.1 million pounds.

12. FEECA, and the utility conservation programs it supports, is one of the primary tools for implementing energy policy in Florida. It appears evident that FEECA's objectives are intrinsically aligned with the climate change agenda outlined by the Governor and Legislature. The intent of FEECA (sec. 366.81, F.S) is to promote, "... the most efficient and cost-effective demand-side renewable energy systems and conservation systems in order to protect the health, prosperity and general welfare of the state and its citizens." HB 7135 established the Florida Energy and

Climate Commission (FECC) and the legislature specifically included the FECC as a party to the Commission's FEECA goal setting proceedings (sec. 366.82 (5). Section 366.82 (3) (d) F.S., requires the Commission to consider, "The costs imposed by state and federal regulations on the emission of greenhouse gases." The gas conservation programs authorized by the Commission can help achieve the energy conservation, electric load growth mitigation and carbon emission reduction goals set by state policymakers.

Prior Commission Authorization of Uniform Residential Gas Conservation Programs

13. Beginning in September 2006 and continuing through 2007, each investor-owned LDC separately petitioned for and received Commission approval to modify their existing residential conservation programs, or in the case of Indiantown and Sebring, adopt new programs. As a result of these filings, the Commission approved uniform allowance amounts for each LDC's most active residential programs, (Residential New Construction Program, Residential Appliance Replacement Program and Residential Appliance Retention Program). The new construction program provides cash allowances to homebuilders or developers to encourage gas appliance installations. The appliance replacement program provides allowances for consumers converting residential electric appliances to natural gas. The appliance retention program offers allowances to homeowners replacing or upgrading existing natural gas appliances to encourage the retention of gas appliances. Attachment 1 to this petition includes a summary of the uniform residential programs administered by all LDCs. The current uniform

residential gas conservation programs were approved by the Commission in the Orders listed below:

<u>LDC</u>	Order No.	<u>Issuance Date</u>
City Gas Chesapeake FPUC Indiantown Peoples Gas Sebring St. Joe	PSC-07-0122-PAA-EG PSC-07-0197-PAA-EG PSC-06-0749-PAA-GU PSC-07-0531-TRF-EG PSC-06-0816-PAA-EG PSC-07-0693-TRF-EG PSC-07-0495-PAA-EG	February 12, 2007 March 5, 2007 September 5, 2006 July 20, 2007 October 10, 2006 August 24, 2007 June 11, 2007
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- 14. The development of the uniform residential gas conservation programs was achieved through a cooperative effort among the member utilities of the AGDF. AGDF members jointly participated in compiling the data necessary to assess the cost benefit of each of the uniform programs. Common data was developed for appliance costs, appliance installation costs, energy usage and other similar data utilized in to determine the cost effectiveness of the applicable programs. Each LDCs cost benefit analysis was based on the Gas Rate Impact Measurement (G-RIM) Test and Participant Test methodologies (Form PSC/ECR 14-G 4/96) incorporated by reference in Commission Rule 25-17.009, F.A.C. The common data developed by AGDF was used in the respective LDC cost benefit tests approved by the Commission in the above listed Orders. Several cost categories in the cost benefit tests required data specific to an individual LDC. Facility installation investment, service costs, fuel recovery charges, depreciation rates and base rates were developed for each LDC and used in their respective filings.
- 15. The principal objective of developing uniform residential conservation programs was to increase program participation. Standardizing the allowance amounts and program procedures eliminated or greatly reduced three fundamental difficulties

with gas conservation programs. First, most LDC conservation allowance amounts had not been adjusted since the mid-1990's and were out of sync with market economics. Gas allowances are paid to defray the consumer's initial cost of installing interior piping, venting and the purchase of appliances or equipment. Selecting natural gas is a good economic decision as evidenced by the positive Participants Tests results filed with each gas program. However, higher installation first costs than comparable electric appliances can deter builders, consumers and business owners from installing gas. The uniform residential allowances approved by the Commission represented an increase in the allowance amounts for storage water heating, heating, clothes drying and cooking appliances for most LDCs. The Commission also approved a new high efficiency gas tankless water heating allowance for each of the residential programs.

- 16. Second, prior to the adoption of the current uniform allowance amounts and program requirements, each LDC program operated under different program criteria which contributed to confusion among potential program participants. For example, homebuilders constructing residences in multiple LDC territories were faced with multiple program procedures and allowance amounts. Variability in the allowances between LDCs created problems for homebuilders evaluating the economics of a gas fuel choice. The uniform programs eliminated this problem.
- 17. Third, prior to the adoption of uniform programs it was difficult to promote the conservation programs through AGDF's cooperative advertising and consumer education initiatives. The development of uniform residential programs has enabled the natural gas industry to deliver a more powerful and cost-effective

message through its conservation related consumer education programs. Over the past five years, the AGDF has administered a joint energy conservation advertising and customer education program in accordance with the advertising requirements in Commission Rule 25-17.015(5) F.A.C. The joint advertising effort reduces development costs and enables bulk purchasing discounts that greatly increase the coverage and effectiveness of the conservation message. The AGDF statewide "Get Gas Florida" campaign is directed at educating the public about the availability of approved energy conservation programs. Prior to the adoption of the uniform residential gas conservation programs "Get Gas Florida" advertising stopped short of promoting specific conservation allowances, since the allowances were approved in different amounts for each LDC. Current AGDF advertising for residential programs highlights the uniform rebate amounts. Consumer visits to the Get Gas Florida web site have significantly increased since the change in advertising format.

REQUESTED RELIEF

Conservation Demonstration And Development Program

18. AGDF seeks Commission approval for a Conservation Demonstration and Development (CDD) Program to be implemented by each AGDF member LDC. The CDD Program would support research and development, demonstration and monitoring projects designed to promote energy efficiency, conservation and reductions in climate change emissions. Each CDD project would be designed to produce results that address one or more of the FEECA goals identified in Section 366.82 (2), F.S. Conservation projects related to appliances, equipment, technologies, and marketing and consumer education strategies would be pursued

under the CDD Program. A variety of activities could be performed under the CDD Program including engineering evaluations, cost benefits analyses, data collection, literature searches, field testing, pilot programs, demonstrations, technology development support, building code analysis and consumer behavior or market evaluations. Several examples of the types of projects AGDF members could support through the CDD Program are listed below.

- Demonstrations of the efficiency and operational costs of solar/gas tankless
 water heating systems. Such systems are highly efficient, could significantly
 reduce carbon emissions and directly contribute to FEECA's demand-side
 renewable energy goals.
- Research into the applications of natural gas vehicles in support of the Governor's and Legislature's transportation conservation initiatives could be undertaken in the CDD Program in support of FEECA's petroleum fuel reduction goals.
- Market research into consumer or homebuilder purchase appliance or fuel type decision making that would assist in designing more effective incentive and consumer education programs.
- Research on emerging commercial building technologies such as desiccant dehumidification, gas engine drive cooling, or building techniques for hot, humid climates.
- Monitoring of existing program effects on long-term conservation and emission savings to determine needed program adjustments or improvements.

- 19. Natural gas industry CDD projects of the type listed above would be designed to foster and promote energy efficiency and conservation principally through the development or modification of Commission approved conservation programs. Such projects are entirely consistent with the intent of FEECA and Commission Rule and practice. Section 366.81, F.S., provides that, "The Legislature finds and declares that it is critical to utilize the most efficient and cost effective demand side renewable energy systems and conservation systems in order to protect the health. prosperity and general welfare of its citizens." The FEECA legislation goes on to declare that the applicable statutes, "... are to be liberally construed in order to meet the complex problems of reducing and controlling the growth rates of electric consumption and reducing the growth rates of weather-sensitive peak demand; increasing the overall efficiency and cost-effectiveness of electricity and natural gas production and use; encouraging the further development of demand-side renewable energy systems; and conserving expensive resources, especially petroleum fuels." The development of natural gas conservation programs able to help meet FEECA objectives should be dependent upon technical, economic and market data produced through the independent study and analysis of conservation options and technologies. The proposed CDD Program would be designed to produce results that would lead to new and better conservation efforts from the natural gas industry.
- 20. The Commission has a long history of support for conservation R&D programs. PSC Order No. 22176, issued November 14, 1989, required electric utilities to "... pursue research, development and demonstration projects designed to promote energy efficiency and conservation." Commission Rule 25-17.001 (5) (f), F.A.C.,

requires that electric utilities, "Aggressively pursue research, development and demonstration projects..." The Rule goes on to define an aggressive research programs as including, "... technological research, research on load behavior and related problems and market-related research". All five investor-owned electric utilities regulated by the Commission administer approved conservation R&D programs.

- 21. LDCs could jointly fund gas research and demonstration projects under the proposed CDD Program. Joint funding of projects would, i) enable a greater number of overall projects to be completed, ii) eliminate duplicate projects, iii) provide a screening mechanism that ensures priority ranking of potential projects, iv) ensure a broad dissemination of project results to the benefit of all LDCs and v.) reduce the overall project admiristrative costs. Project costs would be equitably allocated among the members. Joint project funding would not inhibit the Commission's ability to audit or otherwise exercise its oversight authority related to an individual LDCs conservation activities.
- 22. Each approved electric utility research program establishes an annual total expense cap, with the exception of Tampa Electric Company's program which establishes a five-year spending cap. In its most recent DSM Plan approved by the Commission in Order No. PSC-05-0181-PAA-EG, issued February 16, 2005, Tampa Electric Company's Conservation Research and Development Program included an annual spending estimate which may be exceeded in any given year, however, total program costs are capped over a five-year period. In addition, the electric programs all have an individual project cost cap. Individual research or

demonstration projects exceeding the cap require administrative approval from Commission staff prior to project initiation.

23. AGDF proposes to establish a CDD Program cost cap methodology similar to that authorized by the Commission for Tampa Electric Company. The gas CDD Program would set a five-year total program spending cap for each LDC. Individual project costs by LDC would also be capped unless the LDC receives administrative approval to exceed the project cap from Commission staff. Given the size differences between AGDF member LDCs, the five-year and individual project caps would vary by LDC. The following cost caps are proposed:

LDC	Five-Year Cap	Project Cap
City Gas	\$500,000	\$100,000
Chesapeake	\$300,000	\$60,000
FPUC	\$300,000	\$60,000
Indiantown	\$50,000	\$10,000
Peoples Gas	\$750,000	\$150,000
Sebring	\$50,000	\$10,000
St. Joe	\$50,000	\$10,000

- 24. The proposed CDD Program would be a new conservation program for all AGDF members except Peoples Gas. AGDF is requesting that the Commission approve this program for all of its members including Peoples Gas. When approved, Peoples Gas would modify its existing program to conform to that approved by the Commission in this docket without a further filing.
- 25. AGDF has not prepared or submitted G-RIM or Participants Tests cost benefit analyses for the proposed CDD Program. To our knowledge no research and

development program (electric or gas) authorized by the Commission has required a cost benefit determination. The nature of R&D programs preclude such evaluations, since one of the principal aims of such a program is to determine the economic feasibility of the research or demonstration subject. In most cases it would be difficult to determine with reasonable certainty the consumer costs or benefits for a given technology or efficiency measure until the research project is completed. In addition, since no utility would be able to forecast in advance all of the specific projects for which research or demonstration will be conducted, or the results generated, it is not possible to measure cost benefits. Finally, activities funded by the proposed CDD Program are inconsistent with the cost effectiveness evaluations required by the (G-RIM) Test and Participant Test methodologies incorporated by reference in Commission Rule 25-17.009, F.A.C. These methodologies assume specific actions and incurred costs on the part of consumers participating in a demandside management program along with certain revenues and costs to the LDC.

Propane Distribution System Conversion Program

26. AGDF seeks Commission approval for a Propane Distribution System Conversion Program to be implemented by each AGDF member LDC. The primary objective of the proposed program is to promote the use of gas in residential new construction projects that are beyond the economic extension of a LDCs natural gas distribution system. In such cases the LDC, an affiliate or a third party propane company, would construct a propane distribution system (mains, service lines, meter, regulators) to natural gas specifications. The propane system would

receive gas from one or more centralized storage tanks and vaporization equipment connected to the distribution main. Typically, the customers on the propane system receive metered service similar to that provided by a natural gas utility. The propane system would "hold" customers on gas until the time natural gas service becomes available. At that time the storage and vaporization equipment would be removed, the development main connected to the natural gas approach main and customer appliances converted from propane to natural gas. A cash allowance to defray the cost of converting propane appliances to natural gas would be available to consumers at the time of conversion.

27. The approval of cash allowances for the conversion of propane appliances to natural gas is consistent with FEECA goals and objectives. Without the construction of propane distribution systems to hold developments on gas until natural gas arrives, the majority of customers in these developments would install electric appliances (the residential market penetration of bulk propane service is estimated at less than 2% of total Florida residences). Earlier in this petition, the FEECA goals of reducing electric consumption and weather sensitive peak demand were noted. Offering developers and consumers in new residential communities an opportunity to select propane service through a distribution system that resembles natural gas service (no storage tank, no delivery truck, metered service, etc.) will ensure high consumer participation. In propane distribution systems constructed over the past five years by FPUC and Chesapeake, over 98% of the residents are connected to the system. Absent the propane distribution system, the vast majority of these residences would be using electricity for water heating, space heating, cooking, clothes drying and pool heating. A number of econometric forecast models (University of Florida Bureau of Economic and Business Research; Fishkind and Associates Econocast, et. al.) indicate recovery of the residential construction market over the next few years. Most models predict housing starts back to a level approaching 150,000 per year by 2012. As development begins again, the propane hold systems can play an important role in meeting FEECA goals for electric consumption and demand reduction. Approval of the proposed conversion program would support the construction of propane distribution systems by providing allowances to help consumer's convert and retain gas appliances when the system transfers to natural gas.

28. In addition to the opportunities to construct propane distribution systems in future developments, there are existing propane systems that could be converted to natural gas. The Florida Department of Agriculture and Consumer Services, Bureau of Liquefied Petroleum Gas Inspection, currently licenses 431 such systems serving several thousand customers in Florida. The vast majority of these systems are operated by propane retailers not affiliated with an AGDF LDC. Most of the systems are small; the Bureau requires a license on any propane distribution system serving ten (10) of more customers from a central storage tank. From time to time a natural gas distribution system is extended in close proximity to an existing propane distribution system. In some cases the propane retailer is interested in selling the system. The consumer services (meter reading, billing, etc), maintenance and safety compliance required to operate a pipeline distribution system are much different than the non-metered bulk delivery service typical of most residential propane service. Over the years

there have been numerous Florida propane distribution systems that have lost significant numbers of customers to electricity conversions. AGDF proposes that the Propane Distribution System Conversion Program authorize conversion allowances for consumers in communities where existing propane distribution systems are converted to natural gas.

- 29. The conversion of customers on existing propane distribution systems to natural gas is also consistent with the intent of FEECA. The conversion of such consumers to natural gas would, in AGDF's view, greatly decrease the probability that the existing propane gas appliances operated by those consumers are eventually converted to electricity. The rates, terms and service quality provided by AGDF member LDCs is regulated by the Commission and such oversight provides assurances of fair and equitable treatment that is important to many consumers. Historically, consumer costs for natural gas service have been lower than propane, as is demonstrated by the positive Participants Test results for the proposed program included in Attachment 2 to this petition. Finally, the retention of residential consumer appliances on gas is a key element in each LDC gas conservation program. The philosophy behind these programs is self evident conversion of a gas appliance to electricity is counter to the achievement of FEECA goals. The conservation retention incentives, along with the LDCs consumer education programs describing the energy and climate benefits of natural gas, help keep customers connected.
- 30. The conversion of consumer appliances from propane to natural gas is, in most cases, a relatively straightforward process. The majority of the propane gas

appliances on the market today are convertible to natural gas with a change out of the gas orifice (introduces gas to the burner). Many gas appliances are sold with conversion kits that enable the installer to select the applicable fuel type. Occasionally, a model cannot be converted and must be replaced. From time to time an appliance may require a vent change-out or other adjustment to meet current code requirements. For those projects in which the LDC plays a role in the initial installation of the propane system, the selection of interior piping, venting and appliance models can be influenced to assure a low cost conversion process. For example, the SummerGlenn development south of Ocala was converted from propane to natural gas in 2008 by FPUC. The development was approximately five years old and the propane distribution system had been installed by FPUC. The average cost of converting almost 1,500 appliances was less than \$100 per appliance. In an older development where certain appliances (usually the water heater) may need to be replaced the costs could be higher. The installation of a replacement natural gas water heater, assuming no piping or venting adjustments, would be approximately \$600. AGDF proposes to establish conversion allowance maximum amounts equal to the allowances in the existing uniform Residential Appliance Retention Program administered by each LDC. The Commission approved retention program allowance amounts for each approved natural gas appliance are as follows:

•	Storage Water Heating	\$350
•	Tankless Water Heating	\$450
•	Heating	\$350
•	Clothes Drying	\$100
•	Cooking	\$100

If approved by the Commission, the above allowance amounts would be adopted as the maximum payment for the conversion of a respective appliance under the Propane Distribution System Conversion Program. The LDC would pay actual consumer conversion costs up to the maximum allowance amount. For system conversions similar to the SummerGlenn project referenced above, allowance payments on average would be less than the maximum amounts. In the event a consumer was required to change-out an appliance, a higher allowance amount, up to the maximum by appliance, would be authorized. The allowance amounts proposed above would not be paid until the appliances are converted. AGDF proposes that the LDCs be allowed to incur and recover reasonable administrative and consumer education costs to notify homeowners of the conversion and provide information on allowance amounts and conversion procedures.

31. The Commission has previously approved a similar propane system conversion program for Chesapeake. Commission Order No. 98-1079-FOF-GU, issued August 10, 1998. The current Chesapeake program assumes that Chesapeake will construct the propane distribution system as a non-regulated investment and pay the approved allowance amounts at the time residences are constructed. The allowance payments are held on its balance sheet as a deferred asset until the system is converted and recovery of the payments is sought through ECCR. The proposed Propane Distribution System Conversion Program would be a new conservation program for all AGDF members except Chesapeake. AGDF is requesting that the Commission approve this program for all of its members, including Chesapeake. When approved, Chesapeake would modify its existing

program to conform to that approved by the Commission in this docket without a further filing.

32. The acquisition or transfer of assets of a propane distribution system owned by an affiliate or non-regulated operating division of the LDC would occur at net book value as indicated in the above referenced Commission Order on the current Chesapeake conversion program. At no time prior to the acquisition would the investment costs of the affiliate in the propane system be included in an LDC's rate base. In the event a propane system is purchased by an LDC from a non-affiliated party, the acquisition price would be dictated by market negotiation between the parties. A system acquisition would not occur unless the system price was reasonable and met the LDC's tariff extension of facilities policy or other financial feasibility determination.

Cost Benefit Tests

33. AGDF has followed the Commission-approved cost effectiveness test methodologies (G-RIM Test and Participants Test) required by Rule 25-17.009, F.A.C., to determine the cost-benefit of the proposed Propane Distribution System Conversion Program. Attachment 2 is a composite document containing each AGDF LDCs G-RIM and Participants Tests for the Propane Distribution System Conversion Program. The tests demonstrate the cost benefit of the proposed programs. The program's G-RIM and Participants Tests results for the proposed cash allowances by appliance type exceed 1.0 (results above 1.0 are deemed to generate cost benefits).

34. Many of the data elements required to complete the G-RIM and Participants Tests were developed through a cooperative effort of members of AGDF's Energy Work Group. These data elements have been consistently used in the cost benefit tests for each AGDF LDC, as presented in Attachments 2 and 3 to this petition. The development and use of common data between utilities is not unusual. The Commission approved the uniform residential gas conservation programs filed separately by each LDC in 2006 and 2007 (see the Commission Orders listed in paragraph 11) which included common data used in the respective cost benefit tests filed by each LDC. The current consolidated docket (Docket Nos. 080407-EG through 080413-EG.) under which the Commission is reviewing electric utility numeric conservation goals is another example of the use of common data among a group of utilities. Based on comments presented at the Commission's November 3, 2008 workshop, an electric utility collaborative is working on a jointly funded Technical Potential Study to be followed by economic and market reviews which are intended to produce data used by all electric utilities to develop both numeric goals and, ultimately, conservation programs to achieve the goals. Historically, the Commission has not required LDCs operating in multiple jurisdictions in the state to file multiple regional based conservation programs. The AGDF data used to produce the gas G-RIM and Participants Tests are representative of appliance costs, installation costs and energy usage information applicable on an average state-wide basis. In certain instances, heating system equipment and installation costs for example, data was developed using the Orlando market to represent typical or average cost data.

- 35. The annual natural gas therm usage data for storage water heating, heating, cooking and clothes drying used in the respective cost benefit tests is based on data developed by Peoples Gas. Usage data for gas tankless water heaters was obtained from manufacturers. In 1995, Peoples Gas conducted a gas appliance sub-metering research project for the specific purpose of developing residential usage data necessary for forecasting project feasibility and conservation filing cost benefit tests. To date, the Peoples Gas study is the only sub-metered gas appliance usage study conducted in Florida. The study collected data for natural gas appliances in over 300 Peoples Gas customer residences. The residences were selected in the north, central and south regions of the state. Actual consumption data was collected for over a year. Propane gas usage data for each appliance type was calculated based on the respective appliance's natural gas usage adjusted for the thermal differences between the fuels. Propane gas was assumed to have a heat content of 91,600 Btus per gallon, natural gas 100,000 Btus per therm.
- 36. The AGDF Energy Work Group determined that the most reliable appliance cost data could be obtained from appliance retailers with a large Florida sales presence and from nationally recognized cost estimating publications in widespread use in the residential construction industry. The data developed from these sources were compared to internal cost information available through FPUC's retail appliance operation. Appliance costs for storage tank water heaters, tankless water heaters, cooking equipment and clothes dryers was obtained from the Home Depot and Lowes web sites (www.homedepot.com and <a h

either natural gas or propane. In many cases a conversion kit is provided with the unit that enables the installer to modify a natural gas unit to propane or the reverse. In most cases, there is no price difference between natural gas and propane gas models. For the purposes of the G-RIM and Participants Tests included in this filing, AGDF assumed that natural gas and propane gas appliances could be purchased at the same price. The appliances referenced above are available for retail purchase and delivery anywhere in the state at the prices quoted on the Home Depot or Lowes websites. Use of a major appliance retailer's published pricing provides the Commission verifiable, real world price data. In the AGDF's view, the retail Home Depot and/or Lowes prices provide a reasonable price point for inclusion in the G-RIM and Participants Tests. For heating systems, equipment costs were obtained from the "2009 R.S. Means Residential Construction Cost Data, 28th Annual Edition", construction cost estimating guide. The R.S. Means guide is a nationally recognized construction cost estimator.

37. The installation costs for the above referenced appliances were developed through a combination of efforts. AGDF member companies surveyed local plumbers, air conditioning contractors and gas fitters to obtain installation pricing. As frequently occurs when conducting such surveys, there was significant variation in the price points for installation, in those cases where the contractors were willing to share cost data. FPUC's retail appliance sales business unit had undertaken a recent competitive bid process to retain third party contractors to install appliances sold through their retail business. The FPUC contractor installation pricing for their central Florida operating division was selected for

water heating, cooking and clothes drying installations. Heating system installation costs were obtained from the R.S. Means construction cost estimating guide referenced above. AGDF assumed no installation cost differences between natural gas and propane appliances.

- 38. The inflation rates used to escalate Operation and Maintenance expenses, fuel costs and retail appliance installation costs over the twenty-year evaluation period included in the G-RIM and Participants Test models is based on the January 2009, Blue Chip Financial quarterly CPI forecast for 2009 (Q1 -1.3%; Q2 1.2%; Q3 2.0%; Q4 1.9%). The annual average CPI forecast for 2009 is .95%.
- 39. The service life of gas appliances was established as follows:

Storage tank water heating: 10 years

Tankless water heating: 20 years

Heating: 18 years

• Clothes dryer: 13 years

• Cooking: 15 years

Service life is used in the Participants Test model to indicate the year in which replacement appliance costs will be incurred by consumers as well as a retention allowance payment by the LDC under its approved Residential Appliance Retention Program. The source of appliance service life data is the National Association of Homebuilders *Study of Life Expectancy of Home Components*, February 2008. AGDF assumed no difference in the service life of natural gas and propane gas appliances.

40. The Participants Test model requires a cost input for appliance maintenance.

Obtaining reliable residential appliance maintenance costs is problematic. Some

data is available from manufacturers, but it is inconsistent and largely based on marketing materials. ADGF has followed the same practice employed during the LDC uniform residential conservation program filings in 2006 and 2007, and assumed the purchase of a residential appliance warranty. The price for such a warranty has been assumed at \$37.50 per month (\$450 per year). Several companies offer residential appliance warranties at comparable pricing in Florida. An allocation of the annual cost by appliance resulted in \$270 for the heating system and \$60 for each of water heater, dryer and range (cook top and oven).

- 41. The costs for gas main installations were jointly developed by the AGDF Energy Work Group based on average cost data for recent installations. The cost for the installation of 2" plastic main (standard for each AGDF LDC in residential development projects) is assumed to \$6.50 per linear foot of main. A typical Florida residential building lot is assumed to be 75 feet in width (\$6.50 x 75 = \$487.50). The main installation cost was rounded up to \$500 per customer.
- 42. Residential propane fuel costs were based on the January 2009 Oil Price Information Service (OPIS) monthly average price of \$0.726 per gallon at the Mont Belvieu hub. The total retail price includes a \$0.20 per gallon average delivery from Mont Belveiu to Tampa, an additional \$0.07 per gallon local delivery to an end-user and a margin of \$1.55 per gallon. No monthly customer charge has been assumed, although such fees are not uncommon for customers served by an underground propane distribution system. Total retail price for residential propane service is assumed to be \$2.55 per gallon.
- 43. The average tax rate for residential natural gas utility customers was assumed to be 10%. The average tax rate for propane gas customers was assumed to 7.5%.

The utility customers pay Florida gross receipts tax whereas propane customers do not.

- 44. The cost of electricity was developed from a weighted average of the residential rates, including fuel adjustment rates, in place at January 2009 for the four largest Florida investor-owned Commission-regulated electric utilities.
- 45. There are several data elements required in the G-RIM and Participants Test models that are appropriately applicable solely to individual LDCs. They are as follows:
 - Each LDCs base rates (Customer Charge and Energy or Transportation
 Charge) for residential service were used to calculate non-fuel natural gas
 delivery charges. For those LDCs with multiple rate classes applicable to
 residential service, the class that most closely represents the "typical" full
 load customer (approximately 400 therms per year) was selected.
 - The natural gas fuel cost (commodity and interstate delivery) used in the G-RIM and Participants Tests is based on each LDCs Purchased Gas Adjustment (PGA) billing rate for February 2009. For those unbundled LDCs that no longer participate in the Commission's PGA proceeding, the respective third party marketer February 2009 fuel price was used.
 - Each LDCs residential (or the applicable rate class identified above)
 ECCR billing factors were included in the tests.
 - An energy conservation program administration cost was calculated for each LDC. An allocation methodology was applied to assign program administrative expenses other than cash allowances, including common and advertising expenses, to the appliance types for which allowances are

offered in the proposed propane system conversion program. LDC conservation expenses forecast for 2009 and approved by the Commission in Docket 080004-GU were used in the allocation process. The methodology allocates total program administration expenses by appliance type based on the relative annual therm consumption estimated for each appliance. Given that there is no historic data on administrative costs related to a propane system conversion program, for the purposes of this analysis AGDF updated and applied the cost allocations for the respective LDCs Residential Appliance Retention Program.

An incremental O&M and administrative cost to add a customer was calculated for each LDC using a methodology similar to that accepted by the Commission in the uniform residential program filings in 2006 and 2007. The cost of service study from each LDCs most recent rate proceeding order (or filing for Peoples Gas and FPUC) was used to derive a ratio of residential O&M costs to total O&M costs. Actual total expense data for FERC 800 Distribution Expense accounts and 900 level accounts was compiled from Each LDCs 2007 FERC Form 2. The total expenses by account were adjusted by the ratio of residential to total O&M expenses described above. The residential expense allocation was further adjusted to remove expenses that were not trended for growth as reflected in MFR Schedule G-2 in the LDCs most recent rate proceeding. The FERC 800 level expenses were used for incremental cost of new customer O&M and the FERC 900 level expenses were used for incremental cost of new customer administration.

- The investment cost related to the installation of a residential service line,
 meter and regulator was based on data received from each LDC. The
 AGDF Work Group requested that each LDC update the MFR Schedule
 E-7 from its most recent rate proceeding. For Peoples Gas, FPUC and St.
 Joe, the data is as filed in their active or recently completed rate cases.
- The cost of capital used in the G-RIM test was based on each LDCs midpoint Required Rate of Return Average Capital Structure (FPSC Adjusted Basis) as reported in the LDCs most recent Earnings Surveillance Report to the Commission.
- The depreciation rates used in the G-RIM test are the applicable rates for plastic main, plastic service lines and meters from the LDCs most recent Commission approved Depreciation Study.

CONCLUSION

- 46. The gas conservation programs proposed by AGDF in this petition meet the Commission's historic tests for evaluating such programs. In Order No. 22176, issued November 14, 1989 in Docket No. 890737-PU, In re: Implementation of Section 366.80-.85, F.S., Conservation Activities of Electric and Natural Gas Utilities, the Commission stated that conservation programs will be evaluated using the following criteria:
 - Whether the program advances the policy objectives of Rule 25-17.001, Florida Administrative Code, and Sections 366.80 through 366.85, Florida Statutes, also known as the "Florida Energy Efficiency and Conservation Act" (FEECA);
 - Whether the program is directly monitorable and yields measurable results; and
 - Whether the program is cost-effective.

AGDF, on behalf of its member LDCs, has demonstrated that each of the proposed programs meets the above criteria and is worthy of Commission

approval.

47. The adoption of the conservation programs described above would not affect the 2009 Energy Conservation Cost Recovery (ECCR) factors authorized by the Commission for each LDC in Docket 080004, Commission Order No. PSC-08-0785-FOF-GU, issued December 1, 2008. No AGDF LDC is requesting adjustments to its 2009 factors. Any additional expense resulting from approval of the proposed programs by the Commission would be addressed in the filing to

WHEREFORE, the Associated Gas Distributors of Florida respectfully requests that the Commission enter its order granting this petition and the LDC energy conservation programs hereinabove described within ninety (90) days of the filing date of this petition. Respectfully submitted,

Norman H. Horton, Jr.

Messer, Caparello & Self, P. A.

Post Office Box 15579 Tallahassee, FL 32317

(850)222-0720 (850)222-4359 fax

Attorneys for Associated Gas Distributors of Florida

establish ECCR factors for 2010.

Attachment 1

Associated Gas Distributors of Florida (AGDF) Petition for Approval of Energy Conservation Program Modifications March 2009

Energy Conservation Program Descriptions for Florida Investor-Owned Natural Gas Local Distribution Companies (LDCs)

Energy Conservation Program Descriptions for Florida Investor-Owned Natural Gas Local Distribution Companies (LDCs)

The following document provides a i) brief overview of the adoption of uniform or standardized residential conservation programs for all investor owned LDCs, ii) a description, by LDC, of additional approved conservation programs, and iii) a matrix summarizing each program and its related allowance amounts.

Development of Uniform Residential Programs

Each of the state's seven regulated natural gas Local Distribution Companies (LDCs) currently operate Commission approved conservation programs and participate in the Energy Conservation Cost Recovery process as provided in Commission Rule 25-17.015, F.A.C. The investor-owned gas utilities are Florida City Gas (City Gas), Florida Division of Chesapeake Utilities Company (Chesapeake), Florida Public Utilities Company (FPUC), Indiantown Gas Company (Indiantown), Peoples Gas System (Peoples Gas), Sebring Gas System (Sebring) and St. Joe Natural Gas Company (St. Joe). All of the above LDCs offer conservation programs aimed at both the residential new construction and existing residential consumer markets. Certain LDCs also offer conservation programs aimed at the commercial and industrial markets.

Over the past two years, each investor-owned LDC petitioned for and received Commission approval to modify existing residential conservation programs, or in the case of Indiantown and Sebring, adopt new programs. As a result, each LDC's primary residential programs have identical allowance amounts and administrative procedures. The development of uniform gas conservation programs was achieved through a cooperative effort among the member utilities of the Associated Gas Distributors of Florida ("AGDF"), a trade association representing all of the investor-owned LDCs operating in Florida. AGDF members jointly participated in compiling common appliance cost, appliance installation cost and energy usage data required to complete the RIM and Participants Tests for each residential program. Each LDC utilized its individual facility and service costs, fuel recovery charge and base rates in the cost effectiveness tests.

The primary objective in developing consistent residential conservation program designs across all LDCs was to increase participation in the programs, especially the new construction program. Prior to the adoption of the current consistent allowance amounts and program requirements, each LDC program operated under different parameters. Homebuilders constructing residences in multiple LDC territories were frequently confused by inconsistent procedures. Variability in the allowance amounts between LDCs created problems for homebuilders evaluating the economics of a fuel choice. For most of the LDCs the appliance allowance amounts approved by the Commission for each residential program represented increases in their existing allowances. Each LDC also adopted a new allowance for gas tankless water heaters

which have DOE rated efficiency levels approximately 30% greater than storage water heaters. The development of uniform residential programs also enabled the gas industry to deliver a more powerful, and cost-effective, message through its conservation related consumer education programs.

The current uniform LDC residential energy conservation programs were approved by the Commission in the Orders listed below.

LDC	Order No.	Issuance Date
City Gas Chesapeake FPUC Indiantown Peoples Gas Sebring St. Joe	PSC-07-0122-PAA-EG PSC-07-0197-PAA-EG PSC-06-0749-PAA-GU PSC-07-0531-TRF-EG PSC-06-0816-PAA-EG PSC-07-0693-TRF-EG PSC-07-0495-PAA-EG	February 12, 2007 March 5, 2007 September 5, 2006 July 20, 2007 October 10, 2006 August 24, 2007 June 11, 2007

Uniform Residential Natural Gas Conservation Programs

Each of Florida's investor-owned natural gas LDCs offers the following three residential energy conservation programs.

1. Residential New Construction Program.

The new home program provides cash allowances to developers, builders or consumers constructing single, manufactured or multi-family residences which include certain natural gas appliances. Allowances are paid upon service activation in the amounts listed below for the installation of the applicable appliances. The program allowances are designed to assist in defraying the cost of interior gas piping, venting, appliance installation and other costs associated with residential gas service. The overall cost benefit of selecting natural gas is positive for consumers. However, homebuilders are generally more influenced by initial construction costs than they are with a homeowner's long-term operating and maintenance costs. Providing a cash allowance for gas installations, as this program has done since its inception, helps mitigate a homebuilder's construction cost concerns and significantly improves the likelihood that efficient, cleanburning natural gas appliances will be provided to Florida homeowners. All appliance installations must meet the minimum efficiency standards prescribed by the Florida Energy Code or the Department of Energy in 10 CFR Part 430, Energy and Water Conservation Standards and Effective Dates.

Residential New Construction Program Cash Allowances

Gas Storage Tank Water Heating	\$350
Gas Tankless Water Heating	\$450
Gas Heating	\$350
Gas Cooking	\$100
Gas Clothes Drying	\$100

2. Residential Appliance Replacement Program.

The appliance replacement program is designed to target the replacement of existing residential electric appliances with natural gas appliances. Allowances are paid to homeowners in the amounts listed below for the installation of the applicable appliances. The allowances help homeowners cover the conversion costs associated with piping, venting and purchasing natural gas appliances. All gas appliances installed under the replacement program must meet the minimum efficiency standards established by the Department of Energy.

Residential Appliance Replacement Program Cash Allowances

Gas Storage Tank Water Heating	\$525
Gas Tankless Water Heating	\$525
Gas Heating	\$625
Gas Cooking	\$100
Gas Clothes Drying	\$100

3. Residential Appliance Retention Program.

The appliance retention program is designed to encourage homeowners with existing natural gas appliances to retain natural gas when the existing appliances fail, or are otherwise replaced. Providing incentives for the retention of gas appliances in existing homes helps avoid the electric demand increases that would occur if the gas appliance is converted to electricity. The retention allowances also help the LDC avoid the cost of meter removal and, ultimately, the cost of cutting and capping service lines (as is required by Commission rule). When a customer is lost, the typical cost to remove the meter and cut and cap the service is estimated at \$350 to \$500. The retention program provides cash allowances in the amounts listed below to existing residential gas customers who replace old or inoperable gas appliances with new energy efficient gas appliances. All gas appliances installed under the replacement program must meet the minimum efficiency standards established by the Department of Energy.

Residential Appliance Retention Program Cash Allowances

Gas Storage Tank Water Heating	\$525
Gas Tankless Water Heating	\$525
Gas Heating	\$625
Gas Cooking	\$100
Gas Clothes Drying	\$100

Additional Natural Gas Energy Conservation Programs

A. Florida City Gas

- 1. <u>Gas Appliances in Schools</u>: The program is designed to provide gas appliances in schools and offer teaching assistance on energy conservation, gas use and safety in Home Economics Departments through a Company employed home economist.
- 2. <u>Residential Propane Conversion Program</u>: The program provides cash incentives to homeowners converting existing propane appliances to natural gas. The incentives listed below are designed to defray the homeowner's conversion costs.

Residential Propane Conversion Cash Allowances

Gas Water Heating	\$200
Gas Heating	\$100
Gas Clothes Drying	\$50
Gas Cooking	\$25

- 3. Residential Cut and Cap Program: This program is intended to reactivate inactive services by providing a \$200 cash incentive to homeowners in existing residences that have discontinued gas service. The allowances are paid in addition to the Residential Appliance Replacement Program allowances described above. This program is intended to encourage gas service reactivation prior to the expiration of a 5-year inactive service time period where, by Commission Rule, the service line must be cut and capped.
- 4. <u>Commercial/Industrial Conversion Program</u>: This program offers cash allowances to convert non-residential, non-natural gas appliances and equipment to natural gas. The allowance is designed to assist in covering the initial cost of gas piping, venting and equipment. Allowances are paid based on the rated Btu input of the installed gas appliance or equipment at a rate of \$75 per 100,000 Btu.

5. Commercial/Industrial Alternative Technology Incentive Program: The program is designed to encourage the installation of alternative gas technologies such as natural gas cooling, desiccant dehumidification, gas engine installation (water pumping, for example) cogeneration and other technologies that displace non-natural gas fuels. The program includes a cash allowance based on a life cycle cost analysis of an individual project. The allowance is limited to three (3) times the annual Florida City Gas margin produced by the project.

B. Florida Division of Chesapeake Utilities Corporation

1. Residential Propane Distribution Program: This program is intended to promote the use of gas in residential developments that are beyond the economic extension of the LDC. An underground propane distribution system, designed to natural gas standards, is constructed to "hold" the homes on gas until such time as the natural gas system can be economically extended and the residences converted from propane to natural gas. The following incentives are available to encourage the installation of propane appliances in the new homes.

Residential Propane Distribution Cash Allowances

Gas Water Heating	\$275
Gas Heating	\$275
Gas Cooking and Drying	\$75

- 2. Residential Natural Gas Space Conditioning Program: The program provides a \$1,200 cash allowance to developers, builders or homeowners installing gas cooling or desiccant dehumidification equipment in residential buildings.
- Commercial Gas Space Conditioning Program: An allowance of \$50 per ton of natural gas space conditioning up to a maximum of 500 tons is offered to non-residential building owners to encourage the installation of gas equipment.
- 4. <u>Conservation Education Program</u>: Several community and business outreach initiatives designed to provide information on energy conservation and natural gas are provided through this program.

C. Florida Public Utilities Company

1. Residential Service Reactivation Program: This program is intended to reactivate inactive services by providing a \$350 cash incentive to homeowners in existing residences that have discontinued gas service. The installation of a gas water heater is required. The allowances are paid

in addition to the Residential Appliance Replacement Program allowances described above. This program is intended to encourage gas service reactivation prior to the expiration of a 5-year inactive service time period where, by Commission Rule, the service line must be cut and capped.

- 2. <u>Residential Conservation Service Program</u>: The Company offers home energy surveys to identify conservation opportunities and provides information to homeowners on various strategies to save energy.
- 3. <u>Space Conditioning Program</u>: This program is designed to encourage the conversion of on-main electric space conditioning equipment to natural gas space conditioning equipment. Residences are eligible for a \$1,200 cash allowance. Commercial installations are eligible for an allowance of \$50 per ton.
- 4. <u>Commercial Conservation Program</u>: The Company offers commercial energy surveys to identify conservation opportunities and provides information to business owners on various strategies to save energy.
- 5. <u>Conservation Education Program</u>: Several community and business outreach initiatives designed to provide information on energy conservation and natural gas are provided through this program.

D. Indiantown Gas Company

Indiantown's initial conservation program was approved by the Commission in July, 2007. At present, Indiantown only offers the three uniform residential programs adopted for all Florida investor-owned LDCs described above.

E. Peoples Gas System

- 1. Residential Appliance Replacement Program: In addition to the appliances included in the uniform Residential Appliance Replacement Program described above, Peoples Gas also offers a \$65 cash allowance for the conversion of electric space heaters to natural gas.
- Commercial Electric Replacement Program: The program provides cash allowances of \$40 per KW to building owners or authorized lessee's for the replacement of existing commercial electric resistance appliances or equipment with comparable natural gas units. Typical conversions would include commercial water heating systems, ranges, ovens, fryers and clothes drying equipment.
- 3. Gas Space Conditioning Program: This program is designed to convert on-main customers from electric space conditioning equipment to efficient

natural gas equipment. A cash allowance of \$150 per ton up to a maximum of 500 tons is available for each customer conversion.

- 4. <u>Small Package Cogeneration Program</u>: A cash allowance equal to \$150 per KW, up to a 150 KW maximum, to building owners installing package cogeneration systems. The program also includes a contribution of up to \$5,000 to evaluate the technical and economic potential of such installations.
- Oil Heat Replacement Program: This program is designed to encourage replacement of existing oil furnaces with efficient natural gas heating systems. A primary goal of the program is to prevent building owners from converting oil heating systems to electricity, especially electric strip heat, to the detriment of FEECA objectives. A cash allowance of \$330 is offered to defray the expense of gas piping and venting.
- 6. Research, Development and Program Monitoring: This program authorizes Peoples Gas to fund projects that pursue research, development and demonstration of appliance, equipment conservation techniques that promote energy efficiency and conservation. The program also includes monitoring the effectiveness of existing conservation programs. The program's intent is to develop knowledge that leads to new or modified conservation programs. In 2008, Peoples Gas began work on two R&D projects: a technical study of residential and commercial desiccant dehumidification technologies and a study and pilot program to evaluate the installation of residential thermal solar water heating systems with gas tankless water heating backup.

F. Sebring Gas System

Sebring's initial conservation program was approved by the Commission in Augsut, 2007. At present, Sebring only offers the three uniform residential programs adopted for all Florida investor-owned LDCs described above.

G. St. Joe Natural Gas Company

 Residential Gas Air Conditioning: In addition to the appliances included in the uniform residential new construction, appliance replacement and appliance retention programs described above, St. Joe also offers a \$1,400 cash allowance for the installation of natural gas cooling or desiccant dehumidification equipment in new residential buildings and a \$1,500 allowance in existing residences.

Florida LDC Energy Conservation Programs Authorized Allowances Mar-09

	Program	FCG	CFG	FPUC	PGS	IGC	SGS	SJNG
1.	RES New Construction		T	T				1
	Storage WH	\$350	\$350	\$350	\$350	\$350	****	
	Tankiess WH	\$450	\$450	1			\$350	\$350
	Furance			\$450	\$450	\$450	\$450	\$450
		\$350	\$350	\$350	\$350	\$350	\$350	\$350
	Clothes Dryer	\$100	\$100	\$100	\$100	\$100	\$100	\$100
	Cooking	\$100	\$100	\$100	\$100	\$100	\$100	\$100
2.	RES Appliance Replacement			 				+
	Storage WH	\$525	\$525	\$525	\$525	\$525	\$525	\$525
	Tankless WH	\$525	\$525	\$525	\$525	\$525	\$525	\$525
	Heating	\$625	\$625	\$625	\$625	\$625	\$625	\$625
	Clothes Dryer	\$100	\$100	\$100	\$100	\$100	\$100	\$100
	Cooking	\$100	\$100	\$100	\$100	\$100 \$100	\$100	
	Space Heating	0.00	\$100	\$100	\$65	\$100	\$100	\$100
	opass , idamig				\$65			
3.	RES Appliance Retention							
	Storage WH	\$350	\$350	\$350	\$350	\$350	\$350	\$350
	Tankless WH	\$450	\$450	\$450	\$450	\$450	\$450	\$450
	Heating	\$350	\$350	\$350	\$350	\$350	\$350	\$350
	Clothes Dryer	\$100	\$100	\$100	\$100	\$100	\$100	\$100
	Cooking	\$100	\$100	\$100	\$100	\$100	\$100	\$100
4.	RES Gas Air Conditioning	-						
••	New Construction]	\$1,200				Í	\$1,400
	Replacement		\$1,200 \$1,200	\$1,200	\$150/ton			
	Replacement		\$1,200	\$1,200	1		1	\$1,500
	Detection]	#4 000	!	(100 ton max)			
	Retention		\$1,200					\$1,500
5 .	RES Propane "Distribution"							
	Water Heating		\$275				1	
	Furnace		\$275]			
	Range/Dryer Stub-out		\$75					,
			•					
6.	RES Propane "Conversion"							
	Furance	\$200			ľ			1
	Water Heating	\$100					[
	Range	\$50						
	Dryer	\$25						
7.	RES Service Reactivation	\$200		\$350			ļ	
				(requires WH)				
8.	RES Gas School Program	yes						
	(home economist)	, , , ,						
9.	RES Energy Audits	yes		yes				
10.	COM Elec Res Appliance Repl				\$40/KW			
	man in				(100 KW max)			
	<u></u>							
11.	COM Non-Gas to Gas Conversion	\$75						
		(per 100K Btu)						
12.	COM Gas Air Conditioning	-	\$50/ton		\$150/ton			
14.	Our Our All Conditioning	1 1	(500 ton max)		(100 ton max)			
			(CCC (CIT HIGA)		(.us ton max)			
13 .	Small Package Cogeneration				\$5000 study			
]			\$150 KW			
					(150 KW max)			
14.	COM Alternative Tech Incentive	LCC						
14.	Alternative rech incentive						ļ	l i
	į	3 yr payback						
		(max 3 x margin)						
15.	COM Energy Audits	yes		yes				
		,		,				
16.	EC Program Monitoring and R&D				yes			
	1	1			no specified limits			

Attachment 2

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

Company	<u>Attachment</u>
Florida Division of Chesapeake Utilities Corporation	2.1
Florida City Gas	2.2
Florida Public Utilities Company	2.3
Indiantown Gas Company	2.4
Peoples Gas System	2.5
Sebring Gas System	2.6
St. Joe Natural Gas Company	2.7

Attachment 2.1

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

Florida Division of Chesapeake Utilities Corporation Rate Impact Measurement Test Participants Test

Summary of RIM Test and Participants Test Results

	Proposed Allowance	Participants Test	RIM Test
Gas Storage Tank Water Heating	\$350	1.33	1.16
Gas Tankless Water Heating	\$450	1.29	1.11
Gas Heating	\$350	1.21	1.19
Gas Clothes Drying	\$100	1.24	1.17
Gas Cooking	\$100	1.23	1.16

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type
Storage Tank Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$89	\$173	\$69	\$332	\$173	\$38	\$18	\$362.39	\$592
2010	\$89	\$175	\$69	\$333	\$175	\$37	\$19	\$12.39	\$243
2011	\$89	\$177	\$69	\$335	\$177	\$36	\$19	\$12.39	\$244
2012	\$89	\$179	\$69	\$337	\$179	\$34	\$19	\$12.39	\$244
2013	\$89	\$180	\$69	\$339	\$180	\$33	\$19	\$12.39	\$245
2014	\$89	\$182	\$69	\$340	\$182	\$32	\$19	\$12.39	\$246
2015	\$89	\$184	\$69	\$342	\$184	\$31	\$20	\$12.39	\$247
2016	\$89	\$186	\$69	\$344	\$186	\$30	\$20	\$12.39	\$248
2017	\$89	\$188	\$69	\$346	\$188	\$29	\$20	\$12.39	\$249
2018	\$89	\$190	\$69	\$348	\$190	\$28	\$20	\$362.39	\$600
2019	\$89	\$192	\$69	\$350	\$192	\$27	\$20	\$12.39	\$251
2020	\$89	\$193	\$69	\$352	\$193	\$26	\$21	\$12.39	\$252
2021	\$89	\$195	\$69	\$354	\$195	\$25	\$21	\$12.39	\$253
2022	\$89	\$197	\$69	\$356	\$197	\$24	\$21	\$12.39	\$255
2023	\$89	\$199	\$69	\$358	\$199	\$23	\$21	\$12.39	\$256
2024	\$89	\$201	\$69	\$360	\$201	\$22	\$21	\$12.39	\$257
2025	\$89	\$203	\$69	\$362	\$203	\$22	\$22	\$12.39	\$259
2026	\$89	\$205	\$69	\$364	\$205	\$21	\$22	\$12.39	\$260
2027	\$89	\$207	\$69	\$366	\$207	\$20	\$22	\$12.39	\$262
2028	\$89	\$209	\$69	\$368	\$209	\$19	\$22	\$12.39	\$264

Present Value of Benefits \$3,382

Present Value of Costs \$2,928

Benefit/Cost Ratio 1.16

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type
Storage Tank Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Mein	3,30%
Gas Customer Charge Escelator	0%	Depreciation Rate - Service Line	3.60%
O&M/Inflation Escalator	1.0%	Cepraciation Rate - Meter	4.00%

able 1								
R	Revenue - Energy Charge							
1								
V	76	Basa Rate	Total On					
2009	Therms 170	\$0.5245	Total Charge \$89					
2010	170	\$0.5245	\$89					
2010	170	\$0.5245	\$89					
2012	170	\$0.5245	\$89					
2013	170	\$0.5245	189					
2014	170	\$0.5245	\$89					
2015	170	\$0.5245	\$89					
2016	170	\$0.5245	\$89					
2017	170	\$0.5245	\$89					
2018	170	\$0.5245	289					
2019	170	\$0.5245	589					
2020	170	\$0.5245	\$89					
2021	170	\$0.5245	288					
2022	170	\$0.5245	\$89					
2023	170	\$0.5245	\$89					
2024	170	\$0.5245	\$89					
2025	170	\$0.5245	589					
2026	170	\$0.5245	\$89					
2027	170	\$0.5245	\$89					
2028	170	\$0.5245	\$89					

Revenue - Cost of Gas									
11	2	4	2*3						
Year	Therms	Fuel Rate	Total Charge						
2009	170	\$1,0200	\$173						
2010	170	\$1.0302	\$175						
2011	170	\$1,0405	\$177						
2012	170	\$1,0509	5179						
2013	170	\$1.0614	\$180						
2014	170	\$1.0720	\$182						
2015	170	\$1,0828	\$184						
2016	170	\$1,0936	\$186						
2017	170	\$1,1045	\$188						
2018	170	\$1,1158	\$190						
2019	170	\$1,1267	\$192						
2020	170	\$1,1380	\$193						
2021	170	\$1.1494	\$195						
2022	170	\$1,1609	\$197						
2023	170	\$1,1725	\$199						
2024	170	\$1,1842	\$201						
2025	170	\$1,1980	\$203						
2026	170	\$1.2080	\$205						
2027	170	\$1,2201	\$207						
2028	170	\$1,2323	\$209						

Revenue - Customer Charge									
	2	3	4	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customer	To Total	Proreted Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$15.00	\$180.00	38.37%	\$69					
2010	\$15.00	\$160.00	38.37%	\$89					
2011	\$15.00	\$180.00	38.37%	\$88					
2012	\$15.00	\$180,00	38.37%	\$69					
2013	\$15,00	\$180,00	38,37%	\$69					
2014	\$15.00	\$180.00	38.37%	\$69					
2015	\$15.00	\$180.00	38.37%	\$69					
2016	\$15.00	\$160.0G	38,37%	\$69					
2017	\$15.00	\$180.00	38.37%	\$69					
2018	\$15.00	\$180.00	36.37%	\$69					
2019	\$15.00	\$189.00	38.37%	\$69					
2020	\$15,00	\$180.00	38.37%	\$69					
2021	\$15.00	\$180.00	38.37%	\$69					
2022	\$15.00	\$160.00	38.37%	269					
2023	\$15.00	\$180.00	38.37%	269					
2024	\$15.00	\$180,00	36.37%	\$69					
2025	\$15.00	\$180.00	38.37%	\$69					
2026	\$15.00	\$180.00	38.37%	\$69					
2027	\$15.00	\$180.00	38.37%	\$69					
2028	\$15,00	\$180.00	38.37%	569					

Investment Carrying Costs										
1	2	3	4	5	- 6	7	8	6*7*B		
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment		
Year	Main	Main	Line	Muter	Investment	of Debt	Consumed To Total	Carrying Cos		
2009	\$100	\$500	\$570	\$180	\$1,350	7.37%	38.37%	\$38		
2010	\$97	\$484	\$549	\$173	\$1,303	7.37%	38.37%	\$37		
2011	\$94	\$468	\$529	\$166	\$1,257	7.37%	38.37%	\$36		
2012	\$81	\$453	\$510	\$159	\$1,213	7.37%	38.37%	\$34		
2013	\$88	\$438	\$492	\$153	\$1,171	7.37%	38.37%	\$33		
2014	\$85	\$424	\$474	\$147	\$1,130	7.37%	38.37%	\$32		
2015	\$82	\$410	\$457	\$141	\$1,090	7.37%	38.37%	\$31		
2016	\$79	\$396	\$441	\$135	\$1,051	7.37%	38,37%	\$30		
2017	\$76	\$383	\$425	\$130	\$1.014	7.37%	38.37%	\$29		
2018	\$73	\$370	\$410	\$125	\$978	7.37%	38.37%	\$28		
2018	\$71	\$358	\$395	\$120	\$944	7.37%	38.37%	\$27		
2020	\$69	\$346	\$381	\$115	\$911	7.37%	38.37%	\$26		
2021	\$67	\$335	\$367	\$110	\$679	7.37%	38.37%	\$25		
2022	\$65	\$324	\$354	\$108	\$849	7.37%	38.37%	\$24		
2023	\$63	\$313	\$341	\$102	\$819	7.37%	38.37%	\$23		
2024	\$81	\$303	\$320	\$98	\$791	7.37%	38.37%	\$22		
2025	\$59	\$293	\$317	\$94	\$763	7.37%	38.37%	\$22		
2026	\$57	5283	\$308	\$90	\$736	7.37%	38.37%	\$21		
2027	\$55	\$274	\$295	\$86	\$710	7,37%	38.37%	\$20		
2028	\$53	\$265	\$284	\$83	\$685	7.37%	38.37%	\$19		

			incre	mental Custo	mer Costs			
1	2	3	4	5=3*4	8	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total increments
Year	Adm. Cost	Adm Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$3,18	\$36	38.37%	\$14.58	\$9.92	38.37%	\$4	\$18
2010	\$3.21	\$39	38.37%	\$14.97	\$10.02	38.37%	\$4	\$19
2011	\$3.24	\$38	38.37%	\$14.97	\$10.12	38.37%	\$4	\$19
2012	\$3,28	\$39	38.37%	\$14.97	\$10.22	38.37%	\$4	\$19
2013	\$3.31	\$40	38,37%	\$15.35	\$10.32	38.37%	\$4	\$19
2014	\$3,34	\$40	38.37%	\$15.35	\$10.43	38.37%	\$4	519
2015	\$3.38	\$41	38.37%	\$15.73	\$10.53	38.37%	\$4	\$20
2016	\$3.41	541	38.37%	\$15.73	\$10.64	38.37%	\$4	520
2017	\$3.44	\$41	38.37%	\$15.73	\$10.74	38.37%	54	\$20
2018	\$3 49	\$42	36.37%	\$16.12	\$10.85	38.37%	\$4	\$28
2019	\$3.51	542	38.37%	\$16.12	\$10.06	38.37%	\$4	\$20
2020	\$3.55	\$43	38.37%	\$16.50	\$11.07	38.37%	\$4	\$21
2021	\$3.58	543	38.37%	\$16,50	\$11.18	38.37%	\$4	\$21
2022	\$3,62	\$43	38.37%	\$18.50	\$11.20	38.37%	\$4	\$21
2023	\$3.68	844	38,37%	\$16.88	\$11.40	36.37%	\$4	\$21
2024	\$3.69	544	38.37%	\$16.88	\$11.52	38.37%	54	\$21
2025	\$3.73	\$45	38.37%	\$17.27	\$11.63	38.37%	\$4	\$22
202 6	\$3.77	\$45	36.37%	\$17,27	\$11,75	38.37%	\$5	\$22
2027	\$3.80	\$46	38.37%	\$17.65	\$11.87	38.37%	\$5	\$22
2028	\$3.84	\$46	38.37%	\$17.85	\$11,98	38 37%	\$5	\$22

	Gas Costs							
1	2	3	2.3					
	Therms	Gas Supply	Gas Supply					
Year		Rate	Cast					
2009	170	1.0200	\$173					
2010	170	\$1.0302	\$175					
2011	170	\$1 0405	\$177					
2012	170	\$1,0509	\$179					
2013	170	\$1.0614	\$180					
2014	170	\$1.0720	\$182					
2015	170	\$1.0828	\$184					
2016	170	\$1.0936	\$166					
2017	170	\$1.1045	\$186					
2018	176	\$1.7156	\$190					
2019	170	\$1.1267	5192					
2020	170	\$1,1360	\$193					
2021	170	\$1,1494	\$195					
2022	170	\$1.1609	5197					
2023	170	\$1,1725	5199					
2024	170	\$1.1842	\$201					
2025	170	\$1.1960	\$203					
2026	170	\$1,2080	\$205					
2027	170	\$1,2201	\$207					
2028	170	\$1,2323	\$209					

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Tankless Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	77	8	9	6 thru 9
2009	\$79	\$153	\$64	\$295	\$153	\$35	\$17	\$462.39	\$668
2010	\$79	\$155	\$64	\$297	\$155	\$34	\$17	\$12.39	\$218
2011	\$79	\$156	\$64	\$299	\$156	\$33	\$17	\$12.39	\$219
2012	\$79	\$158	\$64	\$300	\$158	\$32	\$17	\$12,39	\$219
2013	\$79	\$159	\$64	\$302	\$159	\$31	\$18	\$12.39	\$220
2014	\$79	\$161	\$64	\$303	\$161	\$30	\$18	\$12.39	\$221
2015	\$79	\$162	\$64	\$305	\$162	\$28	\$18	\$12.39	\$222
2016	\$ 79	\$164	\$64	\$307	\$164	\$27	\$18	\$12.39	\$222
2017	\$79	\$166	\$64	\$308	\$166	\$27	\$18	\$12.39	\$223
2018	\$79	\$167	\$64	\$310	\$167	\$26	\$19	\$12.39	\$224
2019	\$79	\$169	\$64	\$312	\$169	\$25	\$19	\$12.39	\$225
2020	\$ 79	\$171	\$64	\$313	\$171	\$24	\$19	\$12.39	\$226
2021	\$79	\$172	\$64	\$315	\$172	\$23	\$19	\$12.39	\$227
2022	\$79	\$174	\$64	\$317	\$174	\$22	\$19	\$12.39	\$228
2023	\$79	\$176	\$64	\$318	\$176	\$21	\$20	\$12.39	\$229
2024	\$79	\$178	\$64	\$320	\$178	\$21	\$20	\$12.39	\$230
2025	\$79	\$179	\$64	\$322	\$179	\$20	\$20	\$12.39	\$232
2026	\$79	\$181	\$64	\$324	\$181	\$19	\$20	\$12.39	\$233
2027	\$79	\$183	\$64	\$326	\$183	\$19	\$21	\$12.39	\$234
2028	\$79	\$185	\$64	\$327	\$185	\$18	\$21	\$462.39	\$686

Present Value 53,013

Present Value of Costs \$2,703

Benefit/Cost Ratio 1.11

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance	Туре
Tankless Water	er Heating

Fuel Rate Escatator	1.0%	Depreciation Rate - Supply Main	3.30%
Gas Energy Charge Escaletor	0%	Depreciation Rate - Development Main	3.30%
Ges Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.60%
Californian Economics	1.0%	Depreciation Rate . Meter	4 00%

able 1									
R	Revenue - Energy Charge								
1	2	3	2*3						
Year	Therms	Base Rate	Total Charge						
2009	150	\$0.5245	\$79						
2010	150	\$0.5245	\$79						
2011	150	\$0.5245	\$79						
2012	150	\$0.5245	\$79						
2013	150	\$0.5245	\$79						
2014	150	\$0.5245	\$79						
2015	150	\$0.5245	579						
2016	150	\$0.5245	578						
2017	150	\$0,5245	\$79						
2018	150	\$0.5245	\$79						
2018	150	\$0.5245	\$79						
2020	150	\$0.5245	\$79						
2021	150	\$0.5245	\$79						
2022	150	\$0.5245	\$79						
2023	150	\$0.5245	\$79						
2024	150	\$0.5245	\$79						
2025	150	\$0,5245	\$79						
2026	150	\$0.5245	\$79						
2027	150	\$0.5245	\$79						
2028	150	\$0.5245	\$79						

Revenue - Cost of Gas								
1	2		2'3					
	_							
Year	Therms	Fuel Rate	Total Charge					
2009	150	\$1,0200	\$153					
2010	150	\$1,0302	\$155					
2011	150	\$1,0405	\$156					
2012	150	\$1,0609	\$158					
2013	150	\$1,0614	\$159					
2014	150	\$1.0720	\$181					
2015	150	\$1,0828	\$162					
2016	150	\$1.0938	\$164					
2017	150	\$1,1045	\$166					
2016	150	\$1,1156	\$167					
2019	150	\$1.1267	\$169					
2020	150	\$1,1380	\$171					
2021	150	\$1,1494	\$172					
2022	150	\$1,1809	\$174					
2023	150	\$1.1725	\$176					
2024	150	\$1,1842	\$178					
2025	150	\$1,1960	\$179					
2026	150	\$1,2080	\$181					
2027	150	\$1,2201	\$183					
2028	150	\$1,2323	\$185					

	Revenue - Customer Charge									
1	2	3	4	4.3						
	Monthly		Ratio Therms							
	Customer	Annual Customer	To Total	Proreted Annual						
Year	Charge	Chame	Consumed	Customer Charge						
2009	\$15.00	\$180.00	35.48%	364						
2010	\$15.00	\$180.00	35,48%	\$64						
2011	\$15.00	\$180.00	35.48%	\$64						
2012	\$15.00	\$160.00	35,46%	\$64						
2013	\$15.00	\$180.00	35,48%	\$64						
2014	\$15,00	\$180.00	35.46%	\$64						
2015	\$15.00	\$160.00	35,46%	\$64						
2018	\$15 00	\$180.00	35.48%	564						
2017	\$15.00	\$180.00	35 46%	\$64						
2018	\$15.00	\$180.00	35.46%	\$64						
2019	\$15.00	\$180.00	35.48%	\$64						
2020	\$15.00	\$160.00	35,46%	\$64						
2021	\$15.00	\$180.00	35.48%	\$64						
2022	\$15.00	\$180,00	35.45%	\$64						
2023	\$ 15.00	\$189.90	35,48%	\$64						
2024	\$15.00	\$160.00	35,48%	\$64						
2025	\$15.00	\$180.00	35.46%	\$64						
2026	\$15.00	\$180.00	35.46%	\$64						
2027	\$15.00	\$160.00	35 46%	\$64						
2028	\$15,00	\$160.00	35.48%	\$64						

Investment Carrying Costs										
1	2	3	4	5	6	7		6*7*8		
	Supply	Developmen:	Service		Total	Cost	Ratio of Tharms	investment		
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos		
2009	\$100	\$500	\$570	\$180	\$1,350	7.37%	35,46%	\$35		
2010	\$97	\$484	\$549	\$173	\$1,303	7.37%	35.46%	\$34		
2011	594	\$468	\$529	\$186	\$1,257	7.37%	35.46%	\$33		
2012	\$91	\$453	\$510	\$159	\$1.213	7.37%	35.46%	\$32		
2013	\$88	\$438	\$492	\$153	\$1,171	7.37%	35.46%	\$31		
2014	\$85	\$424	\$474	\$147	\$1,130	7.37%	35.46%	\$30		
2015	\$62	\$418	\$457	\$141	\$1,090	7.37%	35.46%	\$28		
2016	\$79	\$396	\$441	\$135	\$1,051	7.37%	35.46%	\$27		
2017	\$76	\$383	\$425	\$130	\$1,014	7.37%	35.46%	\$27		
2018	\$73	\$370	\$410	\$125	\$976	7.37%	35.46%	\$26		
2019	\$71	\$358	\$395	\$120	\$944	7,37%	35.46%	\$25		
2020	\$69	\$346	\$361	\$115	\$911	7.37%	35.46%	\$24		
2021	\$67	\$335	\$387	\$110	\$679	7.37%	35.46%	\$23		
2022	\$65	\$324	\$354	\$106	\$849	7.37%	35.46%	\$22		
2023	\$63	\$313	\$341	\$102	\$819	7.37%	35.46%	\$21		
2024	\$61	\$303	\$329	\$98	\$791	7.37%	35.46%	\$21		
2025	\$59	\$293	\$317	\$94	\$763	7.37%	35.46%	\$20		
2026	\$57	\$283	\$306	\$90	\$736	7.37%	35.46%	\$19		
2027	\$55	\$274	\$295	\$66	\$710	7.37%	35.46%	519		
2028	\$53	\$265	\$284	\$63	\$685	7.37%	35.45%	\$18		

			Incres	mental Custo	mer Costs			
1	2	3	4	5=3*4	- 6	7	8# 6* 7	5+8
	Monthly	Armusi	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$3.18	\$38	35.46%	\$13.48	\$9.92	35.46%	\$4	\$17
2010	\$3.21	\$39	35.48%	\$13.63	\$10.02	35.46%	\$4	\$17
2011	\$3.24	\$39	35.46%	\$13,63	\$10.12	35.46%	\$4	\$17
2012	\$3,28	\$39	35,46%	\$13.83	\$10.22	35.46%	\$4	\$17
2013	\$3.31	\$40	35.46%	\$14.18	\$10.32	35.48%	\$4	\$16
2014	\$3.34	\$40	35.48%	\$14.18	\$10.43	35.46%	\$4	\$16
2015	\$3.38	\$41	35.48%	\$14.54	\$10.53	35,46%	\$4	\$16
2016	\$3.41	\$41	35.46%	\$14,54	\$10.64	35.48%	\$4	\$18
2017	\$3.44	\$41	35,48%	\$14.54	\$10.74	35.40%	\$4	\$18
2018	\$3,48	\$42	35.46%	\$14.89	\$10.65	35.46%	\$4	\$19
2019	\$3.51	\$42	35.46%	\$14.69	\$10.98	35.48%	\$4	\$19
2020	\$3.55	543	35.46%	\$15.25	\$11,07	35,46%	\$4	\$19
2021	\$3.56	\$43	35.46%	\$15,25	\$11.18	35.46%	\$4	\$19
2022	\$3.52	\$43	35.48%	\$15.25	\$11.29	35.46%	\$4	\$19
2023	\$3.60	\$44	35.48%	\$15,80	\$11.40	35.46%	\$4	\$20
2024	\$3.89	\$44	35,48%	\$15.80	\$11.52	35,46%	\$4	\$20
2025	\$3.73	\$45	35.48%	\$15.98	\$11.83	35.46%	\$4	\$20
2028	\$3,77	\$45	35,40%	\$15,96	\$11.75	35.46%	54	\$20
2027	\$3.BO	\$46	35,46%	\$16.31	\$11,87	35.46%	\$4	521
2028	\$3.84	\$45	35.46%	\$16.31	\$11.98	35.46%	\$4	\$21

	Gas C	osts		
11	2	3	2'3	
	Therms	Per Therm	Gas Supply	
Year		Supply Cost	Cost	
2009	150	1,0200	\$153	
2010	150	\$1.0302	\$165	
2011	150	\$1,0405	\$156	
2012	150	\$1.0509	\$158	
2013	150	\$1 0614	\$159	
2014	150	\$1.0720	\$161	
2015	150	\$1.0828	\$162	
2018	150	\$1,0936	\$164	
2017	150	\$1,1045	\$166	
2018	150	\$1,1156	\$167	
2019	150	\$1.1267	\$169	
2020	150	\$1.1380	\$171	
2021	150	\$1,1494	\$172	
2022	150	\$1.1609	\$174	
2023	150	\$1,1725	\$176	
2024	150	\$1,1842	\$178	
2025	150	\$1.1980	\$179	
2026	150	\$1,2080	\$181	
2027	150	\$1.2201	\$183	
2028	150	\$1,2323	\$185	

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Heating System

	Incremental	incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$ 93	\$182	\$ 72	\$347	\$182	\$40	\$19	\$362.98	\$604
2010	\$93	\$183	\$72	\$349	\$183	\$39	\$20	\$12.98	\$255
2011	\$93	\$185	\$72	\$351	\$185	\$37	\$20	\$12.98	\$255
2012	\$93	\$187	\$72	\$353	\$187	\$36	\$20	\$12.98	\$256
2013	\$93	\$189	\$72	\$355	\$189	\$35	\$20	\$12.98	\$257
2014	\$93	\$191	\$72	\$356	\$191	\$3 3	\$20	\$12.98	\$258
2015	\$93	\$193	\$72	\$358	\$193	\$32	\$21	\$12.98	\$259
2016	\$93	\$195	\$72	\$360	\$195	\$31	\$21	\$12.98	\$260
2017	\$93	\$197	\$72	\$362	\$197	\$30	\$21	\$12.98	\$260
2018	\$93	\$199	\$72	\$364	\$199	\$29	\$21	\$12.98	\$262
2019	\$93	\$201	\$72	\$36 6	\$201	\$28	\$21	\$12.98	\$263
2020	\$93	\$203	\$72	\$368	\$203	\$27	\$22	\$12.98	\$264
2021	\$ 93	\$205	\$72	\$370	\$205	\$26	\$22	\$12.98	\$265
2022	\$93	\$207	\$72	\$372	\$207	\$25	\$22	\$12.98	\$267
2023	\$93	\$209	\$72	\$374	\$209	\$24	\$22	\$12.98	\$268
2024	\$93	\$211	\$72	\$376	\$211	\$23	\$22	\$12.98	\$269
2025	\$93	\$213	\$72	\$379	\$213	\$23	\$23	\$12.98	\$271
2026	\$93	\$215	\$72	\$381	\$215	\$22	\$23	\$362.98	\$623
2027	\$93	\$217	\$72	\$383	\$217	\$21	\$23	\$12.98	\$274
2028	\$93	\$219	\$72	\$385	\$219	\$20	\$23	\$12.98	\$276

Present Value of Benefits

\$3,541

Present Value of Costs

\$2,969

Benefit/Cost Ratio

1.19

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type	
 Heating System	

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Mein	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Mean	3.30%
Gas Customer Charge Escalator	0%	Depreciation Rale - Service Line	3.60%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter	4.00%

Table 1			
	Revenue - I	Energy Char	ge
1	2	3	2*3
Year	Therms	Base Rate	Total Charge
2009	178	\$0.5245	\$93
2010	178	\$0.5245	\$93
2011	178	\$0.5245	\$93
2012	178	\$0.5245	\$93
2013	178	\$0.5245	\$93
2014	178	\$0.5245	\$93
2015	176	\$0.5245	\$93
2016	178	\$0.5245	\$93
2017	178	\$0.5245	\$93
2018	178	\$0.5245	\$93
2019	178	\$0.5245	\$93
2020	178	\$0.5245	\$83
2021	178	\$0.5245	\$B3
2022	178	\$0.5245	\$93
2023	178	\$0.5245	\$93
2024	178	\$0.5245	\$93
2025	178	\$0.5245	\$93
2026	178	\$0.5245	\$93
2027	178	\$0.5245	\$93
2028	178	\$0.5245	\$93

Revenue - Cost of Gas									
11	2	4	2*3						
Year	Therms	Fuel Rate	Total Charge						
2009	176	\$1,0200	\$182						
2010	178	\$1.0302	\$183						
2011	178	\$1,0405	\$185						
2012	178	\$1,0509	\$187						
2013	178	\$1.0614	\$189						
2014	178	\$1.0720	\$191						
2015	178	\$1.0828	\$193						
2016	178	\$1,0936	\$195						
2017	178	\$1.1045	\$197						
2018	178	\$1,1156	\$199						
2019	178	\$1.1287	\$201						
2020	178	\$1,1380	\$203						
2021	178	\$1.1494	\$205						
2022	178	\$1,1608	\$207						
2023	178	\$1.1725	\$209						
2024	178	\$1.1842	\$211						
2025	178	\$1,1960	\$213						
2026	178	\$1.2080	\$215						
2027	178	\$1.2201	\$217						
2028	178	\$1.2323	\$219						

Revenue - Customer Charge									
_1	22	3	44	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customer	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$15.00	\$180.00	40.18%	\$72					
2010	\$15.00	\$180.00	40 18%	\$72					
2011	\$15,00	\$180.00	40.18%	\$72					
2012	\$15.00	\$180.00	40.18%	\$72					
2013	\$15,00	\$180.00	40.18%	\$72					
2014	\$15.00	\$180.00	40 18%	\$72					
2015	\$15.00	\$180.00	40.18%	\$72					
2018	\$15.00	\$180.00	40,18%	\$72					
2017	\$15,GB	\$180.00	40.18%	\$72					
2018	\$15.00	\$180.00	40.18%	\$72					
2019	\$15.00	\$180.00	40.18%	\$72					
2020	\$15.00	\$180.00	40.18%	\$72					
2021	\$15.00	\$180.90	40.18%	\$72					
2022	\$15.00	\$180.00	40.18%	\$72					
2023	\$15.00	\$180.00	40.18%	\$72					
2024	\$15.00	\$180.00	40.18%	\$72					
2025	\$15.00	\$180.00	40.18%	572					
2026	\$15.00	\$180.00	40.18%	\$72					
2027	\$15.00	\$190.00	40.16%	\$72					
2028	\$15.00	\$180.00	40.18%	\$72					

			inves	tment Car	rying Costs			
1	2	3	4	5	6	7	8	6*7*6
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$570	\$180	\$1,350	7.37%	40.18%	\$40
2010	\$97	\$484	\$549	\$173	\$1,303	7.37%	40.18%	\$39
2011	\$94	\$468	\$529	\$188	\$1,257	7.37%	40,18%	\$37
2012	\$91	\$463	\$510	\$159	\$1,213	7.37%	40.18%	\$36
2013	\$88	\$438	\$492	\$ 153	\$1,171	7.37%	40.18%	\$35
2014	\$65	\$424	\$474	\$147	\$1,130	7.37%	40.18%	\$33
2015	\$82	\$410	\$457	\$141	\$1,090	7.37%	40.18%	\$32
2016	\$79	\$398	\$441	\$135	\$1,051	7.37%	40.18%	\$31
2017	\$76	\$383	\$425	\$130	\$1,014	7.37%	40.18%	\$30
2018	\$73	\$370	\$410	\$125	\$978	7.37%	40.18%	\$29
2019	\$71	\$358	\$395	\$120	\$944	7.37%	40.18%	\$29
2020	\$69	\$346	\$381	\$115	\$911	7.37%	40.18%	\$27
2021	\$67	\$335	\$367	\$110	\$870	7.37%	40.18%	\$26
2022	\$65	\$324	\$354	\$ 106	\$849	7.37%	40.18%	\$25
2023	\$63	\$313	\$341	\$102	\$819	7.37%	40.18%	\$24
2024	\$61	\$303	\$326	\$68	\$791	7.37%	40.18%	\$23
2025	\$59	\$293	\$317	\$94	\$763	7.37%	40.18%	\$23
2028	\$57	\$283	\$306	\$90	\$736	7,37%	40.18%	\$22
2027	\$55	\$274	\$295	\$98	\$710	7.37%	40.18%	\$21
2028	\$53	\$288	\$284	\$63	\$695	7.37%	40.18%	\$20

			Inc	remental Cus	tomer Cost	ts		
1	2	3	4	5=3*4	- 6	7	6≃6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Thorns To	Annual Ratio	Total Increments
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2000	\$3.18	\$38	40.18%	\$15.27	\$9.92	40.18%	\$4	\$19
2010	\$3.21	\$39	40.16%	\$15.87	\$10.02	40.18%	\$4	\$20
2011	\$3.24	\$39	40,18%	\$15.67	\$10.12	40.18%	\$4	\$20
2012	\$3.28	\$39	40.18%	\$15.67	\$10.22	40.18%	\$4	\$20
2013	\$3.31	\$40	40.18%	\$16.07	\$10.32	40.18%	\$4	\$20
2014	\$3.34	\$40	40.18%	\$16.07	\$10.43	40.18%	\$4	\$20
2015	\$3.38	\$41	40.18%	\$16.47	\$10.53	40.18%	54	\$21
2016	\$3.41	\$41	40.18%	\$16,47	\$10.64	40.18%	\$4	\$21
2017	\$3.44	\$41	40.10%	\$18.47	\$10,74	40.18%	\$4	\$21
2018	\$3.48	\$42	40.18%	\$16.68	\$10.85	40.18%	\$4	\$21
2019	\$3.51	\$42	40.18%	\$16.68	\$10.98	40.18%	\$4	521
2020	\$3.55	\$43	40.18%	\$17.28	\$11.07	40.18%	\$4	\$22
2021	\$3.58	\$43	40.18%	\$17.28	\$11.18	40.16%	\$4	\$22
2022	\$3.62	\$43	40.16%	\$17.28	\$11.29	40.18%	\$5	\$22
2023	\$3.66	544	40.16%	\$17.68	\$11.40	40.18%	\$5	\$22
2024	\$3.66	\$44	40.18%	\$17.88	\$11.52	40.19%	\$5	\$22
2025	\$3.73	\$45	40.18%	\$18.08	\$11.63	40.18%	\$5	\$23
2026	\$3.77	\$45	40.18%	\$18.08	\$11.75	40.18%	\$5	\$23
2027	\$3.60	\$46	40.18%	\$18.48	\$11,87	40.18%	\$5	\$23
2028	\$3.84	546	40.18%	\$18,48	\$11.99	40.18%	\$5	\$23

Gas Costs								
1	2	3	2*3					
	Therms	Per Therm	Gas Supply					
Year		Supply Cost	Cost					
2009	178	\$1.0200	\$182					
2010	178	\$1.0302	\$183					
2011	178	\$1,0405	\$185					
2012	178	\$1 0509	\$187					
2013	178	\$1.0614	\$189					
2014	178	\$1.0720	\$191					
2015	178	\$1.0828	\$193					
2016	178	\$1.0936	\$195					
2017	178	\$1.1945	S197					
2018	178	\$1,1158	\$199					
2019	178	\$1.1267	\$201					
2020	178	\$1 1380	\$203					
2021	178	\$1 1494	\$205					
2022	178	\$1,1609	\$207					
2023	178	\$1.1725	\$209					
2024	178	\$1 1842	\$211					
2025	178	\$1,1960	\$213					
2026	17B	\$1.2080	\$215					
2027	178	\$1.2201	\$217					
2020	179	\$4.2929	£210					

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Clothes Drying

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$26	\$51	\$20	\$98	\$ 51	\$11	\$5	\$103.65	\$171
2010	\$26	\$52	\$20	\$98	\$52	\$11	\$6	\$3.65	\$72
2011	\$26	\$52	\$20	\$99	\$52	\$10	\$6	\$3.65	\$72
2012	\$26	\$53	\$20	\$99	\$53	\$10	\$ 6	\$3.65	\$72
2013	\$26	\$53	\$20	\$100	\$53	\$10	\$6	\$3,65	\$72
2014	\$26	\$ 54	\$20	\$100	\$54	\$9	\$6	\$3,65	\$72
2015	\$26	\$54	\$20	\$101	\$54	\$9	\$6	\$3.65	\$73
2016	\$26	\$ 55	\$20	\$10 1	\$55	\$9	\$6	\$3.65	\$73
2017	\$26	\$55	\$20	\$102	\$5 5	\$8	\$6	\$3.65	\$73
2018	\$26	\$56	\$20	\$102	\$56	\$8	\$6	\$3.65	\$74
2019	\$26	\$ 56	\$20	\$103	\$56	\$8	\$6	\$3,65	\$74
2020	\$26	\$ 57	\$20	\$103	\$57	\$8	\$6	\$3.65	\$74
2021	\$26	\$ 57	\$20	\$104	\$ 57	\$7	\$6	\$103.65	\$175
2022	\$26	\$58	\$20	\$105	\$58	\$ 7	\$6	\$3.65	\$75
2023	\$26	\$ 59	\$20	\$105	\$59	\$ 7	\$6	\$3.65	\$75
2024	\$26	\$5 9	\$20	\$106	\$59	\$ 7	\$6	\$3.65	\$76
2025	\$26	\$60	\$20	\$106	\$60	\$6	\$6	\$3.65	\$76
2026	\$26	\$60	\$20	\$107	\$60	\$ 6	\$6	\$3.65	\$77
2027	\$26	\$6 1	\$20	\$108	\$61	\$6	\$ 7	\$3.65	\$77
2028	\$26	\$62	\$20	\$108	\$62	\$6	\$7	\$3.65	\$78

Present Value of Benefits

\$995

Present Value of Costs

\$848

Benefit/Cost Ratio

1.17

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance	Туре
Ciothes D	rying

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Mein	3.30%
Gas Energy Charge Escalator	0%	Deproclation Rate - Development Main	3.30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3,60%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter	4.00%

Table 1							
R	Revenue - Energy Charge						
. 1	2	3	2*3				
Year	Therms	Base Rate	Total Charge				
2009	50	\$0.5245	\$26				
2010	50	\$0.5245	\$26				
2011	50	\$0.5245	\$26				
2012	50	\$0.5245	\$26				
2013	50	\$0,5245	\$26				
2014	50	\$0.5245	\$26				
2015	50	\$0.5245	\$26				
2016	50	\$0.5245	\$26				
2017	50	\$0.5245	\$26				
2018	50	\$0,5245	\$26				
2019	50	\$0.5245	\$26				
2020	50	\$0.5245	\$26				
2021	50	\$0.5245	\$26				
2022	50	\$0.5245	\$26				
2023	50	\$0.5245	\$26				
2024	50	\$0.5245	\$26				
2025	50	\$0.5245	\$26				
2026	50	\$0.5245	\$26				
2027	.50	\$0.5245	\$26				
2028	50	\$0.5245	\$26				

	Revenue - Co	ost of Gas	
11	2	4	2'3
Year	Therms	Fuel Rate	Total Charge
2009 2010	50 50	\$1.0200	\$51
	50	\$1.0302	\$52
2011		\$1.0405	\$52
2012	50	\$1.0509	\$53
2013	50	\$1.0614	\$53
2014	50	\$1.0720	\$54
2015	50	\$1,0828	\$54
2016	50	\$1.0936	\$55
2017	50	\$1.1045	\$55
2018	50	\$1.1158	\$56
2019	50	\$1.1287	356
2020	50	\$1.1300	\$57
2021	50	\$1.1404	\$57
2022	50	\$1,1609	\$58
2023	50	\$1.1725	3.59
2024	50	\$1.1842	\$69
2025	50	\$1,1980	\$6 0
2026	50	\$1.2080	360
2027	50	\$1,2201	561
2028	50	\$1.2323	362

	2		er Charge	4-3
		3		4.3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$15.00	\$190.00	11,29%	\$20
2010	\$15.00	\$180,00	11.29%	\$20
2011	\$15.00	\$180,00	11.29%	\$20
2012	\$15,00	\$180,00	11,29%	\$20
2013	\$15.00	\$180.D0	11.29%	\$20
2014	\$15.00	\$180.00	11.29%	\$20
2015	\$15.00	\$180.00	11,29%	320
2016	\$15.00	\$180.00	11.29%	\$20
2017	\$15.00	\$180.00	11,29%	\$20
2016	\$15.00	\$180.00	11.29%	\$20
2019	\$15.00	\$180.00	11.29%	\$20
2020	\$15.00	\$180.00	11.29%	\$20
2021	\$15.00	\$180.00	11.29%	\$20
2022	\$15.00	\$180.00	11.29%	\$20
2023	\$15.00	\$180.00	11.29%	\$20
2024	\$15.00	\$180.00	11.29%	320
2025	\$15,00	\$180,00	11.29%	\$20
2026	\$15,00	\$180.00	11.29%	\$20
2027	\$15.00	\$180.00	11,29%	\$20
2028	\$15.00	\$180.00	11.29%	\$20

			inve	stment Ca	rrying Costs			
1	2	3	4	5	6	7	В	6*7*8
	Supply	Development	Service		Yotal	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$670	\$180	\$1,350	7.37%	11.29%	\$11
2010	\$97	\$484	\$549	\$173	\$1,303	7.37%	11.29%	511
2013	\$94	\$46B	\$529	\$196	\$1,257	7.37%	11.29%	\$10
2012	\$91	\$453	\$510	\$159	\$1,213	7.37%	11.29%	\$10
2013	\$68	\$438	\$492	\$153	\$1,171	7.37%	11.29%	\$10
2014	\$85	\$424	\$474	\$147	\$1,130	7.37%	11.29%	\$9
2015	\$82	\$410	\$457	\$141	\$1,090	7.37%	11.29%	59
2016	\$79	\$398	\$441	\$135	\$1,051	7.37%	11.29%	\$9
2017	\$76	\$383	\$425	\$130	\$1,014	7.37%	11.29%	\$8
2018	\$73	\$370	\$410	\$125	\$978	7.37%	11.29%	\$8
2019	\$71	\$358	\$395	\$120	\$944	7.37%	11.29%	\$6
2020	\$69	\$346	\$381	\$115	\$911	7.37%	11.29%	88
2021	\$67	\$335	\$367	\$110	\$87.9	7.37%	11.29%	\$7
2022	\$65	\$324	\$354	\$106	\$840	7.37%	11.29%	\$7
2023	\$63	\$313	\$341	\$102	\$819	7.37%	11.29%	\$7
2024	\$81	\$303	\$329	\$98	\$791	7.37%	11.29%	\$7
2025	\$59	\$293	\$317	\$94	\$763	7.37%	11.29%	26
2026	\$57	\$283	\$306	\$90	\$736	7.37%	11.29%	\$6
2027	\$55	\$274	\$295	\$86	\$710	7.37%	11.29%	56
2028	\$53	\$265	\$284	\$83	\$685	7.37%	11.29%	\$6

			incre	emental Custo	omer Costs			
1	2	3	4	5=3*4	6	7	8=6*7	8+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	D&M Cost	Adm. & O&M Cust
2009	\$3.18	\$38	11.29%	\$4.29	\$9.92	11.29%	\$ 1	\$5
2010	\$3.21	\$39	11.29%	\$4.40	\$10.02	11.29%	\$ ⊤	36
201t	\$3.24	\$39	11.29%	\$4.40	\$10.12	11 29%	\$1	\$6
2012	\$3.26	\$39	11.29%	\$4.40	\$10.22	11.29%	\$1	\$6
2013	\$3.31	\$40	11.29%	\$4.51	\$10.32	11.29%	\$1	\$6
2014	\$3.34	\$40	11.29%	\$4.51	\$10.43	11.29%	51	\$6
2015	\$3,38	\$41	11.29%	\$4.83	\$10.53	11.29%	\$1	\$6
2016	\$3.41	\$41	11.29%	\$4.63	\$10.64	11.29%	\$1	\$6
2017	\$3.44	\$41	11,29%	\$4.63	\$10.74	11.29%	\$1	\$6
2018	\$3,48	\$42	11.29%	\$4.74	\$10.85	11.29%	\$1	\$6
2019	\$3.51	\$42	11.29%	\$4.74	\$10.98	11.29%	\$1	\$6
2020	\$3.55	543	11,29%	\$4.85	\$11.07	11,29%	\$1	\$6
2021	\$3.58	\$43	11.29%	\$4.85	\$11,18	11.29%	\$1	\$6
2022	\$3.62	\$43	11,29%	\$4.85	\$17,29	11.29%	\$1	\$6
2023	\$3,86	\$44	11.29%	\$4,97	511.40	11,29%	\$1	\$ 6
2024	\$3.69	\$44	11.29%	\$4.97	\$11,52	11,29%	\$1	\$6
2025	\$3,73	\$45	11.29%	\$5.06	\$11.63	11,29%	\$1	\$6
2026	\$3,77	\$45	11.29%	\$5.08	\$11.75	11.29%	\$1	\$6
2027	\$3.80	\$46	11.29%	\$5,19	\$11.67	11.20%	31	\$7
2028	\$3.84	346	11.29%	\$5.19	\$11.98	11.29%	\$1	\$7

	Gas	Costs	
11	2	3	5.3
	Therms	Per Therm	Gas Supply
Year		Supply Cost	Cost
2009	50	1.0200	\$51
2010	50	\$1.0302	\$52
2011	.50	\$1.0405	\$52
2012	50	\$1,0509	\$53
2013	50	\$1,0614	\$53
2014	50	\$1.0720	354
2015	50	\$1.0828	\$54
2018	50	\$1,0938	\$55
2017	50	\$1 1045	\$55
2018	50	\$1.1156	\$56
2019	50	\$1.1267	\$56
2020	50	\$1 1380	£57
2021	50	\$1,1494	\$ 57
2022	50	\$1,1809	\$58
2023	50	\$1.1725	\$59
2024	50	\$1.1842	\$59
2025	50	\$1,1960	\$80
2026	50	\$1,2080	\$60
2027	50	\$1,2201	361
2028	50	\$1.2323	\$82

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Cooking

	Incremental Revenue	Incremental Revenue	Incremental Revenue	Total Gas	Gas Supply	Investment Carrying	Incremental Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$24	\$46	\$18	\$88	\$46	\$10	\$5	\$103.29	\$164
2010	\$24	\$46	\$18	\$88	\$46	\$10	\$ 5	\$3.29	\$64
2011	\$24	\$47	\$18	\$89	\$47	\$9	\$5	\$3.29	\$65
2012	\$24	\$47	\$18	\$89	\$47	\$9	\$ 5	\$3.29	\$65
2013	\$24	\$48	\$18	\$90	\$48	\$9	\$5	\$3.29	\$65
2014	\$24	\$48	\$18	\$90	\$48	\$8	\$5	\$3.29	\$65
2015	\$24	\$49	\$18	\$ 91	\$49	\$8	\$ 5	\$3.29	\$65
2016	\$24	\$49	\$18	\$ 91	\$49	\$8	\$5	\$3.29	\$66
2017	\$24	\$50	\$18	\$92	\$50	\$8	\$5	\$3.29	\$66
2018	\$24	\$50	\$18	\$92	\$50	\$7	\$5	\$3.29	\$66
2019	\$24	\$51	\$18	\$93	\$51	\$7	\$5	\$3.29	\$66
2020	\$24	\$ 51	\$18	\$93	\$ 51	\$7	\$ 5	\$3.29	\$67
2021	\$24	\$52	\$18	\$94	\$52	\$7	\$6	\$3.29	\$67
2022	\$24	\$52	\$18	\$94	\$52	\$6	\$6	\$3.29	\$67
2023	\$24	\$53	\$18	\$95	\$53	\$6	\$6	\$103.29	\$168
2024	\$24	\$53	\$18	\$95	\$53	\$6	\$6	\$3.29	\$68
2025	\$24	\$54	\$18	\$96	\$54	\$6	\$6	\$3.29	\$69
2026	\$24	\$54	\$18	\$96	\$54	\$6	\$6	\$3.29	\$69
2027	\$24	\$55	\$18	\$97	\$55	\$5	\$6	\$3.29	\$69
2028	\$24	\$55	\$18	\$97	\$55	\$5	\$6	\$3.29	\$70

Present Value		Present Value	
of Benefits	\$895	of Costs	\$771

Benefit/Cost		
Ratio	1.16	
		4

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance	Туре	
Cookin	g	

Fuel Rate Escalator	1.0%	Depreciation Rata - Supply Main	3.30%
Base Rate Escalator	0%	Depreciation Rate - Development Main	3.30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3,60%
O&M/Inflation Escalator	1.0%	Deposition Rate - Mater	4.00%

Table 1s

ole 1			
F	Revenue -	Energy Cha	rge
1	2	3	2-3
Year	Therms	Base Rate	Total Charge
2009	45	\$0.5245	\$24
	- :		

,	- Energy Cha	rge	Revenue - Cost of Gas	
	3	2-3	1 2 4	_
s Base Rate Total Charge	Total Chame		Year Therms Fuel Rate	Total (
\$0.5245 \$24			2009 45 \$1.0200	\$
\$0.5245 \$24			2010 45 \$1.0302	•
\$0,5245 \$24			2011 45 \$1,0405	5
\$0,5245 \$24			2012 45 \$1.0509	3
\$0.5245 \$24	\$24	I	2013 45 \$1.0614	
\$0.5245 \$24	\$24		2014 45 \$1.0720	
\$0.5245 \$24	\$24		2015 45 \$1.0826	84
\$0.5245 \$24	\$24		2016 45 \$1.0936	
\$0.5245 \$24	\$24	Ī	2017 45 \$1,1045	34
\$0.5245 \$24	\$24	1	2018 45 \$1.1156	\$4
\$0.5245 \$24	\$24		2019 45 \$1.1267	3.5
\$0,5245 \$24	\$24		2020 45 \$1,1380	\$5
\$0.5245 \$24	\$24		2021 45 \$1,1494	\$:
\$ 0,5245 \$2 4			2022 45 \$1.1609	\$5
\$0.5245 \$24	\$24		2023 45 \$1.1725	\$4
\$0.5245 \$24			2024 45 \$1.1842	\$5
\$0.5245 \$24			2025 45 \$1.1960	3:
\$0.5245 \$24			2026 45 \$1.2080	\$
\$0.5245 \$24			2027 45 \$1.2201	\$
\$0.5245 \$24	\$24	1	2028 45 \$1 2323	\$

Revenue - Customer Charge								
1	2	3	44	4*3				
	Monthly		Rutio Therms					
	Customer	Annual Customer	To Total	Prorated Annual				
Year	Charge	Charge	Consumed	Customer Charge				
2009	\$15.00	\$180.00	10.18%	\$18				
2010	\$15.00	\$180,00	10.16%	\$18				
2011	\$15.00	\$180.00	10.16%	\$18				
2012	\$15.00	\$186.00	10.18%	\$18				
2013	\$15.00	\$160.00	10.16%	\$18				
2014	\$15.00	\$180.00	10.16%	\$18				
2015	\$15.00	\$180,00	10.18%	\$18				
2016	\$15.00	\$180.00	10.16%	\$18				
2017	\$15.00	\$180,00	10,16%	\$18				
2018	\$15.00	\$180.00	10.16%	318				
2019	\$15,00	\$180.00	10,16%	\$18				
2020	\$15.00	\$180.00	10.16%	518				
2021	\$15.00	\$190.00	10.16%	\$18				
2022	\$15.00	\$180.00	10.16%	\$18				
2023	\$15.00	\$180.00	10.16%	\$18				
2024	\$15,60	\$180.00	10.16%	\$18				
2025	\$15.00	\$160,00	10.16%	\$18				
2026	\$15.00	\$160,00	10.16%	\$18				
2027	\$15.00	\$180.00	10.16%	\$18				
2028	\$15.00	\$180.00	10.16%	\$18				

			Inve	stment Ca	rrying Costs			
1	2	3	4		6	7	. 8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carryina Coa
2009	\$100	\$50G	\$570	\$160	\$1,350	7.37%	10.16%	\$10
2010	\$97	\$464	\$540	\$173	\$1,303	7.37%	10.16%	\$10
2011	\$94	\$468	\$529	\$166	\$1,257	7.37%	10.16%	\$9
2012	\$91	\$453	\$510	\$159	\$1,213	7.37%	10.16%	29
2013	\$86	\$438	\$402	\$153	\$1,171	7.37%	10.16%	39
2014	\$85	\$424	\$474	\$147	\$1,130	7.37%	10 16%	\$8
2015	\$62	\$410	\$457	\$141	\$1,090	7.37%	10.18%	\$8
2016	\$79	\$398	5441	\$135	\$1,051	7.37%	10.16%	5 8
2017	\$76	5363	\$425	\$130	\$1,014	7.37%	10.16%	26
2018	\$73	\$370	\$410	\$125	\$978	7.37%	10.18%	\$7
2019	\$71	\$358	\$395	\$120	\$944	7.37%	10,16%	\$7
2020	\$69	\$340	\$361	\$115	\$911	7.37%	10.16%	\$7
2021	\$67	\$335	\$367	\$110	\$679	7.37%	10.18%	\$7
2022	\$65	\$324	\$354	\$105	\$849	7.37%	10.16%	82
2023	\$83	5313	\$341	\$102	\$819	7.37%	10.18%	\$6
2024	\$61	\$303	\$329	596	\$791	7.37%	10.16%	\$8
2025	359	\$293	\$317	\$94	\$763	7.37%	10.18%	\$6
2026	\$57	\$283	\$308	\$90	\$736	7.37%	10.16%	\$6
2027	\$55	5274	\$295	\$66	\$710	7.37%	10.16%	\$5
2028	\$53	\$265	\$284	\$83	\$685	7.37%	10.16%	\$5

Incremental Customer Costs									
1	2	3	4	5×3*4	6	7	9=6*7	5+8	
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Thorns To	Annuel Ratio	Total increments	
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cast	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cos	
2009	\$3,18	\$38	10.18%	\$3.86	\$9.92	10,16%	\$1	\$5	
2010	\$3.21	\$39	10.16%	\$3.96	\$10.02	10.18%	\$1	\$5	
2011	\$3.24	\$39	10.18%	\$3.96	510.12	10.16%	\$1	\$5	
2012	\$3.26	\$39	10.16%	\$3.96	\$10.22	10.18%	\$1	\$5	
2013	\$3.31	\$40	10.16%	\$4.06	\$10.32	10,18%	\$1	35	
2014	\$3.34	\$40	10.18%	\$4.06	\$10.43	10, 18%	\$1	\$5	
2015	\$3.38	\$41	10.16%	\$4.16	\$10.53	10.16%	3.1	\$5	
2016	\$3.41	\$41	10.18%	\$4.18	\$10,84	10.16%	\$1	\$5	
2017	\$3.44	\$41	10.16%	\$4.16	\$10.74	10.16%	\$1	\$5	
2018	\$3.48	\$42	10.18%	\$4.27	\$10.65	10.16%	\$1	\$5	
2019	\$3.51	\$42	10.18%	\$4.27	\$10.98	10.16%	\$1	\$5	
2020	\$3.55	\$43	10.18%	\$4.37	\$11.07	10.16%	\$1	\$5	
2021	\$3.58	\$43	10.18%	\$4,37	\$11.19	10.16%	\$1	\$6	
2022	\$3.62	\$43	10.16%	\$4,37	\$11.29	10.16%	\$1	\$6	
2023	\$3.66	544	10.16%	\$4.47	\$11.40	10 16%	51	\$6	
2024	\$3.69	\$44	10,16%	\$4.47	\$11.52	10.16%	\$1	56	
2025	\$3.73	\$45	10.16%	\$4.57	\$11.63	10.18%	51	\$6	
2026	\$3.77	\$45	10,16%	\$4 57	\$11.75	10.16%	\$1	\$6	
2027	\$3,80	\$46	10.16%	\$4.67	\$11.87	10,18%	51	\$6	
2028	\$3.84	\$46	10.16%	\$4.67	\$11.98	10.16%	\$1	\$6	

	Gas	Costs	
1	2	3	2.3
	Therms	Commodity Gas	Gas Supply
Year		Supply Cost	Cost
2009	45	1.0200	\$46
2010	45	\$1.0302	\$46
2011	45	\$1.0405	\$47
2012	45	\$1.0509	\$47
2013	45	\$1.0614	\$48
2014	45	\$1.0720	\$48
2015	45	\$10628	\$49
2016	45	\$1.0936	\$49
2017	45	\$1 1045	\$50
2018	45	\$1,1158	\$50
2019	45	\$1,1267	551
2020	45	\$1,1380	\$51
2021	45	\$1 1494	552
2022	45	\$1,1609	\$52
2023	45	\$1,1725	\$53
2024	45	\$1.1842	\$53
2025	45	\$1 1960	\$54
2026	45	\$1.2080	\$54
2027	45	\$1 2201	\$55
2028	45	\$1 2323	\$55

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type
Storage Tank Water Heating

			Benefit	3						Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$508	\$350	\$60	\$918	0	\$0	0	\$350	\$60	\$191	\$98	\$76	\$775
2010	2	\$509	0	\$61	\$570	0	\$0	0		\$61	\$193	\$98	\$76	\$427
2011	3	\$ 511	0	\$61	\$572	0	\$0	0		\$61	\$195	\$98	\$76	\$430
2012	4	\$512	0	\$ 62	\$574	0	\$0	0		\$62	\$197	\$98	\$76	\$432
2013	5	\$514	0	\$62	\$576	0	\$ 0	0		\$62	\$198	\$98	\$76	\$435
2014	6	\$ 515	0	\$63	\$ 578	0	\$0	0		\$63	\$200	\$98	\$76	\$438
2015	7	\$ 517	0	\$64	\$580	0	\$0	0		\$64	\$202	\$98	\$76	\$440
2016	8	\$518	0	\$64	\$582	0	\$0	0		\$ 64	\$204	\$98	\$76	\$443
2017	9	\$519	0	\$ 65	\$584	0	\$0	0		\$65	\$207	\$98	\$76	\$448
2018	10	\$521	350	\$66	\$9 37	421	(\$659)	239		\$66	\$209	\$98	\$76	\$446
2019	11	\$522	0	\$66	\$589	0	\$ 0	0		\$66	\$211	\$98	\$76	\$451
2020	12	\$524	0	\$67	\$591	0	\$ 0	0		\$67	\$213 '	\$98	\$76	\$454
2021	13	\$525	0	\$68	\$59 3	0	\$ 0	0		\$68	\$215	\$98	\$76	\$457
2022	14	\$527	0	\$68	\$595	0	\$ 0	0		\$68	\$217	\$98	\$76	\$459
2023	15	\$528	0	\$69	\$597	0	\$0	0		\$69	\$219	\$98	\$76	\$462
2024	16	\$530	0	\$70	\$599	0	\$0	0		\$70	\$221	\$98	\$76	\$465
2025	17	\$531	0	\$70	\$601	0	\$0	0		\$70	\$224	\$98	\$76	\$468
2026	18	\$533	0	\$71	\$604	0	\$0	0		\$71	\$226	\$98	\$76	\$471
2027	19	\$534	0	\$72	\$606	0	\$0	0		\$72	\$228	\$98	\$ 76	\$474
2028	20	\$535	00	\$72	\$608	0	\$0	0		\$72	\$230	\$98	\$76	\$477

Present Value of Benefits \$6,206

Present Value of Costs	\$4,677
Benefit/Cost	1.33

Ratio

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Storage Tank Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Propane Cost - Table 1							
Year	Cost Per Galton	Annual Gations	Tax Rate	Propase Cost				
Α	В	c	D	B*C*(1+D)				
2009	\$2.5460	186	7.5%	\$608				
2010	\$2.5533	186	7.5%	\$609				
2011	\$2.5605	186	7.5%	\$811				
2012	\$2.5676	186	7.5%	\$512				
2013	\$2.5750	186	7.5%	\$814				
2014	\$2.5823	186	7.5%	\$515				
2015	\$2.5896	186	7.5%	\$517				
2016	\$2,5968	186	7.5%	\$618				
2017	\$2.6041	186	7.5%	\$519				
2019	\$2.8113	186	7.5%	\$521				
2019	\$2.6186	186	7.5%	\$622				
2020	\$2,6258	188	7.5%	\$524				
2021	\$2.6331	186	7,5%	\$525				
2022	\$2.8404	186	7.5%	\$627				
2023	\$2.6476	188	7.5%	\$628				
2024	\$2.6549	186	7.5%	\$530				
2025	\$2.6622	186	7.5%	\$531				
2026	\$2.6694	186	7.5%	\$633				
2027	\$2.6767	188	7.5%	\$634				
2028	\$2.6839	186	7.5%	\$535				

Natural Gas Supply Cost - Table 2							
Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost			
Α	В	c	D	B*C*(1+D)			
2009	\$1.0200	170	10.0%	\$191			
2010	\$1.0302	170	10.0%	\$193			
2011	\$1.6405	170	10.0%	\$198			
2012	\$1.0509	170	10.0%	\$197			
2013	\$1.0614	170	10.0%	\$198			
2014	\$1.0720	170	10.0%	\$200			
2015	\$1,0828	170	10.0%	\$202			
2016	\$1.0936	170	10.0%	\$204			
2017	\$1.1045	170	10.0%	\$207			
2018	\$1.1156	170	10.0%	\$209			
2018	\$1,1267	170	10.0%	\$211			
2020	\$1.1380	170	10.0%	\$213			
2021	\$1,1494	170	10.0%	\$215			
2022	\$1.1509	176	10.0%	\$217			
2023	\$1,1725	170	10.0%	\$219			
2024	\$1.1842	170	10.0%	\$221			
2025	\$1,1960	170	10.0%	8224			
2026	\$1.2080	170	10.0%	\$226			
2027	\$1.2201	170	10.0%	\$228			
2028	\$1.2323	170	10.0%	\$230			

Natural Gas Energy Charge - Table 3											
Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost							
Α_	В	С	D	B*C*(1+D)							
2009	\$0.5245	170	10,0%	\$98							
2010	\$0.5245	170	10.0%	\$98							
2011	\$0.5245	170	10.0%	\$88							
2012	\$0.5245	170	10.0%	\$88							
2013	\$0,5245	170	10.0%	\$98							
2014	\$0.5245	170	10.0%	\$88							
2015	\$0,5245	170	10.0%	\$98							
2016	\$0.5245	170	10.0%	\$98							
2017	\$0.5245	170	10.0%	\$98							
2018	\$0.5245	170	10.0%	\$98							
2019	\$0.5245	170	10.0%	\$98							
2020	\$0.5245	170	10.0%	\$98							
2021	\$0.5245	170	10.0%	\$98							
2022	\$0.5245	170	10.0%	\$98							
2023	\$0,5245	170	10.0%	\$98							
2024	\$0.5245	170	10.0%	\$98							
2025	\$0.5245	170	10.0%	\$98							
2026	\$0.5245	170	10.0%	\$98							
2027	\$0.5245	170	10.0%	\$95							
2028	\$0.5245	176	10.0%	\$98							

Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	<u> </u>	С	0	E	D/E	G	C*(D/E)*(1+Z)
2009	\$15,00	\$180.00	170	443	38.37%	10.0%	\$76
2010	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2011	\$15.00	\$180.00	170	443	38.37%	10.0%	\$78
2012	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2013	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2014	\$15,00	\$180.00	170	443	38.37%	10.0%	\$76
2015	\$15.00	\$180.00	170	443	38.37%	10.0%	\$78
2018	\$15,00	\$180.00	170	443	38.37%	10.0%	\$76
2017	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
018	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2019	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2020	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2021	\$15.00	\$180.00	170	443	38.37%	10.0%	\$78
2022	\$15.00	\$180.00	170	443	38.37%	10.0%	\$78
2023	\$15.00	\$180,00	170	443	38.37%	10.0%	\$76
2024	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2025	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2026	\$15.00	\$180.00	170	443	38.37%	10.0%	\$76
2027	\$15,00	\$180.00	170	443	38.37%	10.0%	\$76
2026	\$15.00	\$180,00	170	443	38.37%	10.0%	\$76

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type
Tankless Water Heating

			Benefits	3						Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Instellation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$448	\$450	\$60	\$958	\$0	\$0	\$0	\$450	\$60	\$168	\$87	\$70	\$835
2010	2	\$449	0	\$61	\$510	0	\$0	0		\$61	\$170	\$87	\$70	\$387
2011	3	\$451	0	\$61	\$512	0	\$0	0		\$61	\$172	\$87	\$7 0	\$390
2012	4	\$452	0	\$62	\$514	0	\$0	0		\$62	\$173	\$87	\$70	\$392
2013	5	\$453	0	\$62	\$516	0	\$0	0		\$62	\$175	\$87	\$70	\$394
2014	6	\$455	0	\$63	\$518	0	\$0	0		\$63	\$177	\$87	\$70	\$397
2015	7	\$456	0	\$64	\$520	0	\$ 0	0		\$64	\$179	\$87	\$70	\$399
2016	8	\$457	0	\$64	\$521	0	\$0	0		\$64	\$180	\$87	\$70	\$402
2017	9	\$458	0	\$65	\$523	0	\$0	0		\$65	\$182	\$87	\$70	\$404
2018	10	\$460	0	\$66	\$525	0	\$0	0		\$66	\$184	\$87	\$70	\$406
2019	11	\$461	0	\$66	\$527	0	\$0	0		\$66	\$186	\$87	\$7 0	\$409
2020	12	\$462	0	\$67	\$529	0	\$0	0		\$67	\$188	\$87	\$70	\$411
2021	13	\$463	0	\$66	\$531	0	\$ 0	0		\$68	\$190	\$87	\$70	\$414
2022	14	\$465	0	\$68	\$533	0	\$0	0		\$68	\$192	\$87	\$70	\$417
2023	15	\$486	0	\$69	\$536	0	\$0	0		\$ 69	\$193	\$87	\$70	\$419
2024	16	\$467	0	\$70	\$537	0	\$ 0	0		\$70	\$195	\$87	\$70	\$422
2025	17	\$469	0	\$70	\$539	0	\$0	0		\$70	\$197	\$87	\$70	\$424
2026	18	\$470	0	\$71	\$541	0	\$0	0		\$71	\$199	\$87	\$70	\$427
2027	19	\$471	0	\$72	\$543	0	\$0	0		\$72	\$201	\$87	\$70	\$430
2028	20	\$472	450	\$72	\$995	1,219	(\$1,746)	527		\$72	\$203	\$87	\$70	\$433

Present Value of Benefits	\$5,634	Present Value of Costs	\$4,363
		Reportit Cost	1 20

Ratio

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Tankless Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Propi	me Cost - Tal	ole 1			Natuari Ga	s Supply C	ost - Table 2			Natural Ga	s Energy Cl	harge - Tabl	e 3			Natı	ıral Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Them	Annual Therms	Tex Fishs	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Ye	Monthly or Gustome Charge	Annual r Customer Charge	Appliance Annual Therms	Total Amusi Thoms	Ratio - Appliance to Total	Tax Rafa	Pro-Rated Customer Charge
Α	8	С	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	_A	в	С	D	B*C*(1+D)		В	c	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	164	7.5%	\$448	2009	\$1.0200	150	10.0%	\$168	2009	\$0.5245	150	10.0%	\$87	20	9 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70
2010	\$2.5533	164	7.5%	\$449	2010	\$1.0302	150	10.0%	\$170	2010	\$8.5245	150	10.0%	\$87	20	0 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70
2011	\$2,5605	164	7.5%	\$461	2011	\$1.0405	150	10.0%	\$172	2011	\$0.5245	150	10.0%	\$87	20	1 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70
2012	\$2.5678	164	7.5%	\$452	2012	\$1,0509	150	10.0%	\$173	2012	\$0.5245	150	10.0%	\$87	20	2 \$15.00	\$180.00	150	423	35.48%	10.0%	\$70
2013	\$2.5750	164	7.5%	\$463	2013	\$1.0614	150	10.0%	\$175	2013	\$0.5245	150	10.0%	\$87	20	3 \$15.00	\$180,00	150	423	35.46%	10.0%	\$70
2014	\$2.5823	164	7.5%	\$455	2014	\$1.0720	150	10.0%	\$177	2014	\$0.5245	150	10.0%	\$87	20	4 \$15.00	\$180,00	150	423	35.46%	10.0%	\$70
2015	\$2,5896	164	7.5%	\$466	2015	\$1,0828	150	18.0%	\$179	2015	\$0.5245	150	10.0%	\$87	20		\$180.00	150	423	35.46%	10.0%	\$70
2018	\$2,5968	164	7.5%	\$457	2016	\$1.0936	150	10.0%	\$180	2018	\$0.5245	150	10.0%	\$87	20	•	\$180.00	150	423	35.46%	10.0%	\$70
2017	\$2,6041	164	7.5%	\$468	2017	\$1,1045	150	10.0%	\$182	2017	\$0.5245	150	10.0%	\$87	20	•	\$180.00		423	35,46%	10.0%	1
]				1														150				\$70
2018	\$2.6113	164	7.5%	\$460	2018	\$1.1156	150	10.0%	\$184	2018	\$0.5245	150	10.0%	\$87	20		\$180.00	150	423	35.46%	10.0%	\$70
2019	\$2.5186	164	7.5%	\$461	2019	\$1.1267	150	10.0%	\$186	2019	\$0.5245	150	10.0%	\$87	20		\$180.00	150	423	35.46%	10.0%	\$70
2020	\$2.6259	164	7.5%	\$462	2020	\$1.1380	150	10.0%	\$188	2020	\$0.5245	150	10.0%	\$87	20	10 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70
2021	\$2.6331	164	7.5%	\$463	2021	\$1.1494	150	10.0%	\$190	2021	\$0.5245	150	10.0%	\$87	20	\$15.00	\$180.00	150	423	35.48%	10.0%	\$70
2022	\$2.6404	164	7.5%	\$465	2022	\$1.1609	150	10.0%	\$192	2022	\$0.5245	150	10.0%	\$87	20	2 \$15.00	\$180.00	150	423	35,48%	10.0%	\$70
2023	\$2.6476	164	7.5%	\$466	2023	\$1,1725	150	10.0%	\$193	2023	\$0.5245	150	10.0%	\$87	20	23 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70
2024	\$2.6549	184	7.5%	\$467	2024	\$1,1842	150	10.0%	\$196	2024	\$0.5245	150	10.0%	\$87	20	\$15.00	\$180.00	150	423	35.46%	10.0%	\$7e
2025	\$2.6622	184	7.5%	\$469	2025	\$1.1960	150	10.0%	\$197	2025	\$0.5245	150	10.0%	\$87	20	25 \$15.00	\$180.00	150	423	35.48%	10.0%	\$70
2026	\$2.6694	164	7.5%	\$470	2026	\$1.2060	150	10.0%	\$199	2028	\$0.5245	150	10.0%	\$87	20	8 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70
2027	\$2.8767	164	7.5%	\$471	2027	\$1.2201	150	10.0%	\$201	2027	\$0.5245	150	10.0%	\$87	20	7 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70
2028	\$2.6839	164	7.5%	\$472	2028	\$1.2323	150	10.0%	\$203	2028	\$0.5245	150	10.0%	\$87	20	8 \$15.00	\$180.00	150	423	35.46%	10.0%	\$70

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Heating System

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
11	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$532	\$350	\$270	\$1,152	\$0	0	\$0	\$350	\$270	\$200	\$103	\$80	\$1,002
2010	2	\$533	0	\$273	\$806	0	0	0		\$273	\$202	\$103	\$80	\$657
2011	3	\$535	0	\$275	\$610	0	0	0		\$275	\$204	\$103	\$80	\$661
2012	4	\$536	0	\$278	\$815	0	0	0		\$278	\$206	\$103	\$80	\$666
2013	5	\$538	0	\$261	\$819	0	0	0		\$281	\$208	\$103	\$80	\$671
2014	6	\$539	0	\$284	\$623	0	0	0		\$284	\$210	\$103	\$80	\$676
2015	7	\$541	0	\$287	\$828	0	0	0		\$287	\$212	\$103	\$80	\$681
2016	8	\$542	0	\$289	\$832	0	0	0		\$289	\$214	\$103	\$80	\$686
2017	9	\$544	0	\$292	\$836	0	0	0		\$292	\$216	\$103	\$80	\$691
2018	10	\$545	0	\$295	\$841	0	0	0		\$295	\$216	\$103	\$80	\$696
2019	11	\$547	0	\$298	\$845	0	0	0		\$298	\$221	\$103	\$80	\$701
2020	12	\$548	0	\$301	\$850	0	0	0		\$301	\$223	\$103	\$80	\$706
2021	13	\$550	0	\$304	\$854	0	0	0		\$304	\$225	\$103	\$80	\$712
2022	14	\$552	0	\$307	\$859	0	0	0		\$307	\$227	\$103	\$80	\$717
2023	15	\$ 553	0	\$310	\$863	0	0	0		\$310	\$230	\$103	\$80	\$722
2024	16	\$555	0	\$313	\$868	0	0	0		\$313	\$232	\$103	\$80	\$728
2025	17	\$556	0	\$317	\$873	0	0	0		\$317	\$234	\$103	\$80	\$733
2026	18	\$558	350	\$320	\$1,227	2,882	(4,657)	1,775		\$320	\$237	\$103	\$80	\$739
2027	19	\$559	0	\$323	\$882	0	0	0		\$323	\$239	\$103	\$80	\$744
2028	20	\$561	0	\$326	\$887	0	0	0		\$326	\$241	\$103	\$80	\$750

Present Value \$8,585 of Benefits Present Value \$7,067
of Costs

Benefit/Cost 1.21 Ratio

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Heating System

Exculation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

Propane Cost - Table 1										
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost						
A	8	С	D	B*C*(1+D						
2009	\$2,5460	194	7.5%	\$532						
2010	\$2,5533	194	7.5%	\$633						
2011	\$2.5605	194	7.5%	\$538						
2012	\$2.5678	194	7.5%	\$538						
2013	\$2,5750	194	7.5%	\$538						
2014	\$2.5823	194	7.5%	\$539						
2015	\$2,5896	194	7.5%	\$541						
2018	\$2.5968	194	7.5%	\$542						
2017	\$2,6041	194	7.5%	\$844						
2018	\$2.8113	194	7.5%	\$545						
2019	\$2.8188	194	7.5%	\$547						
2020	\$2.6259	194	7.5%	\$645						
2021	\$2.6331	194	7.5%	\$550						
2022	\$2,8404	194	7.5%	\$552						
2023	\$2.6476	194	7.5%	\$563						
2024	\$2.6549	194	7.5%	\$555						
2025	\$2,6622	194	7.5%	\$556						
2026	\$2.8694	194	7.5%	\$888						
2027	\$2.6767	194	7.5%	\$589						
2026	\$2,6839	194	7.5%	\$561						

	Natural Ga	s Supply Co	ost - Table 2	
Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost
A	В	С	D	B*C*(1+D)
2009	\$1.0200	178	10.0%	\$200
2010	\$1.0302	178	10.0%	\$202
2011	\$1,0405	178	10.0%	\$204
2012	\$1.0509	178	10.0%	\$206
2013	\$1.0614	178	10.0%	\$208
2014	\$1.0720	178	10.0%	\$210
2015	\$1.0828	178	10.0%	\$212
2016	\$1.0936	178	10.0%	\$214
2017	\$1.1945	178	10.0%	\$218
2018	\$1.1158	178	10.0%	\$218
2019	\$1.1267	176	10.0%	\$221
2020	\$1,1380	178	10.0%	\$223
2021	\$1.1494	178	10.0%	\$228
2022	\$1,1609	176	10.0%	\$227
2023	\$1.1725	178	10.0%	\$230
2024	\$1.1842	178	10.0%	\$232
2025	\$1.1960	178	10.0%	\$234
2026	\$1.2080	178	10.0%	\$237
2027	\$1,2201	178	10.0%	\$239

	Natural Gas	Energy Cha	rge - Table	3
Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost
A	В	c	a	B*C*(1+D)
2009	\$0.5245	178	10.0%	\$103
2010	\$0.5245	176	10.0%	\$103
2011	\$0.5245	178	10.0%	\$103
2012	\$0.5245	178	10.0%	\$103
2013	\$0.5245	176	10.0%	\$103
2014	\$0.5245	178	10.0%	\$103
2015	\$0.5245	178	10.0%	\$103
2016	\$0.5245	178	10,0%	\$103
2017	\$0.5245	178	10.0%	\$103
2018	\$0.5245	178	10.0%	\$103
2019	\$0.5245	178	10.0%	\$103
2020	\$0.5245	178	10.0%	\$103
2021	\$0,5245	178	10.0%	\$103
2022	\$0.5245	178	10.0%	\$103
2023	\$0.5245	178	10.0%	\$103
2024	\$0.5245	178	10,0%	\$103
2025	\$0.5245	178	10.0%	\$103
2026	\$0.5245	178	10.0%	\$103
2027	\$0.5245	178	10.0%	\$103
2028	\$0.5245	178	10.0%	\$103

			Natur	al Gas Custo	mer Charge	e - Table 4		
	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
	Α	- 8	Ç	D	E	D/E	G	C*(D/E)*(1+Z)
	2009	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2010	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2011	\$15.00	\$180.00	178	443	40,18%	10.0%	\$80
	2012	\$15,00	\$180.00	178	443	40.18%	10.0%	\$80
	2013	\$15.00	\$180.00	178	443	40,18%	10.0%	\$60
	2014	\$15.00	\$180.00	178	443	40,18%	10.0%	\$80
	2015	\$15.00	\$180,00	178	443	40.18%	10,0%	\$80
	2016	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2017	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2018	\$15.90	\$180,00	178	443	40.18%	10.0%	\$80
	2019	\$15,00	\$180.00	178	443	40,18%	10,0%	\$80
	2020	\$15.00	\$180.00	178	443	40,18%	10.0%	\$80
	2021	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2022	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2023	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2024	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
	2025	\$15.00	\$189.00	178	443	40.18%	10.0%	\$60
	2026	\$15,00	\$180,00	178	443	40.18%	10.0%	\$80
	2027	\$15.00	\$180.00	178	443	40.18%	10.0%	\$80
·	2028	\$15,00	\$180.00	178	443	40.18%	10.0%	\$80

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Clothes Drying

			Benefits						C	osts				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance 0 & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1			,						Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$149	\$100	\$60	\$309	\$0	\$0	\$0	\$100	\$60	\$56	\$29	\$22	\$267
2010	2	\$150	0	\$61	\$210	0	\$0	0		\$61	\$57	\$29	\$22	\$168
2011	3	\$150	0	\$81	\$211	0	\$0	0		\$61	\$57	\$29	\$22	\$170
2012	4	\$151	0	\$62	\$212	0	\$0	0		\$62	\$58	\$29	\$22	\$171
2013	5	\$151	0	\$62	\$214	0	\$0	0		\$62	\$58	\$29	\$22	\$172
2014	6	\$152	0	\$63	\$215	0	\$0	0		\$ 63	\$59	\$29	\$22	\$173
2015	7	\$152	0	\$64	\$218	0	\$0	0		\$64	\$60	\$29	\$22	\$174
2016	8	\$152	0	\$64	\$217	0	\$0	0		\$64	\$60	\$29	\$22	\$176
2017	9	\$153	0	\$6 5	\$218	0	\$ 0	0		\$65	\$61	\$29	\$22	\$177
2018	10	\$153	0	\$66	\$219	0	\$0	0		\$66	\$61	\$29	\$22	\$178
2019	11	\$154	0	\$66	\$220	0	\$0	0		\$66	\$62	\$29	\$22	\$179
2020	12	\$154	0	\$67	\$221	0	\$0	0		\$67	\$6 3	\$29	\$22	\$181
2021	13	\$154	100	\$68	\$322	533	(\$697)	164		\$68	\$6 3	\$29	\$22	\$182
2022	14	\$155	0	\$68	\$223	0	\$0	0		\$68	\$64	\$29	\$22	\$183
2023	15	\$155	0	\$69	\$224	0	\$0	0		\$69	\$64	\$29	\$22	\$185
2024	16	\$156	0	\$70	\$225	0	\$0	0		\$70	\$6 5	\$29	\$22	\$186
2025	17	\$156	0	\$70	\$227	0	\$0	0		\$70	\$66	\$29	\$22	\$187
2026	18	\$157	0	\$71	\$228	0	\$0	0		\$71	\$66	\$29	\$22	\$189
2027	19	\$157	0	\$72	\$229	0	\$ O	0		\$72	\$67	\$29	\$22	\$190
2028	20	\$157	0	\$72	\$230	0	\$0	0		\$72	\$68	\$29	\$22	\$191

Present Value strains \$2,258

Present Value of Costs \$1,820

Benefit/Cost 1.24
Ratio

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Clothes Drying

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Ta	ble 1			Natural Ga	as Supply Co	ost - Table 2			Natural G	s Energy Ch	arge - Table	e 3			Natu	ral Gas Custo	mer Charge	- Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Yes	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annusi Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Gustomer Charge
Α.	8	c	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	A	В	С	D	B*C*(1+D)	A	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	55	7.5%	\$149	2009	\$1.0200	50	10.0%	\$66	2009	\$0.5245	50	10.0%	\$29	200	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2010	\$2.5533	55	7.5%	\$150	2010	\$1.0302	50	10.0%	\$57	2010	\$0.5245	50	10.0%	\$29	201	\$15.00	\$180.00	50	443	11,29%	10.0%	\$22
2011	\$2.5605	55	7.5%	\$160	2011	\$1.0405	50	10.0%	\$67	2011	\$0.5245	50	10.0%	\$29	201	\$15,00	\$180.00	50	443	11.29%	10.0%	\$22
2012	\$2.5678	55	7.5%	\$181	2012	\$1.0509	50	10.0%	\$58	2012	\$0.5245	50	10.0%	\$29	201	2 \$15,00	\$180.00	50	443	11.29%	10.0%	\$22
2013	\$2.5750	55	7.5%	\$151	2013	\$1,0614	50	10.0%	\$55	2013	\$0,5245	50	10.0%	\$29	201	3 \$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2014	\$2,5823	55	7.5%	\$152	2014	\$1,0720	50	10.0%	\$59	2014	\$0.5245	50	10.0%	\$29	201	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2015	\$2.5896	55	7,5%	\$152	2015	\$1.0828	50	10.0%	\$60	2015	\$0.5245	50	10.0%	\$29	201		\$180.00	50	443	11.29%	10.0%	\$22
2016	\$2.5968	55	7.5%	\$152	2016	\$1,0936	50	10.0%	560	2016	\$0.5245	50	10.0%	\$29	201		\$180,00	50	443	11.29%	10.0%	\$22
2017	\$2,6041	55	7.5%	\$153	2017	\$1,1945	50	10.0%	\$61	2017	\$0.5245	50		·	201	•	\$180.00					
1	•	**		1		• • •			1				10.0%	\$29	1		•	50	443	11.29%	10.0%	\$22
2018	\$2.6113	55	7.5%	\$153	2018	\$1.1156	50	10.0%	\$61	2018	\$0.5245	50	10.0%	\$29	201		\$180.00	50	443	11.29%	10.0%	\$22
2019	\$2,8186	55	7.5%	\$154	2019	\$1,1267	50	10.0%	\$62	2019	\$0.5245	50	10.0%	\$29	201	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2020	\$2.6259	55	7.5%	\$154	2020	\$1.1360	50	10.0%	\$63	2020	\$0.5245	50	10.0%	\$29	202	\$15,00	\$180.00	50	443	11.29%	10.0%	\$22
2021	\$2,6331	55	7.5%	\$154	2021	\$1,1494	50	10.0%	\$63	2021	\$0.5245	50	10.0%	\$29	202	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2022	\$2.5404	55	7.5%	\$168	2022	\$1,1609	50	10.0%	\$64	2022	\$0.5245	50	10.0%	\$29	202	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2023	\$2.6476	55	7.5%	\$155	2023	\$1.1725	50	10.0%	\$64	2023	\$0.5245	50	10.0%	\$29	202	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2024	\$2.6549	55	7.5%	\$166	2024	\$1.1842	50	10.0%	\$65	2024	\$0,5245	50	10.0%	\$29	202	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2025	\$2.6622	55	7.5%	\$166	2025	\$1,1960	50	10.0%	\$66	2025	\$0,5245	50	10.0%	\$29	202	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2026	\$2.6694	55	7.5%	\$157	2026	\$1,2080	50	10.0%	\$64	2026	\$0.5245	50	10.0%	\$29	202	\$ \$15,00	\$180.00	50	443	11.29%	10.0%	\$22
2027	\$2.6767	55	7.5%	\$157	2027	\$1.2201	50	10.0%	\$67	2027	\$0.5245	50	10.0%	\$29	202	7 \$15.00	\$180.00	50	443	11.29%	10.0%	\$22
2028	\$2.6839	55	7,5%	\$157	2028	\$1,2323	50	10.0%	\$68	2028	\$0.5245	50	10.0%	\$29	202	\$15.00	\$180.00	50	443	11.29%	10.0%	\$22

Chesapeake Utilities Corporation - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type	
Cooking	

			Benefits							Costs	*************			
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$134	\$100	\$60	\$294	\$0	\$0	\$0	\$100	\$60	\$50	\$26	\$20	\$257
2010	2	\$135	0	\$61	\$195	0	\$O	0		\$61	\$51	\$26	\$20	\$158
2011	3	\$135	0	\$61	\$196	0	\$ O	0		\$61	\$52	\$26	\$20	\$159
2012	4	\$136	0	\$62	\$197	0	\$0	0		\$62	\$52	\$26	\$20	\$160
2013	5	\$136	0	\$62	\$198	0	\$0	0		\$62	\$5 3	\$26	\$20	\$161
2014	6	\$136	0	\$63	\$199	0	\$0	C		\$63	\$53	\$26	\$20	\$162
2015	7	\$137	0	\$ 64	\$200	0	\$0	0		\$64	\$54	\$26	\$20	\$163
2016	8	\$137	0	\$ 64	\$201	0	\$0	0		\$ 64	\$54	\$26	\$20	\$165
2017	9	\$138	0	\$65	\$202	0	\$0	0		\$6 5	\$55	\$26	\$20	\$166
2018	10	\$138	0	\$66	\$204	0	\$0	0		\$66	\$55	\$26	\$20	\$167
2019	11	\$138	0	\$66	\$205	0	\$0	0		\$66	\$56	\$26	\$20	\$168
2020	12	\$139	0	\$67	\$206	0	\$0	0		\$67	\$56	\$26	\$20	\$169
2021	13	\$139	0	\$68	\$207	0	\$0	0		\$68	\$57	\$26	\$20	\$171
2022	14	\$139	0	\$68	\$208	0	\$0	0		\$68	\$5 7	\$26	\$20	\$172
2023	15	\$140	100	\$69	\$309	637	(\$805)	167		\$69	\$58	\$26	\$20	\$173
2024	16	\$140	0	\$70	\$210	0	\$0	0		\$70	\$59	\$26	\$20	\$174
2025	17	\$141	0	\$70	\$211	0	\$0	0		\$70	\$59	\$26	\$20	\$176
2026	18	\$141	0	\$71	\$212	0	\$0	0		\$71	\$60	\$26	\$20	\$177
2027	19	\$141	0	\$72	\$213	0	\$0	0		\$72	\$60	\$26	\$20	\$178
2028	20	\$142	0	\$72	\$214	0	\$O	0		\$72	\$61	\$26	\$20	\$180

Present Value of Benefits	\$2,103	Present Va of Costs	\$1,710
		Benefit/Cost Ratio	1.23

Chesapeake Utilities Corporation - AGDF Energy Conservation Filling 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Cooking

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Pro	pane Cost - Table	1	
Year	Cost Per Gallos	Annual Gallon	Tax Rate	Propane Cost
Α	8	С	D	B*C*(1+D)
2009	\$2.5460	49	7.5%	\$134
2010	\$2.5533	49	7.5%	\$135
2011	\$2.5605	49	7.5%	\$135
2012	\$2.5678	49	7.5%	\$136
2013	\$2.5750	49	7.5%	\$136
2014	\$2.5823	49	7.5%	\$136
2015	\$2.5896	49	7.5%	\$137
2016	\$2.5968	49	7.5%	\$137
2017	\$2.6041	49	7.5%	\$138
2018	\$2.6113	49	7.5%	\$138
2019	\$2.6186	49	7.5%	\$138
2020	\$2.6259	49	7.5%	\$139
2021	\$2.6331	49	7.5%	\$139
2022	\$2.6404	49	7.5%	\$139
2023	\$2.6476	49	7.5%	\$140
2024	\$2.6549	49	7.5%	\$140
2025	\$2.6622	49	7.5%	\$141
2026	\$2.6694	49	7.5%	\$141
2027	\$2.6767	49	7.5%	\$141
2028	\$2,6839	49	7.5%	\$142

Natural Gas Supply Cost - Table 2							
Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost			
Α	8	С	۵	B*C*(1+D)			
2009	\$1.0200	45	10.0%	\$50			
2010	\$1.0302	45	10.0%	\$51			
2011	\$1.0405	45	10.0%	\$52			
2012	\$1.0509	45	10.0%	\$52			
2013	\$1.0614	45	10.0%	\$53			
2014	\$1.0720	45	10.0%	\$53			
2015	\$1.0828	45	10.0%	\$54			
2016	\$1.0936	45	10.0%	\$54			
2017	\$1.1045	45	10.0%	\$55			
2018	\$1.1156	45	10.0%	\$55			
2019	\$1.1267	45	10.0%	\$56			
2020	\$1.1380	45	10.0%	\$58			
2021	\$1.1494	45	10.0%	\$57			
2022	\$1.1809	45	10.0%	\$57			
2023	\$1.1725	45	10.0%	\$58			
2024	\$1.1842	45	10.0%	\$59			
2025	\$1.1960	45	10.0%	\$59			
2026	\$1.2080	45	10.0%	\$80			
2027	\$1.2201	45	10.0%	\$60			

10.0%

\$61

2028 \$1.2323 45

Natural Gas Energy Charge - Table 3									
Year	Rate Per Therm	Annuel Therms	Tax Rate	NG Cost					
А	В	С	D	B*C*(1+D)					
2009	\$0.5245	45	10.0%	\$28					
2010	\$0.5245	45	10.0%	\$26					
2011	\$0.5245	45	10.0%	\$26					
2012	\$0.5245	45	10.0%	\$26					
2013	\$0.5245	45	10.0%	\$26					
2014	\$0.5245	45	10.0%	\$26					
2015	\$0.5245	45	10.0%	\$26					
2016	\$0.5245	45	10.0%	\$26					
2017	\$0.5245	45	10.0%	\$26					
2018	\$0.5245	45	10.0%	\$26					
2019	\$0.5245	45	10.0%	\$26					
2020	\$0.5245	45	10.0%	\$26					
2021	\$0.5245	45	10.0%	\$26					
2022	\$0.5245	45	10.0%	\$26					
2023	\$0.5245	45	10.0%	\$26					
2024	\$0.5245	45	10.0%	\$26					
2025	\$0.5245	45	10.0%	\$26					
2026	\$0.5245	45	10.0%	\$26					
2027	\$0.5245	45	10.0%	\$26					
2028	\$0.5245	45	10.0%	\$26					

Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α	В	С	D	E.	D/E	G	C*(D/E)*(1+Z)
2009	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2010	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2011	\$15.00	\$180.00	45	443	10,16%	10.0%	\$20
2012	\$ 15.00	\$180.00	45	443	10.16%	10.0%	\$20
2013	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2014	\$15.00	\$180.00	45	443	10.15%	10.0%	\$20
2015	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2016	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2017	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2018	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2019	\$15.00	\$180.00	45	443	10.15%	10.0%	\$20
2020	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2021	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2022	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2023	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2024	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2025	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2026	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2027	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20
2028	\$15.00	\$180.00	45	443	10.16%	10.0%	\$20

Attachment 2.2

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

Florida City Gas Rate Impact Measurement Test Participants Test

Summary of RIM Test and Participants Test Results

	Proposed Allowance	Participants Test	RIM Test
Gas Storage Tank Water Heating	\$350	1.70	1.17
Gas Tankless Water Heating	\$450	1.66	1.12
Gas Heating	\$350	1.41	1.22
Gas Clothes Drying	\$100	1.40	1.19
Gas Cooking	\$100	1.38	1.18

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type
Storage Tank Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$100	\$119	\$51	\$270	\$119	\$55	\$17	\$350.52	\$541
2010	\$100	\$120	\$51	\$271	\$120	\$53	\$17	\$0.52	\$190
2011	\$100	\$121	\$51	\$272	\$121	\$ 51	\$17	\$0.52	\$189
2012	\$100	\$123	\$51	\$273	\$123	\$49	\$17	\$0.52	\$189
2013	\$100	\$124	\$ 51	\$275	\$124	\$47	\$17	\$0.52	\$189
2014	\$100	\$125	\$ 51	\$276	\$125	\$46	\$17	\$0.52	\$188
2015	\$100	\$126	\$51	\$277	\$126	\$44	\$17	\$0.52	\$188
2016	\$100	\$128	\$51	\$278	\$128	\$42	\$17	\$0.52	\$188
2017	\$100	\$129	\$ 51	\$280	\$129	\$41	\$18	\$0.52	\$188
2018	\$100	\$130	\$ 51	\$281	\$130	\$39	\$18	\$350.52	\$538
2019	\$100	\$131	\$51	\$282	\$131	\$38	\$18	\$0.52	\$188
2020	\$100	\$133	\$ 51	\$283	\$133	\$37	\$19	\$0.52	\$189
2021	\$100	\$134	\$51	\$285	\$134	\$35	\$19	\$0.52	\$189
2022	\$100	\$135	\$51	\$286	\$135	\$34	\$19	\$0.52	\$189
2023	\$100	\$137	\$ 51	\$287	\$137	\$33	\$19	\$0.52	\$189
2024	\$100	\$138	\$ 51	\$289	\$138	\$32	\$19	\$0.52	\$190
2025	\$100	\$140	\$51	\$290	\$140	\$3 1	\$19	\$0.52	\$190
2026	\$100	\$141	\$ 51	\$292	\$141	\$30	\$19	\$0.52	\$190
2027	\$100	\$142	\$51	\$293	\$142	\$28	\$20	\$0.52	\$191
2028	\$100	\$144	\$51	\$294	\$144	\$27	\$20	\$0.52	\$192

Present Value of Benefits \$2,734

Present Value of Costs \$2,343

Benefit/Cost Ratio 1.17

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type
Storage Tank Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Ges Energy Charge Escalator	0%	Depractation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.80%
D&M/Inflation Escalator	1.0%	Dopreciation Rate - Meter	4.20%

Revenue - Energy Charge							
1	2	3	2*3				
Year	Therms	Sase Rate	Total Charge				
2009	170	\$0.5884	\$100				
2010	170	\$0.5884	\$100				
2011	170	\$0,5884	\$100				
2012	170	\$0.5884	\$100				
2013	170	\$0.5884	\$100				
2014	170	\$0.5884	\$100				
2015	170	\$0.5884	\$100				
2016	170	\$0.5884	\$100				
2017	170	\$0.5884	\$100				
2018	170	\$0,5884	\$100				
2019	170	\$0.5884	\$100				
2020	170	\$0.5884	\$100				
2021	170	\$0.5884	\$100				
2022	170	\$0.5884	\$100				
2023	170	\$0.5884	\$100				
2024	170	\$0.5884	\$100				
2025	170	\$0.5884	\$100				
2026	170	\$0.5884	\$100				
2027	170	\$0.5884	5100				
2628	170	\$0.5884	\$100				

Revenue - Cost of Gas								
1	2	4	2*3					
Year	Therms	Fuel Rate	Total Charg					
2009	170	\$0,7000	\$119					
2010	170	\$0.7070	\$120					
2011	170	\$0,7141	\$121					
2012	170	\$0.7212	\$123					
2013	170	\$0.7284	\$124					
2014	170	\$0.7357	\$125					
2015	170	\$0.7431	\$126					
2016	170	\$0.7505	\$128					
2017	170	\$0.7580	\$129					
2016	170	\$0,7656	\$130					
2019	170	\$0.7732	\$131					
2020	170	\$0.7810	\$133					
2021	170	\$0.7888	\$134					
2022	170	\$0.7967	\$135					
2023	170	\$0.8046	\$137					
2024	170	\$0.9127	\$138					
2025	170	\$0.8208	\$140					
2026	170	\$0.8290	\$141					
2027	170	\$0.8373	\$142					
2028	170	\$0.8457	\$144					

	Re	venue - Custom	er Charge	
1	2	3	4	4-3
	-Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annuel
Year	Charge	Charge	Consumed	Customer Charge
2009	\$11.00	\$132.00	38.37%	\$51
2010	\$11:00	\$132.00	39.37%	\$51
2011	\$11.00	1\$132.00	38,37%	\$51
2012	\$11.00	\$132.00	38.37%	\$51
2013	\$11,00	\$132.00	38.37%	\$51
2014	\$11.00	\$132.00	38.37%	551
2015	\$11.00	\$132.00	38.37%	\$51
2016	\$11.00	\$132.00	38.37%	\$51
2017	\$11.00	\$132.00	38.37%	\$51
2018	\$11.00	\$132.00	38.37%	\$51
2019	\$11.00	\$132.00	38.37%	\$51
2020	\$11.00	\$132.00	38.37%	\$51
2021	\$11,00	\$132.00	38.37%	\$51
2022	\$11.00	\$132.00	38.37%	\$51
2023	\$11.00	\$132.00	38.37%	\$51
2024	\$11,00	\$132.00	38.37%	\$51
2025	\$11.00	\$132.00	38.37%	\$51
2026	\$11.00	\$132.00	38.37%	\$51
2027	\$11,00	\$132.00	38.37%	\$51
2028	\$11.00	\$132.00	38.37%	\$51

			inve	stment Ca	rrying Costs		_	
1	2	3	4	5	6	7	8	6*7*e
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$960	\$307	\$1,867	7.62%	38.37%	\$55
2010	597	\$486	\$924	\$294	\$1,601	7.82%	38.37%	\$53
2011	394	\$472	\$889	\$282	\$1,737	7.82%	38.37%	3.51
2012	\$91	\$458	\$855	\$270	\$1,674	7.62%	38.37%	\$49
2013	\$68	\$445	\$623	\$259	\$1,615	7.62%	38.37%	\$47
2014	\$85	\$432	\$792	\$248	\$1,557	7.62%	38.37%	\$46
2015	\$53	\$419	\$762	\$238	\$1,502	7.62%	38,37%	\$44
2016	\$91	\$407	\$733	\$228	\$1,449	7.62%	38.37%	\$42
2017	\$79	\$395	\$705	\$218	\$1,397	7.62%	38.37%	541
2018	\$77	\$384	\$678	\$209	\$1,348	7.82%	38.37%	\$39
2019	\$75	\$373	\$652	\$200	\$1,300	7.82%	38,37%	\$38
2020	\$73	\$362	\$627	5192	\$1,254	7.62%	38.37%	\$37
2021	\$71	\$352	\$603	\$184	\$1,210	7 62%	38.37%	\$35
2022	\$69	\$342	\$580	\$176	\$1,187	7 62%	38.37%	\$34
2023	\$67	\$332	\$558	\$169	\$1,126	7.62%	38 37%	\$33
2024	\$65	\$322	\$537	\$162	\$1,086	7.62%	36.37%	\$32
2025	\$83	\$313	\$517	\$155	\$1,048	7.82%	38.37%	\$31
2026	\$61	\$304	\$497	5148	\$1,010	7.62%	36.37%	530
2027	\$59	\$295	\$478	\$142	\$974	7.62%	38.37%	\$2B
2028	\$57	\$286	\$460	\$136	\$939	7.82%	38.37%	\$27

			incre	mental Custo	mer Costs			
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Retio Therms To	Annual Ratio	Total increments
Year	Adm Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.99	\$24	38,37%	\$9.21	\$19.13	38.37%	\$7	\$17
2010	\$2.00	\$24	38.37%	\$9.21	\$10.32	38.37%	\$7	\$17
2011	\$2.02	\$24	38 37%	\$9.21	\$19.51	38.37%	\$7	\$17
2012	\$2.04	\$24	38.37%	\$9.21	\$19.71	36.37%	\$8	\$17
2013	\$2.08	\$25	38.37%	\$9.59	\$19,91	38.37%	\$8	\$17
2014	\$2.08	\$25	38.37%	\$9.59	\$20.11	38.37%	\$8	\$17
2015	\$2.10	\$25	38.37%	\$9.59	\$20.31	38.37%	\$8	\$17
2016	\$2.12	525	38.37%	\$9.59	\$20.51	38.37%	58	\$17
2017	\$2.14	\$26	38.37%	\$9.98	\$20.72	38.37%	\$8	\$18
2018	\$2.17	\$26	38.37%	\$9.98	\$20.92	38,37%	29	\$18
2019	\$2.19	\$26	38.37%	\$9.98	\$21.13	38.37%	\$8	\$18
2020	\$2.21	\$27	38,37%	\$10.35	\$21.34	38.37%	\$8	\$19
2021	\$2.23	\$27	38,37%	\$10.38	\$21.56	38.37%	\$8	\$19
2022	\$2.25	\$27	38.37%	\$10.36	\$21.77	38.37%	\$8	\$19
2023	\$2.28	\$27	38,37%	\$10.36	\$21.99	38.37%	\$8	\$19
2024	\$2.30	\$28	38.37%	\$10.74	\$22,21	38.37%	59	\$19
2025	\$2.32	\$28	38.37%	\$10.74	\$22.43	38.37%	\$9	\$19
2028	\$2.34	\$26	36,37%	\$10.74	\$22,66	36.37%	\$9	\$19
2027	\$2.37	\$28	38.37%	\$10.74	\$22.88	38.37%	59	\$20
2028	\$2.39	\$29	38.37%	\$11.13	\$23,11	36.37%	8.0	\$20

	Gas	Costs		
1	2	3	2.3	
	Therms	Gas Supply	Gas Supply	
Year		Rate	Cost	
2009	170	0.7000	\$119	
2010	170	\$0.7070	\$120	
2011	170	\$0.7141	\$121	
2012	170	\$0.7212	\$123	
2013	170	\$0.7284	\$124	
2014	170	\$0.7357	\$125	
2015	170	\$0.7431	\$128	
2018	170	\$0 7505	\$1.28	
2017	170	\$0.7580	\$1.29	
2018	170	\$0,7656	\$130	
2019	170	\$0.7732	\$131	
2020	170	\$0,7810	\$133	
2021	170	\$0.7888	\$134	
2022	170	\$0.7967	\$135	
2023	170	\$0.8046	\$137	
2024	170	50 8127	\$138	
2025	170	\$0,8208	\$146	
2026	170	\$0.8290	\$141	
2027	170	\$0,8373	\$142	
2028	170	\$0.8457	\$144	

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Tankless Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$88	\$105	\$47	\$240	\$105	\$ 50	\$15	\$450.52	\$621
2010	\$88	\$106	\$47	\$241	\$106	\$4 9	\$15	\$0.52	\$171
2011	\$88	\$107	\$47	\$242	\$107	\$47	\$15	\$0.52	\$170
2012	\$88	\$108	\$47	\$243	\$108	\$4 5	\$15	\$0.52	\$169
2013	\$88	\$109	\$47	\$244	\$109	\$44	\$16	\$0.52	\$169
2014	\$88	\$110	\$47	\$245	\$1 10	\$42	\$16	\$0.52	\$169
2015	\$88	\$111	\$47	\$247	\$1 11	\$41	\$16	\$0.52	\$169
2016	\$88	\$113	\$47	\$248	\$113	\$39	\$16	\$0.52	\$168
2017	\$88	\$114	\$47	\$249	\$114	\$38	\$17	\$0.52	\$169
2018	\$88	\$115	\$47	\$250	\$115	\$36	\$17	\$0.52	\$168
2019	\$88	\$116	\$47	\$251	\$116	\$35	\$17	\$0.52	\$168
2020	\$88	\$117	\$47	\$252	\$117	\$34	\$17	\$0.52	\$169
2021	\$88	\$118	\$47	\$253	\$118	\$33	\$17	\$0.52	\$169
2022	\$88	\$119	\$47	\$255	\$119	\$32	\$17	\$0.52	\$169
2023	\$88	\$121	\$47	\$256	\$121	\$30	\$17	\$0.52	\$169
2024	\$88	\$122	\$47	\$257	\$122	\$29	\$18	\$0.52	\$170
2025	\$88	\$123	\$47	\$258	\$123	\$28	\$18	\$0.52	\$170
2026	\$88	\$124	\$47	\$259	\$124	\$27	\$18	\$0.52	\$170
2027	\$88	\$126	\$47	\$261	\$126	\$26	\$18	\$0.52	\$170
2028	\$88	\$127	\$47	\$262	\$127	\$25	\$18	\$450.52	\$621

Present Value 52,433

Present Value of Costs \$2,177

Benefit/Cost Ratio 1.12

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type	
Tankless Water Heating	

			,
Fuel Rate Esceletor	1.0%	Depreciation Rate - Supply Main	2.90%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.80%
OFERIANIST Secondar	4.0%	Conveniation Pate - Major	4 2044

Revenue - Energy Charge						
_1	2	3	2*3			
1897	Therma	Base Rate	Total Charge			
2009	150	\$0.5884	\$88			
2010	150	\$0.5884	\$88			
2011	150	\$0.5684	\$86			
2012	150	\$0,5894	\$68			
2013	150	\$0.5884	\$88			
2014	150	\$0,5864	882			
2015	150	\$0.5884	\$88			
2016	150	\$0.5884	\$88			
2017	150	\$0.5884	\$88			
2018	150	\$0.5884	\$96			
2019	150	\$0.5684	\$88			
2020	150	\$0.5884	\$88			
2021	150	\$0.5884	\$85			
2022	150	\$0.5884	\$86			
2023	150	\$0.5884	\$88			
2024	150	\$0.5684	\$88			
2025	150	\$0.5884	\$88			
2026	150	\$0.5884	\$88			
2027	150	\$0.5884	\$88			
2026	150	\$0.5884	\$86			

	Revenue - Co	st of Gas	
1		4	2*3
Year	Thems	Fuel Rate	Total Charge
2009	150	\$0.7000	\$105
2010	150	\$0.7070	5106
2011	150	\$0.7141	\$107
2012	150	\$0,7212	\$108
2013	150	\$0.7284	\$109
2014	150	\$0,7357	\$110
2015	150	\$0.7431	5111
2018	150	\$0.7505	\$113
2017	150	\$0,7580	\$114
2018	150	\$0,7658	\$115
2019	150	\$0.7732	\$116
2020	150	\$0.7810	\$117
2021	150	\$0.7888	\$118
2022	150	\$0.7967	\$119
2023	150	\$0.8046	\$121
2024	150	\$0.6127	\$122
2025	150	\$0.8208	\$123
2026	150	50.8290	5124
2027	150	\$0.8373	\$126
2028	150	\$0,8457	\$127

		venue - Custome		
_1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Cherge
2009	\$11.00	\$132.00	35.46%	\$47
2010	\$11.00	\$132,00	35.46%	\$47
2011	\$11.00	\$132.00	35.46%	\$47
2012	\$11.00	\$132.00	35.46%	\$47
2013	\$11.00	\$132.00	35.46%	\$47
2014	\$11.00	\$132.00	35.46%	\$47
2015	\$11.00	\$132.00	35.46%	\$47
2016	\$11.00	\$132.00	35.46%	547
2017	\$11.00	\$132.00	35.46%	\$47
2018	\$11.00	\$132.00	35.46%	\$47
2019	\$11.00	\$132.00	35.46%	\$47
2020	\$11.00	\$132.00	35.48%	\$47
2021	\$11.00	\$132.00	35.46%	\$47
2022	\$11,00	\$132.00	35.48%	\$47
2023	\$11.00	\$132.00	35.46%	\$47
2024	\$11.00	\$132.00	35 46%	\$47
2025	\$11,00	\$132.00	35 48%	\$47
2026	\$11.00	\$132.00	35.46%	\$47
2027	\$11.00	\$132.00	35.48%	\$47
2028	\$11,00	\$132,00	35.46%	\$47

Investment Carrying Costs								
1	2	3	4	5	- 6	7	8	6*7*8
	Supply [nemadieveC	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	(Jne	Meter	Investment	of Debt	Consumed To Total	
2009	\$100	\$500	\$960	\$307	\$1.867	7.62%	35.46%	\$50
2010	597	\$486	\$924	\$294	\$1,801	7.62%	35,48%	\$49
2011	394	\$472	\$889	5282	\$1,737	7.62%	35.48%	\$47
2012	\$91	\$458	\$855	\$270	\$1,874	7.82%	35 48%	\$45
2013	\$66	\$445	\$823	\$259	\$1,615	7.62%	35.46%	\$44
2014	\$85	\$432	\$792	\$248	\$1,557	7.62%	35.46%	842
2015	\$83	\$419	\$762	\$238	\$1,502	7.62%	35.46%	\$41
2016	\$81	\$407	\$733	\$228	\$1,449	7.82%	35.48%	\$39
2017	379	\$395	\$705	\$216	\$1,397	7.62%	35.46%	\$38
2018	\$77	\$384	\$678	\$209	\$1,348	7.62%	35.46%	\$36
2019	\$75	\$373	\$652	\$200	\$1,300	7.82%	35.46%	\$35
2020	\$73	\$382	\$627	5192	\$1,254	7.62%	35.46%	\$34
2021	571	\$352	\$603	\$184	\$1,210	7.62%	35 46%	\$33
2022	269	\$342	\$580	\$176	\$1,167	7.62%	35.48%	\$32
2023	\$87	\$332	\$558	\$169	\$1,126	7.82%	35.46%	\$30
2024	\$65	\$322	\$537	\$162	\$1,088	7.62%	35.46%	\$29
2025	\$63	\$313	\$517	\$155	\$1,048	7.62%	35,46%	238
2026	\$61	\$304	8497	\$148	\$1,010	7 62%	35.46%	\$27
2027	\$59	\$295	\$478	\$142	\$974	7.62%	35 46%	\$28
2028	\$57	\$286	\$460	\$136	\$939	7.62%	35 45%	\$25

		incremental Customer Costs						
1	2	3	4	5=3*4	- 6	7	8=6'7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incremental
Year	Adm, Cost	Adm, Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & OSM Cost
2009	\$1.98	\$24	35.46%	\$8.51	\$19.13	35.46%	57	\$15
2010	\$2.00	\$24	35.45%	\$8.51	\$19,32	35 48%	\$7	\$15
2011	\$2.02	\$24	35.45%	\$6.51	\$19.51	35.48%	\$7	\$15
2012	\$2.04	\$24	35.46%	\$8.51	\$19.71	35.46%	\$7	\$15
2013	\$2.06	\$25	35 46%	\$8.87	\$19,91	35.48%	\$7	\$18
2014	\$2.08	\$25	35.46%	\$6.87	\$20.11	35.46%	\$7	\$18
2015	\$2.10	\$25	35.46%	\$8.87	\$20,31	35.46%	\$7	516
2016	\$2.12	\$25	35.46%	\$6.67	\$20.51	35.46%	\$7	\$16
2017	\$2.14	\$26	35.40%	\$9.22	\$20.72	35.46%	\$7	\$17
2018	\$2.17	\$26	35 48%	\$9.22	\$20.92	35.46%	\$7	\$17
2019	\$2.19	\$26	35.46%	\$9.22	\$21.13	35.46%	57	\$17
2020	\$2.21	\$27	35.46%	\$9.57	\$21,34	35 46%	\$8	\$17
2021	\$2.23	527	35,46%	\$9.57	\$21.56	35.46%	\$8	\$17
2022	\$2.25	\$27	35.46%	\$9.57	\$21.77	35.46%	\$8	\$17
2023	\$2,28	\$27	35 48%	\$9.57	\$21.99	35.46%	\$8	\$17
2024	\$2.30	528	35.46%	\$9.93	\$22.21	35 46%	\$8	\$18
2025	\$2.32	\$28	35,48%	\$9.93	\$22.43	35.46%	\$8	\$18
2028	\$2.34	\$28	35,48%	\$9.93	\$22.66	35 40%	\$8	\$18
2027	\$2.37	\$28	35 46%	\$9.93	\$22.88	35.46%	\$8	\$18
2028	\$2.39	\$29	35.46%	\$10,28	523.11	35.48%	\$6	\$18

	Gas (osts	
1	2	3	2,3
	Therms	Per Therm	Gas Suppl
Year		Supply Cost	Cost
2009	150	0.7000	\$105
2010	150	\$0.7070	\$106
2011	150	\$0.7141	\$107
2012	150	50.7212	\$108
2013	150	\$0.7284	\$109
2014	150	\$0,7357	\$110
2015	150	\$0.7431	\$111
2016	150	\$0.7505	5113
2017	150	\$0,7580	\$114
2018	150	\$0.7656	\$115
2019	150	\$0.7732	3116
2020	150	\$0.7810	\$117
2021	150	\$0,7688	\$118
2022	150	\$0,7967	\$119
2023	150	\$0.6046	\$121
2024	150	\$0.8127	\$122
2025	150	\$0.8208	\$123
2026	150	\$0,8290	\$124
2027	150	\$0.8373	\$126
2028	150	\$0.8457	\$127

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Heating System

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2			Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$105	\$125	\$53	\$282	\$125	\$57	\$17	\$350.54	\$550
2010	\$105	\$126	\$53	\$284	\$126	\$5 5	\$17	\$0.54	\$199
2011	\$105	\$127	\$53	\$285	\$127	\$53	\$17	\$0.54	\$198
2012	\$105	\$128	\$5 3	\$286	\$128	\$ 51	\$18	\$0.54	\$198
2013	\$105	\$130	\$53	\$287	\$130	\$49	\$18	\$0.54	\$198
2014	\$105	\$131	\$53	\$289	\$131	\$48	\$18	\$0.54	\$197
2015	\$105	\$132	\$53	\$290	\$132	\$46	\$18	\$0.54	\$197
2016	\$105	\$134	\$ 53	\$291	\$134	\$44	\$18	\$0.54	\$197
2017	\$105	\$135	\$53	\$293	\$135	\$43	\$19	\$0.54	\$197
2018	\$105	\$136	\$53	\$294	\$136	\$41	\$19	\$0.54	\$197
2019	\$105	\$138	\$5 3	\$295	\$138	\$40	\$19	\$0.54	\$197
2020	\$105	\$139	\$ 53	\$297	\$139	\$38	\$19	\$0.54	\$197
2021	\$105	\$140	\$ 53	\$298	\$140	\$37	\$20	\$0.54	\$197
2022	\$105	\$142	\$53	\$300	\$142	\$36	\$20	\$0.54	\$198
2023	\$105	\$143	\$53	\$301	\$143	\$34	\$20	\$0.54	\$198
2024	\$105	\$145	\$53	\$302	\$145	\$33	\$20	\$0.54	\$199
2025	\$105	\$146	\$53	\$304	\$146	\$32	\$20	\$0.54	\$199
2026	\$105	\$148	\$5 3	\$305	\$148	\$31	\$20	\$350.54	\$549
2027	\$105	\$149	\$53	\$307	\$149	\$30	\$20	\$0.54	\$200
2028	\$105	\$151	\$53	\$308	\$15 1	\$29	\$21	\$0.54	\$201

Present Value of Benefits

\$2,863

Present Value of Costs

\$2,356

Benefit/Cost Ratio

1.22

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

1	Appliance Type
	Heating System

participant of the second of t				
Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%	
Ges Energy Charge Escaletor	0%	Depreciation Rete - Development Main	2.90%	
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.80%	
O&M/infletion Escatator	1.0%	Depreciation Rate - Meter	4.20%	

able 1						
Revenue - Energy Charge						
1	2	3	2*3			
Year	Therms	Base Rate	Total Charge			
2009	178	\$0.5884	\$105			
2010	178	\$0.5884	\$105			
2011	178	\$0.5884	\$105			
2012	178	\$0.5884	\$105			
2013	178	\$0.5884	\$105			
2014	178	\$0.5884	\$105			
2015	176	\$0,5884	\$105			
2018	178	\$0,5884	\$105			
2017	178	\$0.5884	\$105			
2018	176	\$0,5884	\$105			
2019	176	\$0.5884	\$105			
2020	176	\$0.5884	\$105			
2021	178	\$0.5884	\$105			
2022	178	\$0.5884	\$105			
2023	178	\$0.5884	\$105			
2024	178	\$0.5884	\$105			
2025	178	\$0.5884	\$105			
2026	176	\$0.5884	\$105			
2027	176	\$0.5004	6408			

Revenue - Cost of Gas									
11	2	4	2.3						
Year	Therms	Fuel Rate	Total Charge						
2009	178	\$0.7000	\$125						
2010	178	\$0.7070	\$128						
2011	178	\$0.7141	\$127						
2012	178	\$0.7212	\$128						
2013	178	\$0.7284	\$130						
2014	178	\$0.7357	\$131						
2015	178	\$0,7431	\$132						
2016	178	\$0.7505	\$134						
2017	178	\$0,7580	\$135						
2018	178	\$0.7856	\$136						
2019	178	\$0.7732	\$138						
2020	178	\$0.7810	\$139						
2021	178	\$0.7888	\$140						
2022	178	\$0.7967	\$142						
2023	178	\$0.8048	\$143						
2024	178	\$0.8127	\$145						
2025	178	\$0.8208	\$146						
2026	178	\$0.8290	\$148						
2027	178	\$0.8373	\$149						
2028	178	\$0.8457	\$151						

	Revenue - Customer Charge										
_1	2	3	4	4"3							
	Monthly		Ratio Therms								
	Customer	Annual Customer	To Total	Prorated Annual							
Year	Charge	Charge	Consumed	Customer Charge							
2009	\$11.00	\$132.00	40.18%	\$53							
2010	\$11.00	\$132.00	40.18%	\$53							
2011	\$11.00	\$132.00	40 18%	\$53							
2012	\$11.00	\$132.00	40 18%	\$53							
2013	\$11,00	\$132.00	40.18%	\$63							
2014	\$11.00	\$132.00	40.18%	\$53							
2015	\$11,00	\$132.00	40.16%	\$53							
2016	\$11.00	\$132.00	40.18%	\$63							
2017	\$11,00	\$132,00	40.18%	\$53							
2018	\$11.00	\$132.00	40.18%	\$53							
2019	\$11.00	\$132 DO	40.18%	\$53							
2020	\$11.00	\$132.00	40.18%	\$53							
2021	\$11.00	\$132.00	40.18%	\$53							
2022	\$11.00	\$132.00	40.16%	\$53							
2023	\$11,00	\$132.00	40.16%	\$53							
2024	\$11,00	\$132,00	40.18%	\$5 3							
2025	\$11.00	\$132.00	40,18%	\$53							
2026	\$11.00	\$132,00	40.18%	\$53							
2027	\$11.00	\$132.00	40.18%	\$53							
2028	\$11.00	\$132.00	40 18%	\$63							

	Investment Carrying Costs												
1	2	3	4	5	6	7	8	6*7*8					
	Supply	Davelopment	Service		Total	Cost	Ratio of Therms	investment					
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Co.					
2009	\$100	\$500	\$960	\$307	\$1,867	7.62%	40.18%	\$57					
2010	\$97	\$486	\$924	\$294	\$1,801	7.82%	40.18%	\$55					
2011	\$94	\$472	\$889	\$282	\$1,737	7.62%	40,18%	\$53					
2012	\$91	\$458	\$855	\$270	\$1,674	7.82%	40.18%	\$51					
2013	\$88	\$445	\$823	\$259	\$1,615	7.82%	40 18%	\$49					
2014	\$85	\$432	\$792	\$246	\$1,557	7.82%	40.18%	\$49					
2015	\$83	\$419	\$782	\$238	\$1,502	7.62%	40.18%	\$48					
2016	\$81	\$407	\$733	\$228	\$1,449	7.62%	40.18%	\$44					
2017	\$79	\$395	\$705	\$218	\$1,397	7.62%	40.18%	\$43					
2018	\$77	\$384	\$678	\$200	\$1,348	7.62%	40.18%	\$41					
2019	\$75	\$373	\$652	\$200	\$1,300	7.82%	40 18%	\$40					
2020	\$73	\$362	\$627	\$192	\$1.254	7.62%	40 18%	\$36					
2021	\$71	\$352	\$603	\$184	\$1,210	7.62%	40.18%	\$37					
2022	\$69	\$342	\$580	\$176	\$1,167	7.62%	40.18%	\$36					
2023	\$67	\$332	\$558	\$169	\$1.126	7.62%	40.18%	\$34					
2024	\$65	\$322	\$537	\$162	\$1,086	7.82%	40.18%	\$33					
2025	\$63	\$313	\$517	\$155	\$1,048	7.62%	40 18%	\$32					
2028	581	\$304	\$497	\$148	\$1,010	7.62%	40.18%	\$31					
2027	\$59	\$295	\$478	\$142	\$974	7.62%	40.18%	\$30					
2028	567	\$286	\$460	\$136	\$939	7 62%	40.18%	\$29					

Incremental Customer Costs												
1	2	3	4	5=3^4	Ĝ	7	B=6*7	5+8				
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total increments				
Yest	Adm. Cost	Adm, Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost				
2009	\$1.96	\$24	40.18%	\$9 64	\$19.13	40.18%	\$8	\$17				
2010	\$2.00	\$24	40 18%	\$9,64	\$19.32	40.18%	\$8	\$17				
2011	\$2.02	\$24	40.18%	\$9.64	\$19.51	40.18%	\$8	\$17				
2012	\$2.04	\$24	40.18%	\$9.64	\$19.71	40,18%	38	\$18				
2013	\$2.09	\$25	40.18%	\$10.05	\$19.91	40.18%	\$8	\$18				
2014	\$2.08	\$25	40.18%	\$10.05	\$20.11	40.18%	\$8	\$18				
2015	\$2.10	\$25	40.18%	\$10.05	\$20.31	40.18%	\$8	\$18				
2015	\$2.12	\$25	40 18%	\$10.05	\$20.51	40.18%	\$8	\$18				
2017	\$2.14	\$26	40.18%	\$10.45	\$20,72	40.18%	\$8	\$19				
2018	\$2 17	\$28	40.18%	\$10.45	\$20.92	40,18%	\$9	\$19				
2019	\$2.19	\$26	40.18%	\$10,45	\$21.13	40.18%	\$8	\$19				
2020	\$2.21	\$27	40.18%	\$10.85	\$21 34	40.18%	\$9	\$19				
2021	\$2.23	\$27	40.18%	\$10.85	\$21.56	40.18%	\$0	\$20				
2022	\$2.25	\$27	40.18%	\$10.85	\$21.77	40.18%	\$9	\$20				
2023	\$2.28	\$27	40.18%	\$10.65	\$21.99	40.18%	\$9	\$20				
2024	\$2.30	\$28	40.18%	\$11.25	\$22.21	40.18%	\$9	\$20				
2025	\$2.32	\$28	40.18%	\$11.25	\$22.43	40.18%	\$9	\$20				
2026	\$2.34	\$28	40.18%	\$11.25	\$22.66	40.18%	\$9	\$20				
2027	\$2.37	\$28	40.18%	\$11.25	\$22.88	40,18%	\$9	\$20				
2028	\$2.39	\$29	40.18%	\$11.65	\$23.11	40.18%	SQ	\$21				

	Gas Costs									
1	2	3	2*3							
	Therms	Per Therm	Gas Supply							
Year		Supply Cost	Cost							
2009	178	\$0.7000	\$125							
2010	175	\$0.7070	\$126							
2011	178	\$0.7141	\$127							
2012	178	\$0.7212	\$128							
2013	178	\$0.7284	\$1.30							
2014	178	\$0.2357	\$131							
2015	178	\$0.7431	\$132							
2016	178	\$0.7505	\$134							
2017	178	\$0.7580	\$135							
2018	178	\$0.7656	\$136							
2019	178	\$0.7732	\$138							
2020	178	\$0.7810	\$139							
2021	178	\$9.7688	\$140							
2022	176	\$0.7967	\$142							
2023	178	\$0.8046	\$143							
2024	178	\$0.6127	\$145							
2025	178	\$0.8200	\$146							
2026	178	\$0.6290	\$148							
2027	178	\$0.8373	\$149							
2028	178	\$0.8457	\$151							

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Ap	plia	nce	Tvi	рe

Clothes Drying

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$29	\$35	\$15	\$79	\$35	\$16	\$5	\$100.15	\$156
2010	\$29	\$35	\$ 15	\$80	\$35	\$15	\$5	\$0.15	\$56
2011	\$29	\$36	\$ 15	\$80	\$36	\$15	\$5	\$0.15	\$56
2012	\$29	\$36	\$15	\$80	\$36	\$14	\$5	\$0.15	\$56
2013	\$29	\$36	\$15	\$81	\$36	\$14	\$5	\$0.15	\$56
2014	\$29	\$37	\$15	\$81	\$37	\$13	\$5	\$0.15	\$55
2015	\$29	\$37	\$ 15	\$81	\$37	\$13	\$5	\$0.15	\$55
2016	\$29	\$38	\$15	\$82	\$38	\$12	\$ 5	\$0.15	\$55
2017	\$29	\$38	\$15	\$82	\$38	\$12	\$5	\$0.15	\$55
2018	\$29	\$38	\$15	\$83	\$38	\$12	\$5	\$0.15	\$55
2019	\$29	\$39	\$15	\$83	\$39	\$11	\$ 5	\$0.15	\$55
2020	\$29	\$39	\$ 15	\$83	\$39	\$11	\$5	\$0.15	\$55
2021	\$29	\$39	\$15	\$84	\$39	\$10	\$ 5	\$100.15	\$155
2022	\$29	\$40	\$ 15	\$84	\$40	\$10	\$6	\$0.15	\$56
2023	\$29	\$40	\$15	\$85	\$40	\$10	\$6	\$0.15	\$56
2024	\$29	\$41	\$ 15	\$85	\$41	\$9	\$ 6	\$0.15	\$56
2025	\$29	\$41	\$15	\$85	\$41	\$9	\$6	\$0.15	\$56
2026	\$29	\$41	\$15	\$86	\$41	\$9	\$6	\$0.15	\$56
2027	\$29	\$42	\$15	\$86	\$42	\$8	\$ 6	\$0.15	\$56
2028	\$29	\$42	\$ 15	\$87	\$42	\$8	\$6	\$0.15	\$56

Present Value of Benefits \$804

Present Value of Costs \$675

Benefit/Cost Ratio 1.19

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type Clothes Drying

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.60%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3,80%
D&M/Inflation Escelator	1.0%	Depreciation Rete - Meter	4.20%

Revenue - Energy Charge										
1	2	3	2*3							
Year	Therms	Base Rate	Total Charge							
2009	50	\$0.5884	\$29							
2010	50	\$0.5884	\$28							
2011	50	\$0.5884	\$29							
2012	50	\$0.5884	\$29							
2013	50	\$0.5884	\$29							
2014	50	\$0.5884	\$29							
2015	50	\$0.5864	\$29							
2016	50	\$0.5884	\$29							
2017	50	\$0.5884	\$29							
2018	50	\$0.5864	\$29							
2019	50	\$0.5884	\$29							
2020	50	\$0,5884	\$29							
2021	50	\$0.5884	\$29							
2022	50	\$0.5884	\$29							
2023	50	\$0.5884	\$29							
2024	50	\$0.5884	\$29							
2025	56	\$0.5884	\$29							
2026	50	\$0.58B4	\$29							
2027	50	\$0.5884	\$29							
2028	50	\$0.5884	\$29							

Revenue - Cost of Gas										
1	2	4	2*3							
Year	Therms	Fuel Rate	Total Charge							
2009	50	\$0,7000	\$35							
2010	50	\$0.7070	\$35							
2011	50	\$0.7141	\$36							
2012	50	\$0,7212	\$36							
2013	50	\$0.7284	\$36							
2014	50	\$0,7357	\$37							
2015	50	\$0.7431	\$37							
2018	50	\$0.7505	\$38							
2017	50	\$0.7580	\$38							
2018	50	\$0.7658	\$38							
2019	50	\$0.7732	\$39							
2020	50	\$0,7810	\$39							
2021	50	\$0.7888	\$39							
2022	50	\$0.7967	\$40							
2023	50	\$0.8046	\$40							
2024	50	\$0.8127	\$41							
2025	50	\$0.8206	\$41							
2026	50	\$0,6290	\$41							
2027	50	\$0.8373	\$42							
2028	50	\$0.8457	\$42							

Revenue - Customer Charge										
1	2	3	A	4*3						
	Monthly		Ratio Therms							
	Customer	Annual Customer	To Total	Prorated Annual						
Year	Charge	Charge	Consumed	Customer Charge						
2009	\$11.00	\$132.00	11.29%	\$15						
2010	\$11.00	\$132.00	11,29%	\$15						
2011	\$11.00	\$132.00	11.29%	\$15						
2012	\$11.00	\$132.00	11.29%	515						
2013	\$11.00	\$132.00	11.29%	\$15						
2014	\$11,00	\$132,00	11,20%	\$15						
2015	\$11.00	\$132.00	11.29%	\$15						
2018	\$11.00	\$132.00	11.29%	\$15						
2017	\$11,00	\$132.00	11.29%	\$15						
2018	\$11.00	\$132.00	11.29%	\$15						
2019	\$11.00	\$132.00	11.29%	\$15						
2020	\$11.00	\$132.00	11.29%	\$15						
2021	\$11.00	\$132.00	11.29%	\$15						
2022	\$11.00	\$132.00	11.29%	\$15						
2023	\$11.00	\$132.00	11.29%	\$15						
2024	\$11.00	\$132.00	11.29%	\$15						
2025	\$11,00	\$132.00	11.29%	\$15						
2028	\$11.00	\$132.00	11 29%	\$15						
2027	\$11.00	\$132.00	11.29%	\$15						
2028	\$11.00	\$132.00	11.29%	\$15						

	Investment Carrying Costs											
1	. 2	3	4	- 5	6	7	e	6*7*8				
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment				
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos				
2009	\$100	\$500	\$960	\$307	\$1,867	7.62%	11.29%	\$16				
2010	\$97	\$486	\$924	\$294	\$1,991	7.62%	11,29%	\$15				
2011	\$94	\$472	\$889	\$282	\$1,737	7 62%	11.29%	\$15				
2012	\$91	\$458	\$855	\$270	\$1,874	7.62%	11.29%	\$14				
2013	\$88	\$445	\$823	\$259	\$1,615	7.62%	11.29%	\$14				
2014	\$85	\$432	\$792	\$248	\$1,557	7 82%	11.29%	\$13				
2015	\$83	\$419	\$762	\$238	\$1,502	7.62%	11.29%	\$13				
2018	\$81	\$407	\$733	\$228	\$1,449	7.82%	11.20%	\$12				
2017	\$79	2 395	\$705	\$218	\$1,397	7.62%	11.29%	\$12				
2018	\$77	\$384	\$876	\$209	\$1,348	7.62%	11.29%	\$12				
2019	\$75	\$373	\$652	\$200	\$1,300	7.62%	11,29%	\$11				
2020	\$73	\$382	\$627	\$192	\$1,254	7.82%	11.29%	\$11				
2021	\$71	\$352	\$803	\$184	\$1,210	7 62%	11.29%	\$10				
2022	\$69	\$342	\$580	\$176	\$1,167	7.82%	11.29%	\$10				
2023	\$67	\$332	\$558	\$169	\$1,126	7.62%	11.29%	\$10				
2024	\$65	\$322	\$537	\$162	\$1,086	7.62%	11.29%	\$9				
2025	\$63	\$313	\$517	\$155	\$1,048	7.62%	11.29%	\$0				
2026	\$61	\$304	\$407	\$148	\$1,010	7.62%	11.29%	\$9				
2027	\$59	\$295	\$478	\$142	\$974	7 82%	11.29%	\$8				
2028	\$57	\$286	\$460	\$136	\$939	7.62%	11.29%	\$8				

			incr	emental Cust	mer Costs			
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Actival Ratio	Total incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm & O&M Cost
2009	\$1.98	\$24	11.29%	\$2.71	\$19.13	11.29%	\$2	\$5
2010	\$2.00	\$24	11.29%	\$2.71	\$19.32	11.20%	52	\$5
2011	\$2.02	\$24	11.29%	\$2.71	\$19.51	11.28%	\$2	\$5
2012	\$2.04	\$24	11 29%	\$2.71	\$19.71	11,29%	\$2	\$5
2013	\$2.06	\$25	11.29%	\$2.82	\$19.91	11.20%	\$2	\$5
2014	\$2.06	\$25	11.29%	\$2.82	\$20.11	11.29%	\$2	\$5
2015	\$2,10	\$25	11.29%	\$2.82	\$20.31	11.29%	\$2	\$5
2016	\$2.12	\$25	11.29%	\$2.82	\$20.51	11.29%	\$2	\$5
2017	\$2.14	\$26	11.29%	\$2.93	\$20.72	11.29%	\$2	\$5
2015	\$2.17	\$26	11.29%	\$2.93	\$20.92	11.28%	\$2	\$5
2019	\$2,19	\$26	11.29%	\$2.93	\$21.13	11.29%	\$2	\$5
2020	\$2.21	\$27	11.29%	\$3.05	\$21.34	11.29%	\$2	\$5
2021	\$2.23	\$27	11.29%	\$3.05	\$21.56	11.29%	\$2	5.5
2022	\$2,25	\$27	11.29%	\$3.05	\$21.77	11.29%	\$2	\$6
2023	\$2.28	\$27	11.29%	\$3.05	\$21.99	11.20%	\$2	\$6
2024	\$2.30	\$28	11.29%	\$3.16	\$22.21	11.20%	\$3	\$6
2025	\$2.32	\$20	11.29%	\$3.16	\$22.43	11.29%	\$3	\$6
2026	\$2.34	\$28	11,29%	\$3.16	\$22.66	11.20%	\$3	\$6
2027	\$2.37	\$28	11.29%	\$3.16	\$22.88	11.20%	\$3	\$6
2028	\$2.39	\$29	11.29%	\$3.27	\$23.11	11,29%	\$3	\$6

	Gas	Costs	
1	2	3	2.3
	Therms	Per Therm	Ges Supply
Year		Supply Cost	Cost
2009	50	0.7000	\$35
2010	50	\$0.7070	\$35
2011	50	\$0.7141	\$36
2012	50	\$0.7212	536
2013	50	\$0.7284	\$36
2014	50	\$0.7357	\$37
2015	50	\$0.7431	\$37
2018	50	\$0.7505	\$38
2017	50	\$0.7580	\$38
2018	50	\$0.7656	\$38
2019	50	\$0.7732	\$39
2020	50	\$0,7810	\$39
2021	50	\$0.7888	\$39
2022	50	\$0,7967	\$40
2023	50	\$0.8046	\$40
2024	50	\$0 8127	\$41
2025	50	\$0.8206	\$41
2026	50	\$0.8290	\$41
2027	50	\$0,8373	\$42
2028	50	\$0.8457	\$42

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Cooking

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$26	\$32	\$13	\$71	\$32	\$14	\$4	\$100.14	\$150
2010	\$26	\$32	\$13	\$72	\$32	\$14	\$4	\$0.14	\$50
2011	\$26	\$32	\$13	\$72	\$32	\$13	\$4	\$0.14	\$50
2012	\$26	\$32	\$13	\$72	\$32	\$13	\$4	\$0.14	\$50
2013	\$26	\$33	\$13	\$73	\$33	\$13	\$ 5	\$0.14	\$50
2014	\$26	\$33	\$13	\$ 73	\$33	\$12	\$5	\$0.14	\$50
2015	\$26	\$33	\$13	\$73	\$33	\$12	\$ 5	\$0.14	\$50
2016	\$26	\$34	\$13	\$74	\$34	\$11	\$5	\$0.14	\$50
2017	\$26	\$34	\$13	\$74	\$34	\$11	\$5	\$0.14	\$50
2018	\$26	\$34	\$13	\$74	\$34	\$10	\$5	\$0.14	\$50
2019	\$26	\$35	\$13	\$75	\$35	\$10	\$ 5	\$0.14	\$50
2020	\$26	\$35	\$13	\$ 75	\$35	\$10	\$ 5	\$0.14	\$50
2021	\$26	\$35	\$13	\$75	\$35	\$9	\$5	\$0.14	\$50
2022	\$26	\$36	\$13	\$76	\$36	\$ 9	\$ 5	\$0.14	\$50
2023	\$26	\$36	\$13	\$76	\$36	\$ 9	\$ 5	\$100.14	\$150
2024	\$26	\$ 37	\$13	\$76	\$37	\$8	\$ 5	\$0.14	\$50
2025	\$26	\$37	\$13	\$77	\$37	\$8	\$ 5	\$0.14	\$50
2026	\$26	\$37	\$13	\$77	\$37	\$8	\$ 5	\$0.14	\$50
2027	\$26	\$38	\$13	\$78	\$38	\$8	\$ 5	\$0.14	\$51
2028	\$26	\$38	\$13	\$78	\$38	\$7	\$ 5	\$0.14	\$51

Present Value of Benefits

\$724

Present Value of Costs

\$616

Benefit/Cost Ratio 1.18

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type	
Cooking	

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Base Rata Escalator	0%	Depreciation Rate - Development Main	2.90%
Gae Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.80%
OSM/inflation Escaletor	1.0%	Depreciation Rate - Mater	4.20%

	evenue - l	Energy Cha	
1	2	3	2*3
188Y	Thems	Base Rate	Total Charge
2009	45	\$0.5884	\$26
2010	45	\$0.5884	\$26
2011	45	\$0.5884	\$26
2012	45	\$0,5884	\$26
2013	45	\$0.5884	\$26
2014	45	\$0.5884	\$28
2015	45	\$0.5884	\$26
2016	45	\$0.5884	\$26
2017	45	\$0.5984	\$26
2016	45	\$0.5884	\$26
2019	45	\$0.5884	\$26
2020	45	\$0.5864	\$26
2021	45	\$0.5884	\$26
2022	45	\$0.5884	\$26
2023	45	\$0.5884	\$26
2024	45	\$0,5884	\$26
2025	45	\$0.5884	\$28
2026	45	\$0.5884	\$26
2027	45	\$0,5864	\$26
2028	45	\$0.5884	\$26

F	Rovenue - Co:	st of Gas	
	2	4	2*3
Year	Theims	Fun Rate	
2008	45	\$0,7000	\$32
2010	45	\$0.7070	\$32
2011	45.	\$0.7141	\$32
2012	45	\$0.7212	\$32
2013	45	\$0.7284	\$33
2014	45	\$0,7387	\$33
2015	45	\$0.7431	\$33
2016	45	\$0.7505	\$34
2017	45	\$0,7580	\$34
2018	45	\$0.7656	\$34
2019	45	\$0.7732	\$35
2020	45	\$0.7610	\$35
2021	45	\$0.7888	\$35
2022	45	\$0.7967	\$36
2023	45	\$0,8046	\$36
2024	45	\$6.6127	\$37
2025	45	\$0.6206	\$37
2026	45	\$0.8290	\$37
2027	45	\$0.8373	\$38
2028	45	\$0.8457	\$36

	Re	evenue - Custome	er Charge	
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	211.00	\$132.00	10.16%	\$13
2010	\$11.00	\$132.00	10.16%	513
2011	\$11.00	\$132.00	10.16%	\$13
2012	\$11.00	\$132.00	10 18%	\$13
2013	\$11,00	\$132.00	10.16%	\$13
2014	\$11.00	\$132.00	10.18%	513
2015	\$11.00	\$132.00	10.16%	513
2016	\$11,00	\$132.00	10.16%	S13
2017	\$11.00	\$132,00	10.16%	\$13
2018	\$11.00	\$132.00	10 16%	\$13
2019	\$11,00	\$132,00	10.16%	\$13
2020	\$11.00	\$132.00	10.18%	\$13
2021	\$11.00	\$132.00	10 18%	\$13
2022	\$11.00	\$132.00	1G.16%	\$13
2023	\$11,00	\$132,00	10.16%	\$13
2024	\$11.00	\$132.00	10.16%	\$13
2025	\$11.00	\$132,00	10 16%	\$13
2026	\$11.00	\$132.00	10.16%	\$13
2027	\$17.00	\$132.00	10 18%	\$13
2028	\$11.00	\$132.00	10.15%	\$13

			Inve	stment Ca	rrying Costs			
1	2	3	4	5	- 6	7	В	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2008	\$100	\$500	\$960	\$307	\$1,867	7.62%	10.18%	\$14
2010	\$97	5486	\$924	\$294	\$1,601	7.62%	10.16%	\$14
2011	\$94	\$472	\$889	\$262	\$1,737	7.62%	10.18%	\$13
2012	\$91	\$456	\$855	\$270	\$1,874	7.62%	10.16%	\$13
2013	\$86	\$445	\$823	\$259	\$1,615	7.62%	10.16%	\$13
2014	\$85	\$432	\$792	\$248	\$1,557	7.62%	10.16%	\$12
2015	\$83	\$419	\$782	\$238	\$1,502	7.62%	10.16%	\$12
2016	\$61	\$407	\$733	\$226	\$1,449	7.82%	10,16%	\$11
2017	\$79	\$395	\$705	\$218	\$1,397	7.62%	10.18%	\$11
2018	\$77	\$364	\$876	\$209	\$1,348	7,62%	10,18%	\$10
2019	\$75	\$373	\$652	\$200	\$1,300	7.82%	10.16%	\$10
2020	\$73	\$362	2627	\$192	\$1,254	7.62%	10.18%	\$10
2021	\$71	\$352	\$603	\$184	\$1,210	7.62%	10.16%	\$9
2022	\$69	\$342	\$580	\$176	\$1,167	7.62%	10.18%	20
2023	\$67	\$332	\$556	\$169	\$1,126	7.52%	10.18%	23
2024	\$85	\$322	\$537	\$162	\$1,086	7.82%	10.16%	\$8
2025	\$83	\$313	\$517	\$155	\$1,048	7.62%	10.16%	\$8
2028	\$81	\$304	\$497	\$146	\$1,010	7.62%	10.16%	\$8
2027	\$59	\$295	3478	\$142	\$974	7.62%	10.16%	\$8
2028	\$57	\$286	\$460	\$136	\$939	7.62%	10.16%	\$7

			incre	mental Custo	omer Costs			
1	2	3		5=3*4	6	7	8×8′7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm Cost	O&M Cost	Total Consumed	D&M Cost	Arim. & O&M Cos
2009	\$1.98	\$24	10.15%	\$2.44	\$19.13	10.16%	\$2	\$4
2010	\$2.00	\$24	10.16%	\$2.44	\$19.32	10.16%	\$2	\$4
2011	\$2.02	\$24	10.16%	\$2,44	\$19.51	10.16%	\$2	. \$4
2012	\$2.04	\$24	10.16%	\$2.44	\$19.71	10,18%	\$2	\$4
2013	\$2.06	\$25	10.16%	\$2.54	\$19.91	10,16%	\$2	\$5
2014	\$2.08	\$25	10.16%	\$2.54	\$20.11	10.16%	\$2	\$5
2015	\$2.10	\$25	10.16%	\$2.54	\$20.31	10.16%	\$2	\$5
2016	\$2.12	\$25	10.18%	\$2.54	\$20.51	10.16%	\$2	\$6
2017	\$2.14	\$26	10.16%	\$2.64	\$20.72	10.18%	\$2	\$5
2018	\$2.17	\$26	10.16%	\$2.64	\$20.92	10.18%	\$2	\$5
2019	\$2.19	\$28	10.16%	\$2.64	\$21.13	10.16%	\$2	\$5
2020	\$2.21	\$27	10.16%	\$2.74	\$21.34	10.16%	\$2	\$5
2021	\$2.23	\$27	10.16%	\$2.74	\$21,56	10,16%	\$2	\$5
2022	\$2.25	\$27	10 18%	\$2.74	\$21.77	10.16%	\$2	\$5
2023	\$2.28	\$27	10.16%	\$2.74	\$21.99	10 16%	\$2	\$5
2024	\$2.30	\$28	10.16%	\$2.84	\$22.21	10.18%	\$2	\$5
2025	\$2.32	\$28	10.16%	\$2.84	\$22.43	10.16%	\$2	\$5
2026	\$2.34	\$26	10.16%	\$2 84	\$22.66	10.16%	\$2	\$5
2027	\$2.37	\$28	10.16%	\$2.84	\$22 68	10.16%	\$2	\$5
2026	\$2,39	\$29	10 16%	\$2.95	\$23,11	10.16%	\$2	\$5

	Gas	Costs	
1	2	3	2*3
	Therms	Commodity Gas	Gas Supply
Year		Supply Cost	Cost
2009	45	0.7000	\$32
2010	45	\$0,7070	\$32
2011	45	\$0.7141	\$32
2012	45	\$0.7212	\$32
2013	45	\$0.7284	\$33
2014	45	\$0,7357	\$33
2015	45	\$0.7431	\$33
2016	45	\$0.7505	\$34
2017	45	\$0,7580	\$34
2018	45	\$0.7656	\$34
2019	45	\$0 7732	\$35
2020	45	20.7810	\$35
2021	45	\$0.7888	\$35
2022	45	\$0.7967	\$36
2023	45	\$0.8048	\$36
2024	45	\$0.8127	\$37
2025	45	\$0.8208	\$37
2026	45	\$0,8290	\$37
2027	45	\$0.8373	\$38
2028	45	\$0.8457	\$38

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type
Storage Tank Water Heating

			Benefit	s					(Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$508	\$350	\$60	\$918	0	\$0	0	\$100	\$60	\$131	\$110	\$56	\$457
2010	2	\$509	0	\$61	\$570	0	\$0	0		\$61	\$132	\$110	\$56	\$359
2011	3	\$511	0	\$61	\$572	0	\$0	0		\$ 61	\$134	\$110	\$56	\$360
2012	4	\$512	0	\$ 62	\$574	0	\$0	0		\$ 62	\$135	\$110	\$56	\$362
2013	5	\$514	0	\$6 2	\$576	0	\$0	0		\$ 62	\$136	\$1 10	\$ 56	\$364
2014	6	\$515	0	\$63	\$578	0	\$ 0	0		\$6 3	\$138	\$110	\$56	\$366
2015	7	\$517	0	\$ 64	\$580	0	\$0	0		\$64	\$139	\$1 10	\$ 56	\$368
2016	8	\$518	0	\$64	\$582	0	\$0	0		\$ 64	\$140	\$1 10	\$ 56	\$370
2017	9	\$519	0	\$65	\$584	0	\$ 0	0		\$65	\$142	\$110	\$56	\$372
2018	10	\$521	350	\$66	\$937	421	(\$659)	239		\$6 6	\$143	\$1 10	\$56	\$375
2019	11	\$522	0	\$66	\$589	0	\$0	0		\$66	\$145	\$1 10	\$56	\$377
2020	12	\$524	0	\$67	\$591] 0	\$0	0		\$ 67	\$146	\$1 10	\$ 56	\$379
2021	13	\$525	0	\$68	\$593	0	\$0	0		\$68	\$148	\$110	\$56	\$381
2022	14	\$527	0	\$68	\$595	0	\$0	0		\$68	\$149	\$110	\$56	\$383
2023	15	\$528	0	\$69	\$597	0	\$0	0		\$6 9	\$150	\$110	\$56	\$385
2024	16	\$530	0	\$70	\$599	0	\$0	0		\$70	\$152	\$110	\$56	\$387
2025	17	\$531	0	\$70	\$601	0	\$0	0		\$70	\$153	\$110	\$56	\$390
2026	18	\$533	0	\$7 1	\$604	0	\$0	0		\$71	\$155	\$110 .	\$56	\$392
2027	19	\$534	0	\$72	\$606	0	\$0	0		\$72	\$157	\$110	\$56	\$394
2026	20	\$535	0	\$72	\$608	0	\$0	0		\$72	\$158	\$110	\$56	\$396

Present Value of Benefits \$6,206 Present Value of Costs \$3,733

Benefit/Cost 1.66
Ratio

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Storage Tank Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1,0%	NG Sase Rates	0.0%

	Prog	pane Cost - Tab	le 1			Natural Gas Suj	pply Cost -	Table 2			Naturel Gas	Energy Ch	arge - Tal	ble 3				Natural Gas (Customer C	harge - Table 4		
Year	Cost Per Gellon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annuai Therms	Tax Rat	e NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	n NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Thomas	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α	В	С	а	B*C*(1+D)	Α_	В	с	D	B*C*(1+D)	A	8	С	D	B*C*(1+D)	A	В	С .	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	156	7.5%	\$508	2009	\$0.7000	170	10%	\$131	2009	\$0.5884	170	10%	\$110	2009	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2010	\$2.5533	186	7.5%	\$809	2010	\$0.7070	170	10%	\$132	2010	\$0.5884	170	10%	\$110	2010	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2011	\$2.5605	186	7.5%	\$511	2011	\$0.7141	170	10%	\$134	2011	\$0.5884	170	1.0%	\$110	2011	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2012	\$2.5678	186	7.5%	\$512	2012	\$0.7212	170	10%	\$135	2012	\$0.5884	170	10%	\$110	2012	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2013	\$2.5750	186	7.5%	\$514	2013	\$0.7284	170	10%	\$138	2013	\$0.5884	170	10%	\$110	2013	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2014	\$2.5823	186	7.5%	\$515	2014	\$0.7357	170	10%	\$136	2014	\$0.5884	170	10%	\$110	2014	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2015	\$2.5896	186	7.5%	\$517	2015	\$0.7431	170	10%	\$139	2015	\$0.5884	170	10%	\$110	2015	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2016	\$2.5968	186	7.5%	\$518	2016	\$0.7505	170	10%	\$140	2016	\$0.5884	170	10%	\$110	2016	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2017	\$2.6041	186	7.5%	\$519	2017	\$0.7580	170	10%	\$142	2017	\$0.5864	170	10%	\$110	2017	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2015	\$2.6113	186	7.5%	\$521	2018	\$0.7656	170	10%	\$143	2018	\$0,5884	170	10%	\$110	2018	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2019	\$2,6186	186	7.5%	\$522	2019	\$0.7732	170	10%	\$145	2019	\$0.5884	170	10%	\$110	2019	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2020	\$2.6259	186	7.5%	\$524	2020	\$0.7810	170	10%	\$148	2020	\$0.5884	170	10%	\$110	2020	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2021	\$2,6331	186	7.5%	\$525	2021	\$0.7888	170	10%	\$148	2021	\$0.5884	170	10%	\$110	2021	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2022	\$2,8404	186	7.5%	\$527	2022	\$0.7967	170	10%	\$149	2022	\$0.5884	170	10%	\$110	2022	\$11.00	\$132.00	170	443	38.37%	10%	\$58
								10%								* '	•					
2023	\$2.8476	186	7.5%	\$528	2023	\$0.8046	170		\$150	2023	\$0.5884	170	10%	\$110	2023	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2024	\$2.6549	186	7,5%	\$630	2024	\$0.8127	170	10%	\$162	2024	\$0.5864	170	10%	\$110	2024	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2025	\$2.8622	186	7.5%	\$631	2025	\$0.8208	170	10%	\$153	2025	\$0.5864	170	10%	\$110	2025	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2026	\$2.6694	186	7.5%	\$533	2026	\$0.8290	170	10%	\$155	2026	\$0.5884	170	10%	\$110	2026	\$11.00	\$132.00	170	443	38,37%	10%	\$56
2027	\$2.6767	186	7.5%	\$634	2027	\$0.8373	170	10%	\$167	2027	\$0.5884	170	10%	\$110	2027	\$11.00	\$132.00	170	443	38.37%	10%	\$56
2028	\$2.6839	186	7.5%	\$636	2028	\$0.8457	170	10%	\$158	2028	\$0.5884	170	10%	\$110	2028	\$11.00	\$132.00	170	443	38.37%	10%	\$56

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Tankless Water Heating

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL GOSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$448	\$450	\$60	\$958	\$0	\$0	\$0	\$100	\$60	\$116	\$97	\$51	\$424
2010	2	\$449	0	\$ 81	\$510	0	\$0	0		\$61	\$117	\$97	\$51	\$326
2011	3	\$451	0	\$61	\$512	0	\$0	0		\$61	\$1 18	\$97	\$ 51	\$328
2012	4	\$452	0	\$62	\$514	0	\$0	0		\$62	\$119	\$97	\$51	\$329
2013	5	\$453	0	\$62	\$516	0	\$0	0		\$62	\$120	\$97	\$ 51	\$331
2014	6	\$455	0	\$ 63	\$518	0	\$0	0		\$63	\$121	\$97	\$51	\$333
2015	7	\$456	0	\$64	\$620	0	\$0	0		\$64	\$123	\$97	\$51	\$335
2016	8	\$457	0	\$64	\$521	0	\$0	0		\$64	\$124	\$97	\$ 51	\$337
2017	9	\$458	0	\$ 65	\$523	0	\$0	0		\$6 5	\$125	\$97	\$51	\$339
2018	10	\$460	0	\$66	\$525	0	\$0	0		\$66	\$126	\$97	\$51	\$341
2019	11	\$461	0	\$66	\$527	0	\$0	0		\$66	\$128	\$97	\$51	\$342
2020	12	\$462	0	\$67	\$529	0	\$0	0		\$67	\$129	\$97	\$51	\$344
2021	13	\$463	0	\$68	\$531	0	\$0	0		\$68	\$130	\$97	\$51	\$346
2022	14	\$465	0	\$68	\$533	0	\$0	0		\$68	\$131	\$97	\$ 51	\$346
2023	15	\$466	0	\$69	\$535	0	\$0	0		\$69	\$133	\$97	\$51	\$350
2024	16	\$467	0	\$70	\$537	0	\$0	0		\$70	\$134	\$97	\$51	\$352
2025	17	\$469	0	\$70	\$539	0	\$0	0		\$70	\$135	\$97	\$51	\$354
2026	18	\$470	0	\$71	\$541	0	\$0	0		\$71	\$137	\$97	\$51	\$356
2027	19	\$471	0	\$72	\$543	0	\$0	0		\$72	\$138	\$97	\$51	\$358
2028	20	\$472	450	\$72	\$995	1,219	(\$1,746)	527		\$72	\$140	\$97	\$51	\$361

Present Value 55,634

Present Value sf Costs \$3,402

Benefit/Cost 1.66
Ratio

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Tankless Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuei Cost	1.0%	NG Base Rates	0.0%

	Propi	ne Cost - Tal	ble 1	
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cos
A	8	С	D	B*C*(1+0)
2009	\$2.5460	164	7.5%	\$448
2010	\$2.5533	184	7.5%	\$449
2011	\$2.5605	164	7.5%	\$461
2012	\$2.5678	164	7.5%	\$452
2013	\$2.5750	184	7.5%	\$463
2014	\$2.5823	164	7.5%	\$468
2015	\$2,5896	184	7.5%	\$486
2016	\$2.5968	164	7.5%	\$467
2017	\$2,6041	184	7.5%	\$456
2018	\$2,6113	184	7.5%	\$460
2019	\$2.6186	184	7.5%	\$461
2020	\$2.6259	184	7.5%	\$462
2021	\$2.6331	184	7.5%	\$463
2022	\$2.6404	164	7.5%	\$465
2023	\$2.6476	164	7.5%	\$455
2024	\$2,6549	184	7.5%	\$467
2025	\$2.6622	164	7.5%	\$469
2026	\$2.5694	184	7.5%	\$470
2027	\$2.6767	184	7.5%	\$471
2028	\$2.6839	164	7.5%	\$472

	Natuari Ga	s Supply Co	ost - Table 2			Natural Gas	<u> </u>
Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	
A	В	С	D	B*C*(1+D)	Α_	В	_
2009	\$0.7000	150	10.0%	\$116	2009	\$0.5884	
2010	\$0.7070	150	10.0%	\$117	2010	\$0,5884	
2011	\$0.7141	150	10.0%	\$118	2011	\$0.5884	
2012	\$0.7212	150	10.0%	\$119	2012	\$0.5884	
2013	\$0.7284	150	10.0%	\$120	2013	\$0.5884	
2014	\$0.7357	150	10.0%	\$121	2014	\$0.5864	
2015	\$0.7431	150	10.0%	\$123	2015	\$0.5864	
2018	\$0.7505	150	10.0%	\$124	2018	\$0.5884	
2017	\$0.7580	150	10,0%	\$125	2017	\$0.5684	
2018	\$0.7656	150	10.0%	\$126	2018	\$0,5884	
2019	\$0.7732	150	10.0%	\$128	2019	\$0.5884	
2020	\$0.7810	150	10.0%	\$129	2020	\$0.5884	
2021	\$0.7888	150	10.0%	\$130	2021	\$0.5884	
2022	\$0,7967	150	10.0%	\$131	2022	\$0.5884	
2023	\$0.8048	150	10.0%	\$133	2023	\$0.5884	
2024	\$0.8127	150	10.0%	\$134	2024	\$0.5884	
2025	\$0.8208	150	10.0%	\$135	2025	\$0.5884	
2026	\$0.8290	150	10.0%	\$137	2026	\$0.5884	
2027	\$0.8373	150	10.0%	\$138	2027	\$0.5884	
2028	\$0.8457	150	10.0%	\$140	2028	\$0.5884	

	Natural Ga	s Energy Cl	arge - Tabk	3	
Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	١
A	В	С		B*C*(1+D)	
2009	\$0.5884	150	10.0%	\$97	2
2010	\$0,5884	150	10.0%	\$97	2
2011	\$0.5884	150	10.0%	\$97	2
2012	\$0.5884	150	10.0%	\$97	2
2013	\$0.5884	150	10.0%	\$97	2
2014	\$0.5864	150	10.0%	\$97	2
2015	\$0.5864	150	10.0%	\$97	2
2018	\$0.5884	150	10.0%	\$97	2
2017	\$0.5684	150	10.0%	\$97	2
2018	\$0.5884	150	10.0%	\$97	2
2019	\$0.5884	150	10.0%	\$97	2
2020	\$0.5884	150	10.0%	\$87	2
2021	\$0.5864	150	10.0%	\$87	2
2022	\$0.5884	150	10.0%	\$97	2
2023	\$0.5884	150	10.0%	\$97	2
2024	\$0.5884	150	10.0%	\$97	2
2025	\$0.5884	150	10.0%	\$97	2
2026	\$0.5884	150	10.0%	\$97	2
2027	\$0.5884	150	10.0%	\$97	2

Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$11.00	\$132.00	150	423	35,46%	10.0%	\$81
2010	\$11.00	\$132.00	150	423	35.46%	10.0%	\$81
2011	\$11.00	\$132,00	150	423	35.46%	10.0%	\$51
2012	\$11.00	\$132.00	150	423	35,46%	10.0%	\$51
2013	\$11.00	\$132.00	150	423	35.46%	10.0%	\$51
2014	\$11.00	\$132.00	150	423	35.46%	10.0%	\$61
2015	\$11.00	\$132.00	150	423	35.46%	10.0%	\$51
2016	\$11.00	\$132.00	150	423	35.46%	10.0%	\$51
2017	\$11.00	\$132.00	150	423	35.46%	10.0%	\$51
2018	\$11.00	\$132.00	150	423	35.48%	10.0%	\$51
2019	\$11.00	\$132.00	150	423	35.46%	10.0%	\$51
2020	\$11.00	\$132.00	150	423	35,46%	10.0%	\$61
2021	\$11.00	\$132.00	150	423	35.48%	10.0%	\$81
2022	\$11.00	\$132.00	150	423	35.46%	10.0%	\$61
2023	\$11.00	\$132.00	150	423	35.46%	10.0%	\$81
2024	\$11.00	\$132.00	150	423	35.48%	10.0%	\$51
2025	\$11.00	\$132.00	150	423	35.48%	10.0%	\$61
2026	\$11.00	\$132.00	150	423	35.46%	10.0%	\$51
2027	\$11,00	\$132.00	150	423	35.46%	10.0%	\$61

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Heating System

			Benefits							Costs				***************************************
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$532	\$350	\$270	\$1,152	\$0	0	\$0	\$100	\$270	\$137	\$115	\$58	\$681
2010	2	\$533	0	\$273	\$806	o	Ō	0		\$273	\$138	\$115	\$58	\$585
2011	3	\$535	0	\$275	\$810	0	0	0		\$275	\$140	\$115	\$58	\$589
2012	4	\$536	0	\$278	\$815	0	0	0		\$278	\$141	\$115	\$58	\$593
2013	5	\$538	0	\$281	\$819	0	0	0		\$281	\$143	\$115	\$58	\$597
2014	6	\$539	0	\$284	\$823	0	0	0		\$284	\$144	\$115	\$58	\$601
2015	7	\$541	0	\$287	\$828	0	0	0		\$287	\$145	\$115	\$58	\$606
2016	8	\$542	0	\$289	\$832	0	0	0		\$289	\$147	\$115	\$58	\$610
2017	9	\$544	0	\$292	\$836	0	0	0		\$292	\$148	\$115	\$58	\$614
2018	10	\$545	0	\$295	\$841	0	0	0		\$295	\$150	\$115	\$58	\$619
2019	11	\$547	0	\$298	\$845	0	0	0		\$298	\$151	\$115	\$58	\$623
2020	12	\$548	0	\$301	\$850	0	0	0		\$301	\$153	\$115	\$58	\$628
2021	13	\$550	0	\$304	\$854	0	0	0		\$304	\$154	\$115	\$58	\$632
2022	14	\$552	0	\$307	\$859	0	0	0		\$307	\$156	\$115	\$58	\$637
2023	15	\$553	0	\$310	\$863	0	0	0		\$310	\$158	\$115	\$58	\$641
2024	16	\$555	0	\$313	\$868	0	0	0		\$313	\$159	\$115	\$58	\$646
2025	17	\$556	0	\$317	\$873	0	0	0		\$317	\$161	\$115	\$58	\$651
2026	18	\$558	350	\$320	\$1,227	2,882	(4,657)	1,775		\$320	\$162	\$115	\$58	\$656
2027	19	\$559	0	\$323	\$882	0	0	0		\$323	\$164	\$115	\$58	\$660
2028	20	\$561	0	\$326	\$887	0	0	0		\$326	\$166	\$115	\$58	\$665

Present Value \$8,585 of Benefits Present Value \$6,089 of Costs

Benefit/Cost 1.41
Ratio

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type	
Heating System	

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1,0%	NG Base Rates	0.0%

	Prop	ane Cost - Tabl	e 1	
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost
Ą	В	С	D	B*C*(1+D)
2009	\$2.5460	194	7.5%	\$532
2010	\$2.5533	194	7.5%	\$533
2011	\$2.5605	194	7.5%	\$535
2012	\$2.5678	194	7.5%	\$536
2013	\$2.5750	194	7.5%	\$538
2014	\$2.5823	194	7.5%	\$538
2015	\$2.5896	194	7.5%	\$541
2016	\$2.5968	194	7.5%	\$542
2017	\$2.6041	194	7.5%	\$544
2018	\$2.6113	194	7.5%	\$646
2019	\$2.6186	194	7.5%	\$547
2020	\$2.6259	194	7.5%	\$548
2021	\$2.6331	194	7.5%	\$550
2022	\$2.8404	194	7.5%	\$562
2023	\$2.8478	194	7.5%	\$553
2024	\$2.6549	194	7.5%	\$555
2025	\$2.6622	194	7.5%	\$556
2026	\$2.6694	194	7.5%	\$558
2027	\$2.6767	194	7.5%	\$559
2028	\$2.6839	194	7.5%	\$561

	Natural Ga	s Supply Co	ost - Table 2				
Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost			
Α	В	С	D	B*C*(1+D)			
2009	\$0.7000	178	10%	\$137			
2010	\$0.7070	178	10%	\$138			
2011	\$0.7141	178	10%	\$140			
2012	\$0.7212	178	10%	\$141			
2013	\$0.7284	178	10%	\$143			
2014	\$0.7357	178	10%	\$144			
2015	\$0.7431	178	10%	\$145			
2016	\$0.7505	178	10%	\$147			
2017	\$0.7580	178	10%	\$148			
2016	\$0.7656	178	10%	\$150			
2019	\$0.7732	178	10%	\$151			
2020	\$0.7810	178	10%	\$183			
2021	\$0.7888	178	10%	\$154			
2022	\$0.7967	176	10%	\$156			
2023	\$0.8046	176	10%	\$168			
2024	\$0.8127	178	10%	\$169			
2025	\$0.8208	178	10%	\$181			
2026	\$0.8290	178	10%	\$152			
2027	\$0.8373	176	10%	\$164			

Natural Gas Energy Charge - Table 3											
Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost							
Α	8	С	D	B*C*(1+D)							
2009	\$0.5884	178	10%	\$115							
2010	\$0.5884	178	10%	\$115							
2011	\$0.5884	178	10%	\$115							
2012	\$0.5884	178	10%	\$115							
2013	\$0.5884	178	10%	\$115							
2014	\$0.5884	178	10%	\$115							
2015	\$0.5884	178	10%	\$115							
2018	\$0.5884	178	10%	\$115							
2017	\$0.5884	178	10%	\$115							
2018	\$0.5884	178	10%	\$118							
2019	\$0.5884	178	10%	\$115							
2020	\$0.5884	178	10%	\$118							
2021	\$0.5884	178	10%	\$115							
2022	\$0.5884	178	10%	\$115							
2023	\$0.5884	178	10%	\$115							
2024	\$0.5884	178	10%	\$115							
2025	\$0.5884	178	10%	\$115							
2026	\$0.5884	178	10%	\$115							
2027	\$0.5884	178	10%	\$115							
2028	en 5094	170	1094	****							

		Natural Gas Customer Charge - Table 4													
	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge							
2	Α	В	С	D	E	D/E	G	C*(D/E)*(1+Z)							
1	2009	\$11.00	\$132.00	178	443	40.18%	10%	\$68							
	2010	\$11.00	\$132.00	178	443	40.18%	10%	\$68							
	2011	\$11.00	\$132.00	178	443	40.18%	10%	\$68							
	2012	\$11.00	\$132.00	178	443	40.18%	10%	\$68							
1	2013	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
	2014	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
	2015	\$11.00	\$132.00	178	443	40.18%	10%	\$68							
	2016	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
1	2017	\$11.00	\$132.00	178	443	40.18%	10%	\$68							
1	2018	\$11.00	\$132.00	178	443	40.18%	10%	\$68							
	2019	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
1	2020	\$11,00	\$132.00	178	443	40.18%	10%	\$58							
	2021	\$11.00	\$132.00	178	443	40.16%	10%	\$68							
1	2022	\$11.00	\$132.00	175	443	40,18%	10%	\$58							
1	2023	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
1	2024	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
1	2025	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
1	2026	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
	2027	\$11.00	\$132.00	178	443	40.18%	10%	\$58							
	2027	\$11.00	\$132.00	178		40.18%	10%	\$66 \$58							
- 1	2026	\$11.UU	\$132.UU	1/0	443	40.15%	10%	300							

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Clothes Drying

			Benefits							osts				
Year	Year Number	Avoided Propane Cost	NG Rebete	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$149	\$100	\$60	\$309	\$0	\$0	\$0	\$100	\$60	\$39	\$32	\$16	\$247
2010	2	\$150	0	\$61	\$210	0	\$0	0		\$61	\$39	\$32	\$16	\$148
2011	3	\$150	0	\$ 61	\$211	0	\$0	0		\$61	\$39	\$32	\$16	\$149
2012	4	\$151	0	\$ 62	\$212	0	\$0	0		\$62	\$40	\$ 32	\$16	\$150
2013	5	\$151	0	\$62	\$214	0	\$0	0		\$ 62	\$40	\$32	\$16	\$151
2014	6	\$152	0	\$63	\$215	0	\$0	0		\$63	\$40	\$32	\$16	\$152
2015	7	\$152	0	\$84	\$216	0	\$0	0		\$64	\$41	\$32	\$16	\$153
2016	8	\$152	0	\$64	\$217	0	\$0	0		\$64	\$41	\$32	\$16	\$154
2017	9	\$153	0	\$65	\$218	0	\$0	0		\$6 5	\$42	\$32	\$16	\$155
2018	10	\$153	0	\$66	\$219	Ò	\$0	0		\$66	\$42	\$32	\$16	\$156
2019	11	\$154	0	\$66	\$220	0	\$ 0	0		\$66	\$43	\$32	\$ 16	\$158
2020	12	\$154	0	\$67	\$221	0	\$0	0		\$ 67	\$43	\$32	\$16	\$159
2021	13	\$154	100	\$6 8	\$322	533	(\$697)	164		\$68	\$43	\$32	\$16	\$160
2022	14	\$155	0	\$68	\$223	0	\$ 0	0		\$68	\$44	\$32	\$16	\$161
2023	15	\$155	0	\$69	\$224	0	\$0	0		\$69	\$44	\$32	\$16	\$1 8 2
2024	16	\$156	0	\$ 70	\$225	0	\$0	0		\$70	\$45	\$32	\$16	\$163
2025	17	\$156	0	\$70	\$227	0	\$0	0		\$70	\$45	\$32	\$16	\$164
2026	18	\$157	0	\$71	\$228	0	\$0	0	0 \$71			\$32	\$16	\$165
2027	19	\$157	0	\$72	\$229	0	\$0	0		\$7 2	\$4 6	\$32	\$16	\$167
2028	20	\$157	0	\$72	\$230	0	\$0	0		\$72	\$47	\$32	\$16	\$168

Present Value of Benefits \$2,258 Present Value of Costs \$1,610

Benefit/Cost 1.40
Ratio

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Clothes Drying

Escalation Rates		LP Cel/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

Propane Cost - Table 1											
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost							
	8	c	D	8°C*(1+D)							
2009	\$2.5460	55	7.5%	\$149							
2010	\$2,5533	55	7.5%	\$150							
2011	\$2,5605	55	7.5%	\$180							
2012	\$2,5678	55	7.5%	\$161							
2013	\$2.5750	55	7.5%	\$161							
2014	\$2,5823	55	7.5%	\$162							
2015	\$2.5896	55	7.5%	\$152							
2018	\$2.5968	55	7.5%	\$152							
2017	\$2.6041	55	7.5%	\$163							
2018	\$2.6113	5 5	7.5%	\$163							
2019	\$2.6186	55	7.5%	\$154							
2020	\$2.6259	55	7.5%	\$154							
2021	\$2.6331	55	7.5%	\$164							
2022	\$2.6404	55	7.5%	\$155							
2023	\$2.8476	55	7.5%	\$155							
2024	\$2.6549	55	7.5%	\$186							
2025	\$2.6622	55	7.5%	\$166							
2026	\$2,6694	55	7.5%	\$157							
2027	\$2,8767	55	7.5%	\$167							
2028	\$2,6839	55	7.5%	\$157							

	Natural Ga	s Supply C	ost - Table 2		Natural Gas Energy Charge - Table 3								
Year	Cost Per Therm	Annual Therms	Tex Rate	NG Cost	Year	Rate Per Thorm	Annual Therms	Tax Rate	NG Cost				
A	8	С	a	B*C*(1+D)	Α	В	С	ø	8°C*(1+D)				
2009	\$0.7000	50	10%	\$39	2009	\$0.5884	50	10%	\$32				
2010	\$0.7070	50	10%	\$39	2010	\$0.5884	50	10%	\$32				
2011	\$0.7141	50	10%	\$39	2011	\$0.5884	50	10%	\$32				
2012	\$0.7212	50	10%	\$40	2012	\$0.5884	50	10%	\$32				
2013	\$0.7284	50	10%	\$40	2013	\$0.5884	50	10%	\$32				
2014	\$0.7357	50	10%	\$40	2014	\$0.5884	50	10%	\$32				
2015	\$0.7431	50	10%	\$41	2015	\$0.5884	50	10%	\$32				
2016	\$0.7505	50	10%	\$41	2016	\$0.5884	50	10%	\$32				
2017	\$0.7580	50	10%	\$42	2017	\$0.5884	50	10%	\$32				
2018	\$0.7656	50	10%	\$42	2018	\$0.5884	50	10%	\$32				
2019	\$0.7732	50	10%	\$43	2019	\$0.5884	50	10%	\$32				
2020	\$0.7810	50	10%	\$43	2020	\$0.5884	50	10%	\$32				
2021	\$0,7888	50	10%	\$43	2021	\$0.5884	50	10%	\$32				
2022	\$0.7967	50	10%	\$44	2022	\$0.5884	50	10%	\$32				
2023	\$0.8046	50	10%	\$44	2023	\$0.5884	50	10%	\$32				
2024	\$0.8127	50	10%	\$46	2024	\$0.5884	50	10%	\$32				
2025	\$0.8208	50	10%	\$48	2025	\$0.5884	50	10%	\$32				
2026	\$0.8290	50	10%	\$46	2026	\$0.5884	50	10%	\$32				
2027	\$0.8373	50	10%	\$46	2027	\$0.5884	50	10%	\$32				
2028	\$0.8457	50	10%	\$47	2028	\$0.5884	50	10%	\$32				

	****	Natur	al Gas Custo	ner Charge	- Table 4		
Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2010	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2011	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2012	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2013	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2014	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2015	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2016	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2017	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2018	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2019	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2020	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2021	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2022	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2023	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2024	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2025	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2026	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2027	\$11.00	\$132.00	50	443	11.29%	10%	\$16
2028	\$11.00	\$132.00	50	443	11,29%	10%	\$16

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Cooking

	d		Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$134	\$100	\$60	\$294	\$0	\$0	\$0	\$100	\$60	\$35	\$29	\$15	\$239
2010	2	\$135	0	\$61	\$195	0	\$0	0		\$ 61	\$35	\$29	\$15	\$139
2011	3	\$135	0	\$61	\$196	0	\$0	0		\$61	\$35	\$29	\$15	\$140
2012	4	\$136	0	\$62	\$197	0	\$0	0		\$62	\$36	\$29	\$15	\$141
2013	5	\$136	0	\$62	\$198	0	\$0	0		\$62	\$36	\$29	\$ 15	\$142
2014	6	\$136	0	\$63	\$199	0	\$0	0		\$63	\$36	\$29	\$1 5	\$143
2015	7	\$137	0	\$64	\$200	0	\$0	0		\$64	\$37	\$29	\$15	\$144
2016	8	\$137	0	\$64	\$201	0	\$0	0		\$64	\$37	\$29	\$15	\$145
2017	9	\$138	0	\$ 65	\$202	0	\$0	0		\$65	\$38	\$29	\$15	\$146
2018	10	\$138	0	\$66	\$204	0	\$0	0		\$66	\$38	\$29	\$ 15	\$147
2019	11	\$138	0	\$66	\$205	0	\$0	0		\$66	\$38	\$29	\$15	\$146
2020	12	\$139	0	\$67	\$206	0	\$0	0		\$67	\$39	\$29	\$15	\$149
2021	13	\$139	0	\$68	\$207	0	\$0	0		\$68	\$39	\$29	\$15	\$151
2022	14	\$139	0	\$68	\$208	0	\$0	0		\$68	\$39	\$29	\$15	\$152
2023	15	\$140	100	\$69	\$309	637	(\$805)	167		\$69	\$40	\$29	\$ 15	\$153
2024	16	\$140	0	\$70	\$210	0	\$0	0		\$70	\$40	\$29	\$15	\$154
2025	17	\$141	0	\$70	\$211	0	\$0	0		\$70	\$41	\$29	\$ 15	\$155
2026	18	\$141	0	\$71	\$212	0	\$0	0		\$71	\$41	\$29	\$15	\$156
2027	19	\$141	0	\$72	\$213	0	\$0	0		\$72	\$41	\$29	\$15	\$157
2028	20	\$142	0	\$72	\$214	0	\$0	0		\$72	\$42	\$29	\$ 15	\$158

Present Value of Benefits \$2,103

Present Value of Costs \$1,522

00000000	
Benefit/Cost	1.38
Ratio	

Florida City Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Pro-Raind Customer Charge

C*(D/E)*(1+Z)

\$15

\$15

\$15

\$15

\$15

\$15

\$15

\$15

\$15

\$15

\$15

\$15

\$15

\$15 \$15

Ratio -Appliance to Total

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

10%

Appliance Type Cooking

Escalation Rates	LP Del/Margin Rate	0.0%	
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tal	bie 1		Natural Gas Supply Cost - Table 2						Netural Gas Energy Charge - Table 3							Natural Gas Customer Charge - Table 4					
Year	Cost Per Gallon	Annual Gallon	Tax Rate	Propane Cost	Yes	Cost Per Therm	Annual Therms	Tax Rate	NG Cost		Year	Rata Per Therm	Annuel Therms	Tax Ret	e NG Cost	¥	eer C	fonthly ustomer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	
A	8	С	D	B*C*(1+D)	A	В	_ с	Q	B*C*(1+D)		Α	В	С	D	B*C*(1+D)		A	В	С	D	E	D/E	
2009	\$2.5460	48	7.5%	\$134	200	9 \$0.7000	45	10%	\$38		2009	\$0.5884	45	10%	\$29	2	109 9	\$11.00	\$132.00	45	443	10.18%	
2010	\$2,5533	49	7.5%	\$135	201	0 \$0.7070	45	10%	\$35		2010	\$0.5884	45	10%	\$29	2	110 :	\$11.00	\$132.00	45	443	10.16%	
2011	\$2.5605	49	7.5%	\$135	201	1 \$0.7141	45	10%	\$35		2011	\$0.5884	45	10%	\$29	2	011 :	\$11.00	\$132.00	45	443	10.16%	
2012	\$2,5678	49	7.5%	\$138	201	2 \$0.7212	45	10%	\$36		2012	\$0.5884	45	10%	\$29	2)12 !	\$11.00	\$132,00	45	443	10.16%	
2013	\$2.5750	49	7.5%	\$135	201	3 \$0.7284	45	10%	\$36		2013	\$0,5884	45	10%	\$29	2	013 :	\$11.00	\$132.00	45	443	10.16%	
2014	\$2,5823	49	7.5%	\$136	201	4 \$0,7357	45	10%	\$36		2014	\$0,5884	45	10%	\$29	2	014 :	\$11,00	\$132.00	45	443	10.16%	
2015	\$2.5896	49	7.5%	\$137	201		45	10%	\$37		2015	\$0.5884	45	10%	\$29			\$11.00	\$132.00	45	443	10.16%	
			7.5%	\$137			45	10%	\$37		2016	\$0.5884	45	10%	\$29			11.00	\$132.00	45	443	10.16%	
2016	\$2.5968	49			201											1							
2017	\$2.6041	49	7.5%	\$138	201	7 \$0.7580	45	10%	\$36		2017	\$0.5884	45	10%	\$29	2	17 :	11.00	\$132,00	45	443	10,16%	
2018	\$2,6113	49	7.5%	\$136	201	8 \$0.7656	45	10%	\$36		2018	\$0.5884	45	10%	\$29	2)18 :	\$11.00	\$132.00	45	443	10.16%	
2019	\$2.6188	49	7.5%	\$138	201	9 \$0.7732	45	10%	\$36		2019	\$0.5884	45	10%	\$29	2	119 :	\$11.00	\$132.00	45	443	10.16%	
2020	\$2.6259	49	7.5%	\$139	202	0 \$0.7810	45	10%	\$39		2020	\$0.5884	45	10%	\$29	2	120	\$11.00	\$132.00	45	443	10.16%	
2021	\$2.6331	49	7.5%	\$138	202	1 \$0.7888	45	10%	\$59		2021	\$0.5684	45	10%	\$29	2	21 1	\$11.00	\$132.00	45	443	10.16%	
2022	\$2,6404	49	7.5%	\$139	202	2 \$0.7967	45	10%	\$39		2022	\$0.5884	45	10%	\$29	2	122 :	\$11.00	\$132.00	45	443	10.16%	
2023	\$2.6478	49	7.5%	\$140	202	3 \$0.8046	45	10%	\$40		2023	\$0.5884	45	10%	\$29	2	123 5	\$11.00	\$132.00	45	443	10.16%	
2024	\$2,6549	49	7.5%	\$140	202	4 \$0.8127	45	10%	\$40		2024	\$0.5884	45	10%	\$29	2	124 :	\$11.00	\$132.00	45	443	10.16%	
2025	\$2.6622	49	7.5%	\$141	202	5 \$0.8208	45	10%	\$41		2025	\$0.5884	45	10%	\$29	2	25 :	\$11.00	\$132.00	45	443	10.16%	
2026	\$2,6694	49	7.5%	\$141	202	6 \$0.8290	45	10%	\$41		2026	\$0.5884	45	10%	\$29	,	126 !	\$11.00	\$132.00	45	443	10,16%	
2027	\$2.6767	49	7.5%	\$141	202		45	10%	\$41		2027	\$0,5884	45	10%	\$29			511.00	\$132.00	45	443	10.16%	
	4			• • • • • • • • • • • • • • • • • • • •								,							•				
2028	\$2.6839	49	7.5%	\$142	202	8 \$0.8457	45	10%	\$42	j L	2028	\$0.5884	45	10%	\$29	1_2	28 5	\$11.00	\$132.00	45	443	10.16%	

Attachment 2.3

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

Florida Public Utilities Company Rate Impact Measurement Test Participants Test

Summary of RIM Test and Participants Test Results

	Proposed <u>Allowance</u>	Participants Test	RIM Test
Gas Storage Tank Water Heating	\$350	1.67	1.11
Gas Tankless Water Heating	\$450	1.67	1.06
Gas Heating	\$350	1.41	1.15
Gas Clothes Drying	\$100	1.41	1.13
Gas Cooking	\$100	1.39	1.11

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type
Storage Tank Water Heating

	Incremental	Incremental	incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$94	\$136	\$37	\$267	\$136	\$34	\$22	\$352.20	\$545
2010	\$94	\$137	\$37	\$268	\$ 137	\$33	\$23	\$2.20	\$195
2011	\$94	\$139	\$37	\$269	\$139	\$32	\$23	\$2.20	\$196
2012	\$94	\$140	\$37	\$271	\$140	\$31	\$23	\$2.20	\$197
2013	\$94	\$142	\$37	\$272	\$142	\$30	\$23	\$2.20	\$197
2014	\$94	\$143	\$37	\$273	\$143	\$29	\$23	\$2.20	\$198
2015	\$94	\$144	\$37	\$275	\$144	\$29	\$24	\$2.20	\$199
2016	\$94	\$146	\$37	\$276	\$146	\$28	\$24	\$2.20	\$200
2017	\$94	\$147	\$37	\$278	\$147	\$27	\$24	\$2.20	\$201
2018	\$94	\$149	\$37	\$279	\$149	\$26	\$24	\$352.20	\$551
2019	\$94	\$150	\$37	\$281	\$150	\$25	\$25	\$2.20	\$203
2020	\$94	\$152	\$37	\$282	\$152	\$25	\$25	\$2.20	\$204
2021	\$94	\$153	\$37	\$284	\$153	\$24	\$25	\$2.20	\$204
2022	\$94	\$155	\$ 37	\$285	\$155	\$23	\$26	\$2.20	\$206
2023	\$94	\$156	\$37	\$287	\$156	\$23	\$26	\$2.20	\$207
2024	\$94	\$158	\$37	\$288	\$158	\$22	\$26	\$2.20	\$208
2025	\$94	\$159	\$ 37	\$290	\$159	\$21	\$26	\$2.20	\$209
2026	\$94	\$161	\$37	\$292	\$161	\$21	\$26	\$2.20	\$210
2027	\$94	\$163	\$37	\$293	\$163	\$20	\$27	\$2.20	\$212
2028	\$94	\$164	\$37	\$295	\$164	\$20	\$27	\$2.20	\$213

Present Value
of Benefits \$2,716

Present Value of Costs \$2,453

Benefit/Cost
Ratio 1.11

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

	Applia	nce Ty	pe
Storag	e Tank	Water	Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.60%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.60%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.20%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Mater	3.30%

F	levenue - l	nergy Cha	rge
!	22	3	2.3
Year	Thems	Base Rate	Total Charge
2009	170	\$0.5511	\$94
2010	170	\$0,5511	\$94
2011	170	\$0.5511	\$94
2012	170	\$0,5511	\$84
2013	170	\$0.5511	\$94
2014	170	\$0.5511	\$94
2015	170	\$0,5511	\$94
2016	170	\$0.5511	\$94
2017	170	\$0.5511	\$94
2018	170	\$0.5511	\$84
2019	170	\$0.5511	\$94
2020	170	\$0.5511	\$94
2021	170	\$0.5511	\$94
2022	170	\$0,5511	\$94
2023	170	\$0.5511	394
2024	170	\$0.5511	\$94
2025	170	\$0.5511	594
2026	170	\$0.5511	\$94
2027	170	\$0.5511	\$94
2028	170	\$0.5611	\$94

Revenue - Cost of Gas									
1	2	4	2-3						
Year	Ynems	Fuel Rate	Total Charge						
2009	170	\$D.8000	\$136						
2010	170	\$0.8080	\$137						
2011	170	\$0.8161	\$139						
2012	170	\$0.8242	\$140						
2013	170	\$0,6325	\$142						
2014	170	\$0.8408	\$143						
2015	170	\$0.8492	\$144						
2016	170	\$0.8577	\$148						
2017	170	\$0.8663	\$147						
2016	170	\$0.8749	\$149						
2018	170	\$0.8637	\$150						
2020	170	\$0.6925	\$152						
2021	170	\$0.9015	\$153						
2022	170	\$0,9105	\$155						
2023	170	\$0.9196	\$156						
2024	170	\$0.9286	\$158						
2025	170	\$0.9381	\$159						
2028	170	\$0.9474	\$161						
2027	170	\$0.9589	\$163						
2028	170	\$0,9865	\$164						

	Re	venue - Custom	er Charge	
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annuel Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$8.00	\$96.00	38.37%	\$37
2010	\$8.00	\$98.00	38.37%	\$37
2011	\$8.00	\$98,00	38.37%	\$37
2012	\$8,00	\$96.00	38.37%	\$37
2013	\$8.00	\$96.00	38.37%	\$37
2014	\$8.00	\$96,00	38.37%	\$37
2015	\$8.00	\$96.00	38.37%	\$37
2018	\$8.00	\$98.00	38.37%	\$37
2017	\$8.00	\$96,00	36 37%	537
2018	\$6.00	\$96.00	39.37%	\$37
2019	\$9.00	\$96,00 -	38.37%	\$37
2020	\$8.00	\$96.00	38.37%	\$37
2021	\$8.00	90.992	38.37%	\$37
2022	\$6.00	\$96,00	38,37%	\$37
2023	\$8.00	\$96.00	38.37%	\$37
2024	\$8.00	\$98,00	38.37%	\$37
2025	\$8.00	\$96.00	39.37%	\$37
2026	\$8.00	\$96.00	35.37%	\$37
2027	\$8.00	\$98.00	38.37%	\$37
2028	\$8.00	\$95.00	38.37%	\$37

			Inve	stment Ca	rrying Costs			
1	2	3	4	5	- 6	7	8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$318	\$172	\$1,090	8.12%	38.37%	\$34
2010	\$97	\$487	\$308	\$ 166	\$1.058	8.12%	38.37%	\$33
2011	\$94	\$474	\$298	\$161	\$1.027	8.12%	38,37%	\$32
2012	\$92	\$462	\$268	\$156	\$998	8.12%	38.37%	\$31
2013	\$60	\$450	\$270	\$151	\$970	8.12%	38.37%	\$30
2014	\$88	\$438	\$270	\$146	\$942	8.12%	38.37%	\$29
2015	\$66	\$427	\$261	\$141	\$915	6.12%	38,37%	\$29
2016	584	\$418	\$253	\$136	\$889	6.12%	38.37%	\$28
2017	\$82	\$405	\$245	\$132	\$864	8 12%	38.37%	527
2016	\$80	\$394	\$237	\$128	\$839	8.12%	38.37%	\$26
2019	\$78	\$384	\$229	\$124	\$815	8.12%	38.37%	\$25
2020	\$76	\$374	\$222	\$120	\$792	8.12%	38.37%	\$25
2021	574	\$364	\$215	\$116	\$789	8.12%	38.37%	\$24
2022	\$72	\$355	\$208	\$112	\$7.47	8.12%	38.37%	\$23
2023	\$70	\$346	\$201	\$108	\$725	8.12%	38.37%	\$23
2024	\$68	\$337	\$195	\$104	\$704	8.12%	38.37%	\$22
2025	\$66	\$328	\$189	\$101	\$664	8.12%	38.37%	\$21
2026	\$64	\$319	\$183	\$98	\$664	8.12%	36.37%	\$21
2027	\$62	\$311	\$177	\$95	\$645	8.12%	38.37%	\$20
2028	\$60	\$303	\$171	\$92	\$626	8 12%	38.37%	\$20

			Incre	mental Custo	mer Costs			
1	2	3	4	5=3*4	- 6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annuai	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$2.40	529	38.37%	\$11.13	\$29.57	38.37%	\$11	\$22
2010	\$2.42	\$29	38.37%	\$11,13	\$29.87	38.37%	\$11	\$23
2011	\$2.45	\$29	38.37%	\$11.13	\$30.18	38.37%	\$12	\$23
2012	\$2.47	\$30	38.37%	\$11.57	\$30.47	38.37%	\$12	\$23
2013	\$2.50	\$30	38.37%	\$11.51	\$30.77	38,37%	\$12	\$2 3
2014	\$2.52	\$30	38.37%	\$11.51	\$31.08	38.37%	\$12	\$23
2015	\$2.55	\$31	38.37%	\$11.90	\$31.39	38.37%	\$12	\$24
2016	\$2.57	\$31	38.37%	\$11.90	\$31.70	38.37%	\$12	\$24
2017	\$2.80	\$31	38,37%	\$11.90	\$32.02	38.37%	512	\$24
2018	\$2.82	\$31	38.37%	\$11.90	\$32.34	38.37%	\$12	\$24
2019	\$2.65	\$32	38.37%	\$12.26	\$32.66	38.37%	\$13	\$25
2020	\$2.68	\$32	36.37%	\$12.28	\$32.99	38.37%	\$13	\$25
2021	\$2.70	\$32	38.37%	\$12.28	\$33.32	38.37%	\$13	\$25
2022	\$2.73	\$33	38.37%	\$12.66	\$33.65	38.37%	\$13	\$26
2023	\$2.76	\$33	38.37%	\$12.86	\$33.99	38.37%	\$13	\$26
2024	\$2.79	\$33	38.37%	\$12.06	\$34.33	36.37%	\$13	\$28
2025	\$2.81	\$34	36.37%	\$13.06	\$34.07	38.37%	\$13	\$26
2028	\$2.84	\$34	38.37%	\$13.05	\$35.02	38.37%	\$13	\$26
2027	\$2.87	\$34	38.37%	\$13.05	\$35.37	38.37%	\$14	\$27
2026	\$2.90	\$35	38.37%	\$13.43	\$35,72	38.37%	\$14	\$27

Gas Costs								
. 1	2	3	2*3					
	Therms	Gas Supply	Gas Supply					
Year		Rate	Cost					
2009	170	0.8000	\$136					
2010	170	\$0,6060	\$137					
2011	170	\$0.8161	\$139					
2012	170	\$0.8242	\$140					
2013	170	\$0.8325	5142					
2014	170	\$0.8408	\$143					
2015	170	\$0.8492	\$144					
2016	170	\$0.8577	\$146					
2017	170	\$0.8863	\$147					
2018	170	\$0.8749	\$149					
2019	170	\$0,8837	\$150					
2020	170	\$0.8925	\$152					
2021	170	50.9015	\$153					
2022	170	\$0.9105	\$155					
2023	170	\$0.9198	\$156					
2024	170	\$0.9288	\$158					
2025	170	\$0.0381	\$159					
2026	170	\$0.9474	\$161					
2027	170	\$0.9569	\$163					
2028	170	\$0,9865	\$164					

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Tankless Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$83	\$120	\$34	\$237	\$120	\$31	\$21	\$452.20	\$624
2010	\$83	\$121	\$34	\$238	\$121	\$30	\$21	\$2.20	\$175
2011	\$83	\$122	\$34	\$239	\$122	\$30	\$21	\$2.20	\$175
2012	\$83	\$124	\$34	\$240	\$124	\$29	\$21	\$2,20	\$176
2013	\$83	\$125	\$34	\$242	\$125	\$28	\$22	\$2.20	\$177
2014	\$83	\$126	\$34	\$243	\$126	\$27	\$22	\$2.20	\$177
2015	\$83	\$127	\$34	\$244	\$127	\$26	\$22	\$2.20	\$178
2016	\$83	\$129	\$34	\$245	\$129	\$26	\$22	\$2.20	\$179
2017	\$83	\$130	\$34	\$247	\$130	\$25	\$22	\$2.20	\$179
2018	\$83	\$131	\$34	\$248	\$131	\$24	\$22	\$2.20	\$180
2019	\$83	\$133	\$34	\$249	\$133	\$23	\$23	\$2.20	\$181
2020	\$83	\$134	\$34	\$251	\$134	\$23	\$23	\$2.20	\$182
2021	\$83	\$135	\$34	\$252	\$135	\$22	\$2 3	\$2.20	\$183
2022	\$83	\$137	\$34	\$253	\$137	\$22	\$24	\$2.20	\$184
2023	\$83	\$138	\$34	\$255	\$138	\$21	\$24	\$2.20	\$185
2024	\$83	\$139	\$34	\$256	\$139	\$20	\$24	\$2.20	\$186
2025	\$83	\$141	\$34	\$257	\$141	\$20	\$24	\$2.20	\$187
2026	\$83	\$142	\$34	\$259	\$142	\$19	\$24	\$2.20	\$188
2027	\$83	\$144	\$34	\$260	\$144	\$19	\$25	\$2.20	\$189
2028	\$83	\$145	\$34	\$262	\$145	\$18	\$2 5	\$452.20	\$640

Present Value of Benefits \$2,411

Present Value of Costs \$2,273

Benefit/Cost
Ratio 1.06

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

ľ	Appliance Type	
Γ	Tankless Water Heating	

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.60%
Gas Energy Charge Escalator	0%	Depreciation Rate - Davelopment Main	2.60%
Gas Customer Charge Escalator	O%	Depreciation Rate - Service Line	3.20%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Mater	3.30%

		Energy Ch	
_1	2	3	2*3
Year	Thems	Base Rate	Total Charge
2009	150	\$0.5511	\$83
2010	150	\$0,5511	\$83
2011	150	\$0.5511	\$83
2012	150	\$0.5511	\$83
2013	150	\$0.5511	\$63
2014	150	\$0.5511	\$83
2015	150	\$0.5511	283
2016	150	\$0.5511	\$63
2017	150	\$0.5511	\$83
2016	150	\$0.5511	98 3
2019	150	\$0.5511	. \$83
2020	150	\$0.5511	\$83
2021	150	\$0.5511	\$83
2022	150	\$0.5511	\$83
2023	150	\$0.5511	\$83
2024	150	\$0.5511	\$83
2025	150	\$0.5511	\$83
2026	150	\$0.5511	283
2027	150	\$0.5511	\$83
2028	150	\$0.5511	\$83

	Revenue - Co	st of Gas				
	1 2 4					
Year	Therms	Fuel Rate	Total Charge			
2009	150	\$0.8000	\$120			
2010	150	\$0.8080	\$121			
2011	150	\$0.8161	\$122			
2012	150	\$0.8242	\$124			
2013	150	\$0.8325	\$125			
2014	150	\$0.8408	\$126			
2015	150	\$0.8492	\$127			
2016	150	\$0.6577	\$129			
2017	150	\$0,8663	\$130			
2018	150	\$0.6749	\$131			
2019	150	\$0.8837	\$133			
2020	150	\$0.8925	\$134			
2021	150	\$0.9015	\$135			
2022	150	\$0,9105	\$137			
2023	150	\$0.9196	\$138			
2024	150	\$0.9288	\$139			
2025	150	\$0,9381	\$141			
2026	150	\$0.9474	\$142			
2027	150	\$0,9589	5144			
2028	150	\$0.9685	\$145			

		venue - Custome		
	2	3	4	4*3
	Monthly		Ratio Tnerms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$8.00	\$96.00	35.46%	\$34
2010	\$6.00	\$96.00	35 46%	\$34
2011	\$8,00	\$96.00	35.46%	\$34
2012	\$6.00	\$96.00	35.46%	\$34
2013	\$8.00	\$98.00	35.46%	\$34
2014	\$6.00	\$98,00	35,46%	\$34
2015	\$8.00	\$96.00	35.46%	\$34
2016	\$8.90	\$96.00	35 46%	\$34
2017	\$8.00	\$96.00	35.46%	\$34
2018	\$8.00	\$95.00	35.46%	\$34
2019	\$8.00	\$96.00	35.46%	\$34
2020	\$8.00	\$96.00	35.46%	\$34
2021	\$8.00	\$98.00	35.46%	\$34
2022	\$8.00	\$98.00	35.46%	\$34
2023	\$6.00	\$96.00	35.46%	\$34
2024	\$8.00	\$96,00	35.46%	534
2025	\$8.00	\$96.00	35.46%	\$34
2028	\$8.00	\$98,00	35 48%	\$34
2027	\$8.00	\$98.00	35.46%	\$34
2028	\$8.00	\$96.00	35.46%	\$34

Investment Carrying Costs								
11	2	3	4	. 5	6	7	6	8"/"8
	Supply	Development	Service		Total	Cost	Ratio of Therms	investmeni
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$318	\$172	\$1,090	8.12%	35.46%	\$31
2010	\$97	\$487	\$308	\$186	\$1,058	B.12%	35.46%	\$30
2011	\$94	\$474	\$298	\$181	\$1,027	8.12%	35.46%	\$30
2012	\$92	\$462	\$268	\$156	\$998	8.12%	35.46%	529
2013	\$90	\$450	\$279	\$151	\$970	8.12%	35.46%	\$28
2014	\$88	\$438	\$270	\$146	\$942	8.12%	35.46%	\$27
2015	\$86	\$427	\$261	\$141	\$915	8.12%	35,46%	\$26
2018	\$84	\$418	\$253	\$136	\$889	8.12%	35.46%	\$26
2017	\$62	\$406	\$245	\$132	\$864	8 12%	35.46%	\$25
2018	\$80	\$394	\$237	\$128	\$839	8.12%	35.46%	\$24
2019	\$78	\$384	\$229	\$124	\$815	8.12%	35.46%	\$23
2020	\$78	\$374	\$222	\$120	\$792	0.12%	35.46%	\$23
2021	\$74	\$364	\$215	\$116	\$769	8.12%	35,46%	\$22
2022	\$72	\$355	\$208	5112	\$747	8,12%	35.46%	\$22
2023	\$70	\$348	\$201	\$108	\$725	6.12%	35.48%	\$21
2024	\$68	\$337	\$195	\$104	\$704	8.12%	35,46%	\$20
2025	\$68	\$328	\$189	\$101	\$684	8.12%	35.46%	\$20
2026	\$64	\$319	\$183	\$96	\$664	8.12%	35.46%	\$19
2027	\$62	\$311	\$177	\$95	\$645	8.12%	35.48%	\$19
2028	SAN	\$303	5171	592	\$626	B 12%	35 46%	112

_			Incres	nental Custo	mer Costs			
1	2	3	4	5=3'4	- 6	7	8=6*7	5+8
	Monthly	Annuel	Ratio Therms To	Annusi Ratio	Annuel	Ratio Therms To	Annual Ratio	Total incrementa
Year	Adm. Cost	Arim. Cost	Total Consumed	Adm. Cost	D&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$2.40	\$29	35.46%	\$10.28	\$29.57	35.46%	\$10	\$21
2010	\$2.42	\$29	35.48%	\$10,26	\$29.87	35.46%	\$11	\$21
2011	\$2.45	\$29	35.46%	\$10.28	\$30.16	35.46%	\$11	\$21
2012	\$2.47	\$30	35.46%	\$10.84	\$30.47	35.46%	\$11	\$21
2013	\$2.50	\$30	35.48%	\$10.84	\$30.77	35.48%	\$11	\$22
2014	\$2.52	\$30	35.46%	\$10.84	\$31.08	35.46%	511	522
2015	\$2.55	231	35.46%	\$10.99	\$31.39	35.46%	\$11	\$22
2016	\$2.57	531	35.46%	\$10.99	\$31.70	35.46%	\$11	\$22
2017	\$2.60	\$31	35.46%	\$10.99	\$32.02	35.48%	\$11	\$22
2018	\$2.62	\$31	35.46%	\$10.99	\$32.34	35.46%	\$11	\$22
2019	\$2.65	\$32	35.48%	\$11.35	\$32.66	35 46%	\$12	\$23
2020	\$2.68	\$32	35,46%	\$11,35	\$32.99	35,46%	\$12	\$23
2021	\$2.70	\$32	35.46%	\$11.35	\$33.32	35.46%	\$12	\$23
2022	\$2.73	\$33	35.46%	\$11.70	\$33.65	35.46%	\$12	524
2023	\$2.76	\$33	35.48%	\$11,70	\$33.99	35.46%	\$12	\$24
2024	\$2.79	\$33	35.48%	\$11.70	\$34.33	35.46%	\$12	\$24
2025	\$2.61	\$34	35.46%	\$12.06	\$34.67	35.46%	\$12	\$24
2026	\$2.84	\$34	35.46%	\$12.08	\$35.02	35.46%	\$12	\$24
2027	\$2.87	\$34	35.46%	\$12.06	\$35,37	35.46%	\$13	\$25
2028	\$2,90	\$35	35,46%	\$12.41	\$35,72	35.46%	\$13	\$25

Gas Costs						
1	2	3	2*3			
	Therms	Per Therm	Gas Supply			
Year		Supply Cost	Cost			
2009	150	0.8000	\$120			
2010	150	\$0,8080	\$121			
2011	150	\$0.8161	\$122			
2012	150	\$0.8242	8124			
2013	150	\$0.8325	\$125			
2014	150	\$0.8408	\$128			
2015	150	\$0.8492	\$127			
2016	150	\$0,6577	\$129			
2017	150	\$0.8663	\$130			
2018	150	\$0 8749	\$131			
2019	150	\$0,8837	5133			
2020	150	\$0 8925	\$134			
2021	150	\$0,9015	\$135			
2022	150	\$0.9105	\$137			
2023	150	\$0.9196	\$138			
2024	150	\$0.9286	\$139			
2025	150	\$0.9381	\$141			
2026	150	\$0.9474	5142			
2027	150	\$0.9569	S144			
2028	150	\$0,9665	\$145			

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Heating System

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental	***************************************	
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$98	\$142	\$39	\$279	\$142	\$36	\$24	\$352.31	\$554
2010	\$98	\$144	\$39	\$280	\$144	\$35	\$24	\$2.31	\$204
2011	\$98	\$145	\$39	\$282	\$145	\$34	\$24	\$2.31	\$205
2012	\$98	\$147	\$39	\$283	\$147	\$33	\$24	\$2.31	\$206
2013	\$98	\$148	\$39	\$285	\$148	\$32	\$24	\$2.31	\$207
2014	\$98	\$150	\$39	\$286	\$150	\$31	\$25	\$2.31	\$207
2015	\$98	\$151	\$39	\$288	\$151	\$30	\$25	\$2.31	\$208
2016	\$98	\$153	\$39	\$289	\$153	\$29	\$25	\$2.31	\$209
2017	\$98	\$154	\$39	\$291	\$154	\$28	\$25	\$2.31	\$210
2018	\$98	\$156	\$39	\$292	\$156	\$27	\$25	\$2.31	\$211
2019	\$98	\$157	\$39	\$294	\$157	\$27	\$26	\$2.31	\$212
2020	\$98	\$159	\$39	\$296	\$159	\$26	\$26	\$2.31	\$213
2021	\$98	\$160	\$39	\$297	\$160	\$25	\$26	\$2.31	\$214
2022	\$98	\$162	\$39	\$299	\$162	\$24	\$27	\$2.31	\$216
2023	\$98	\$164	\$39	\$300	\$164	\$24	\$27	\$2.31	\$217
2024	\$98	\$165	\$39	\$302	\$165	\$23	\$27	\$2.31	\$218
2025	\$98	\$167	\$39	\$304	\$167	\$22	\$28	\$2.31	\$219
2026	\$98	\$169	\$39	\$305	\$169	\$22	\$28	\$352.31	\$570
2027	\$98	\$170	\$39	\$307	\$170	\$21	\$28	\$2.31	\$222
2028	\$98	\$172	\$39	\$309	\$172	\$20	\$28	\$2.31	\$223

\$2,844

Present Value of Benefits

Present Value of Costs \$2,471

Benefit/Cost Ratio 1.15

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type
Heating System

Fuel Rate Escalator	1.0%	Depreciation Rete - Supply Main	2.60%
Gas Energy Charge Escalator	0%	Dapraciation Rate - Development Main	2 60%
Gas Customer Charge Escaletor	0%	Depreciation Rate - Service Line	3.20%
O&M/Inflation Escalator	1.0%	Depreciation Reta - Meter	3.30%

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	_	_	-	-

Table 3

	2	3	2*3
Year	Therms	Sase Rate	Total Charge
200G	178	\$0.5511	\$98
2010	178	\$0,5511	\$98
2011	178	\$0.5511	598
2012	178	\$0.5511	\$98
2013	178	\$0.5511	\$98
2014	178	\$0,5511	\$9B
2015	178	\$0.5511	\$98
2018	178	\$0.5511	598
2017	178	\$0.5511	\$98
2018	178	\$0.5511	\$98
2019	178	\$0,5511	892
2020	178	\$0.5511	\$98
2021	178	\$0.5511	\$98
2022	178	\$0.5511	598
2023	178	\$0,5511	\$98
2024	178	\$0.5511	\$98
2025	178	\$0.5511	\$98
2026	178	\$0.5511	\$98
2027	178	\$0.5511	898
2028	178	\$0.5511	\$98

	Revenue - Cost of Gas									
1	2	4	2'3							
Your	Therms	Fuel Rate	Total Charge							
2009	178	\$0.8000	\$142							
2010	178	\$0.6080	\$144							
2011	178	\$0.8161	\$145							
2012	178	\$0.8242	\$147							
2013	178	\$0.8325	\$148							
2014	178	\$0.8408	\$150							
2015	178	\$0.8492	\$151							
2016	178	\$0.8577	\$153							
2017	178	\$0.8863	\$154							
2018	178	\$0.8749	\$156							
2019	178	\$0.8837	\$157							
2020	178	\$0.8925	\$159							
2021	176	\$0.9015	\$160							
2022	178	\$0.9105	\$162							
2023	178	\$0.9196	\$164							
2024	178	\$0.9288	\$185							
2025	178	\$0.9381	\$167							
2026	178	\$0.9474	\$169							
2027	178	\$0.9569	\$170							
2028	178	\$0.9665	\$172							

	Revenue - Customer Charge								
1	2	3	4	413					
	Monthly		Ratio Tharms						
	Customer	Annual Customer	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$6.00	\$96.00	40.18%	\$39					
201G	\$8.00	\$96.DO	40.18%	\$39					
2011	\$8.00	\$96.00	40.18%	\$39					
2012	\$8,00	\$96,00	40.18%	\$39					
2013	\$8.00	\$96.00	40.18%	\$39					
2014	\$8.00	\$96,00	40.18%	\$39					
2015	\$8.00	\$96.00	40.18%	\$39					
2016	\$8.00	\$98.00	40.18%	\$39					
2017	\$8.00	\$96.00	40.18%	539					
2016	\$8.00	\$96.00	40.18%	\$39					
2019	90.82	\$96.00	40.18%	\$39					
2020	\$6.00	\$96.00	40.18%	\$39					
2021	\$6.00	\$96.00	40.18%	\$39					
2022	\$8.00	\$96,00	40.18%	\$39					
2023	\$8.D0	\$96.00	4G.18%	\$39					
2024	\$8.00	\$98.00	40.18%	\$39					
2025	92,82	\$96,00	40.18%	\$39					
2026	\$8.00	\$96.00	40.18%	\$39					
2027	\$8.00	\$96.00	40,18%	\$39					
2028	\$8.00	\$96.00	40.18%	\$39					

1	2	3	4	5	В	7	8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$318	5172	\$1,090	8.12%	40.18%	\$36
2010	\$97	\$487	\$308	\$166	\$1,058	8.12%	40.18%	\$35
2011	\$94	\$474	\$298	\$161	\$1,027	8.12%	40.18%	\$34
2012	\$92	\$462	\$288	\$156	\$998	8.12%	40.18%	\$33
2013	\$90	\$450	\$279	\$151	\$970	8.12%	40.18%	532
2014	\$88	\$438	\$27a	\$146	\$942	8.12%	40.18%	\$31
2015	\$86	\$427	\$261	\$141	\$915	8.12%	40.18%	\$30
2016	\$84	\$416	\$253	\$136	\$689	B.12%	40.18%	\$29
2017	\$B2	\$405	\$245	\$132	\$864	8.12%	40.18%	\$28
2018	\$80	\$394	\$237	\$128	\$839	8.12%	40.18%	\$27
2019	\$78	\$364	\$229	\$124	\$615	8.12%	40.18%	\$27
2G20	\$76	\$374	\$222	\$120	\$792	8.12%	40.18%	\$26
2021	\$74	\$364	\$215	\$116	\$789	B.12%	40.18%	\$25
2022	\$72	\$355	\$208	\$112	\$747	8.12%	40.18%	\$24
2023	\$70	\$346	\$201	\$108	\$725	8.12%	40.18%	\$24
2024	\$08	\$337	\$195	\$104	\$704	8.12%	40.18%	\$23
2025	\$66	\$328	\$169	\$101	\$684	8.12%	40.18%	\$22
2026	\$64	\$319	\$183	\$98	\$664	8,12%	40, 18%	322
2027	\$62	\$311	\$177	\$95	\$645	8.12%	40.18%	\$21

			Inc	remental Cus	tomer Cost	ts		
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Retio Therms To	Annual Retio	Annual	Ratio Therms To	Annual Ratio	Total incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	D&M Cost	Total Consumed	D&M Cost	Adm. & O&M Cost
2009	\$2,40.	\$29	40.18%	\$11.65	\$29.57	40.18%	\$12	\$24
2010	\$2.42	\$29	40.18%	\$11.65	\$29.87	40.18%	\$12	\$24
2011	\$2.45	\$29	40.18%	\$11,65	\$30.16	40.1B%	\$12	\$24
2012	\$2.47	\$30	40.18%	\$12.05	\$30.47	40.18%	\$12	\$24
2013	\$2.50	\$30	40.18%	\$12.05	\$30,77	40.18%	\$12	\$24
2014	\$2.52	\$30	40.18%	\$12.05	\$31.08	40.18%	\$12	\$25
2015	\$2.55	\$31	40.16%	\$12.46	\$31.39	40,18%	\$13	\$25
2016	\$2.57	\$31	40.18%	\$12.46	\$31.70	40.18%	\$13	\$25
2017	\$2.60	\$31	40.18%	\$12.48	\$32.02	40.18%	\$13	\$25
2018	\$2.62	\$31	40.18%	\$12.46	\$32,34	40.18%	\$13	\$25
2019	\$2.65	\$32	40.18%	\$12.86	\$32.66	40.18%	\$13	\$26
2020	\$2.58	\$32	40.18%	\$12.86	\$32.99	40,18%	\$13	\$26
2021	\$2.70	\$32	40.18%	\$12.86	\$33.32	40.18%	\$13	\$26
2022	\$2.73	\$33	40,18%	\$13.26	\$33.65	40.15%	\$14	\$27
2023	\$2.76	\$33	40.18%	\$13.28	\$33.99	40.18%	\$14	\$27
2024	\$2.79	\$33	40.16%	\$13.26	\$34.33	40.18%	\$14	\$27
2025	\$2.81	\$34	40.18%	\$13.66	\$34.87	40.18%	\$14	\$28
2026	\$2.84	\$34	40.18%	\$13.66	\$35.02	40.18%	\$14	\$28
2027	\$2.87	\$34	40.18%	\$13.66	\$35,37	40.18%	\$14	\$28
2028	\$2.90	\$35	40.18%	\$14.05	\$35.72	40.18%	514	\$28

	Gas Costs								
1	2	3	2*3						
	Therms	Par Therm	Gas Supply						
Year		Supply Cost	Cost						
2009	178	\$0.6000	\$142						
2010	178	\$0.8080	\$144						
2011	178	\$0.8161	\$145						
2012	17B	\$0.8242	\$147						
2013	178	\$0.6325	\$148						
2014	178	\$0.8408	\$150						
2015	176	\$0.8492	\$151						
2016	178	\$0.8577	\$153						
2017	178	\$0.8663	\$154						
2018	178	\$0.6749	\$156						
2019	178	\$0.8837	\$157						
2020	178	\$0.8925	\$159						
2021	178	\$0.9015	\$160						
2022	178	\$0.9105	\$162						
2023	178	\$0,9196	\$184						
2024	178	\$0.9266	\$165						
2025	178	\$0.9381	\$167						
2026	178	\$0 9474	\$169						
2027	178	\$0,9569	\$170						
2028	178	\$0.9865	\$172						

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Clothes Drying

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$28	\$40	\$11	\$78	\$40	\$10	\$ 7	\$100.65	\$157
2010	\$28	\$40	\$11	\$79	\$40	\$10	\$ 7	\$0.65	\$57
2011	\$28	\$41	\$11	\$79	\$41	\$ 9	\$ 7	\$0.65	\$58
2012	\$28	\$41	\$1 1	\$80	\$41	\$9	\$ 7	\$0.65	\$58
2013	\$28	\$42	\$11	\$80	\$42	\$ 9	\$7	\$0.65	\$58
2014	\$28	\$42	\$11	\$80	\$42	\$9	\$7	\$0.65	\$58
2015	\$28	\$42	\$11	\$81	\$42	\$8	\$7	\$0.65	\$59
2016	\$28	\$43	\$11	\$81	\$43	\$8	\$7	\$0.65	\$59
2017	\$28	\$43	\$11	\$82	\$43	\$8	\$7	\$0.65	\$59
2018	\$28	\$44	\$11	\$82	\$44	\$8	\$7	\$0.65	\$59
2019	\$28	\$44	\$11	\$83	\$44	\$7	\$7	\$0.65	\$60
2020	\$28	\$45	\$11	\$83	\$45	\$7	\$7	\$0.65	\$60
2021	\$28	\$45	\$11	\$83	\$45	\$7	\$7	\$100.65	\$160
2022	\$28	\$46	\$11	\$84	\$46	\$7	\$8	\$0.65	\$61
2023	\$28	\$46	\$11	\$84	\$46	\$7	\$8	\$0.65	\$61
2024	\$28	\$46	\$11	\$85	\$46	\$6	\$8	\$0.65	\$61
2025	\$28	\$47	\$11	\$85	\$47	\$6	\$8	\$0.65	\$62
2026	\$28	\$47	\$11	\$86	\$47	\$6	\$8	\$0.65	\$62
2027	\$28	\$48	\$11	\$86	\$48	\$6	\$8	\$0.65	\$62
2028	\$28	\$48	\$11	\$87	\$48	\$ 6	\$8	\$0.65	\$63

Present Value from \$799

Present Value of Costs \$708

Benefit/Cost Ratio 1.13

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance	Туре
Clothes D	rvina

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.60%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.60%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.20%
G&M/Inflation Escalator	1.0%	Depreciation Rate - Mater	3.30%

		nergy Cha	
_1	2	3	2*3
Year	Themas	Base Rate	Total Charge
2009	50	\$0.5511	\$26
2010	50	\$0.5511	\$28
2011	50	\$0.5511	\$28
2012	50	\$0.5511	\$28
2013	50	\$0.5511	\$28
2014	50	\$0.5511	\$28
2015	50	\$0.5511	\$28
2016	50	\$0.5511	\$28
2017	50	\$0,5511	\$2B
2018	50	\$0,5511	\$28
2019	50	\$0.5511	\$28
2020	50	\$0,5511	\$28
2021	50	\$0.5511	\$28
2022	50	\$0.5511	\$28
2023	50	\$0,5511	\$28
2024	50	\$0.5511	\$28
2025	50	\$0.5511	\$28
2026	50	\$0.5511	\$28
2027	50	\$0.5511	\$28
2028	50	\$0.5511	\$28

	Revenue - Cost of Gas								
1	22	4	2*3						
Year	Thems	Fuel Rate	Total Charge						
2009	50	\$0.8000	\$40						
2010	50	\$0.8080	\$40						
2011	50	\$0.8181	341						
2012	50	\$0.8242	\$41						
2013	50	\$0,8325	\$42						
2014	50	\$0.8406	\$42						
2015	50	\$0,8492	\$42						
2016	50	\$0.8577	\$4 3						
2017	50	\$0,8863	\$43						
2018	50	\$0.8749	544						
2019	50	\$0,8837	\$44						
2020	50	\$0.8925	\$45						
2021	50	\$0,0015	\$45						
2022	50	\$0,9105	\$48						
2023	50	\$0.9196	\$48						
2024	50	\$0,9288	\$46						
2025	50	\$0.9381	\$47						
2028	50	\$0.9474	\$47						
2027	50	\$0,9569	\$48						
2028	50	\$0.9665	\$48						

	Revenue - Customer Charge								
- 1	2	3	4	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customer	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$8.00	\$96.00	11.29%	\$11					
2010	\$8,00	\$96.00	11.20%	511					
2011	\$6.00	\$96.00	11.20%	\$11					
2012	\$8.00	\$96.90	11,29%	\$11					
2013	\$6.00	\$96.00	11.29%	511					
2014	\$8.00	\$98.00	11.29%	511					
2015	\$6.00	\$96.00	11.29%	\$11					
2016	\$8.00	596.00	11.26%	\$11					
2017	\$8.00	\$96.00	11.29%	\$11					
2016	\$8.00	\$98.00	11.29%	511					
2019	\$8.00	\$96.00	11,29%	\$11					
2020	\$6.00	\$96.00	11.29%.	\$11					
2021	\$6,00	00.862	11.29%	\$11					
2022	\$6.00	\$98.00	11.29%	\$11					
2023	\$8.00	\$98.00	11.29%	\$11					
2024	\$8.00	\$96.00	11.29%	\$11					
2025	\$8.00	\$98,00	11.29%	\$11					
2026	\$8.00	\$96.00	11.29%	\$11					
2027	\$8.00	\$96.00	11.29%	511					
2028	\$8.00	\$98.00	11.29%	\$11					

	Investment Carrying Costs											
1	2	3	4	5	6	7		6*7*8				
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment				
Year	Main	Main	Line	Meter	Investment	of Debi	Consumed To Total	Carrying Cos				
2009	\$100	\$500	\$318	\$172	\$1,090	8.12%	11.29%	\$10				
2010	\$97	\$487	5306	\$166	\$1,058	8.12%	11,29%	\$10				
2011	\$94	\$474	\$298	\$151	\$1,027	8.12%	11,29%	\$9				
2012	\$92	\$462	\$268	\$ 156	\$998	6.12%	11.28%	\$9				
2013	\$90	\$450	\$279	\$151	\$970	8.12%	11.29%	59				
2014	\$88	\$438	\$270	\$146	\$942	8.12%	11.29%	\$9				
2015	\$88	\$427	\$281	\$141	\$915	8.12%	11.29%	\$8				
2016	\$84	\$416	\$253	\$136	\$889	8.12%	11.29%	\$8				
2017	\$82	\$405	\$245	\$132	\$864	8.12%	11.29%	Se				
2018	\$80	\$394	\$237	\$128	\$639	8.12%	11.29%	28				
2019	\$78	\$384	\$229	\$124	\$915	8.12%	11,20%	\$7				
2020	\$76	\$374	\$222	\$120	\$792	8.12%	11.29%	\$7				
2021	\$74	\$364	\$215	\$118	\$789	8.12%	11.29%	\$7				
2022	\$72	\$355	\$208	\$112	\$747	8.12%	11 26%	\$7				
2023	\$70	\$346	\$201	\$108	\$725	8.12%	11,29%	\$7				
2024	\$6 8	\$337	\$195	\$104	\$704	8.12%	11.29%	\$6				
2025	\$86	\$328	\$189	\$101	\$684	8.12%	11.29%	\$6				
2026	\$64	\$319	\$163	\$98	\$864	8,12%	11.29%	\$6				
2027	\$62	\$311	\$177	\$05	\$645	8.12%	11.29%	\$6				
2028	\$60	\$303	\$171	\$92	\$626	8.12%	11.29%	\$6				

	Incremental Customer Costs								
1	2	3	4	5×3*4	6	7	8=6*7	5+8	
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Increments	
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm, Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost	
2009	\$2.40	\$29	11.29%	\$3.27	\$29.57	11.29%	\$3	\$7	
2010	\$2.42	\$29	11,29%	\$3.27	\$29.87	11,29%	\$3	\$7	
2011	\$2.45	\$29	11.29%	\$3,27	\$30.16	11.29%	\$ 3	\$7	
2012	52.47	\$30	11.29%	\$3.39	\$30.47	11.29%	\$ 3	\$7	
2013	\$2.50	\$30	11.29%	\$3.39	\$30,77	11.29%	\$ 3	\$7	
2014	\$2.52	\$30	11.29%	\$3.39	\$31.08	11.29%	\$4	\$7	
2015	\$2.55	\$31	11.29%	\$3.50	\$31.39	11.29%	\$4	\$7	
2016	\$2.57	\$31	11.29%	\$3.50	\$31.70	11.29%	\$4	\$7	
2017	\$2.80	\$31	11.28%	\$3.50	\$32.02	11.29%	\$4	\$7	
2018	\$2.62	S31	11.29%	\$3.50	\$32.34	11.29%	34	\$7	
2018	\$2.65	\$32	11.29%	\$3.61	\$32.66	11.29%	\$4	\$7	
2020	\$2.66	\$32	11.29%	\$3.61	\$32.90	11.29%	\$4	\$7	
2021	\$2,70	\$32	11 20%	\$3,61	\$33,32	11.29%	54	\$7	
2022	\$2.73	\$33	11.29%	\$3.72	\$33.85	11.29%	\$4	\$8	
2023	\$2,76	\$33	11.29%	\$3.72	\$33.99	11,28%	\$4	\$6	
2024	\$2.79	\$33	11,26%	\$3.72	\$34.33	11.29%	\$4	\$6	
2025	\$2.61	\$34	11.28%	\$3.84	\$34.67	11.29%	\$4	\$8	
2028	\$2.84	\$34	11,29%	\$3.84	\$35.02	11.29%	\$4	86	
2027	\$2.67	\$34	11.29%	\$3.54	\$35.37	11.29%	\$4	\$6	
2028	\$2.90	\$35	11.29%	\$3.95	\$35,72	11.29%	\$4	58	

	Gas	Casts	
1	2	3	5.3
	Thorms	Per Thorm	Gas Supply
Year		Supply Cost	Cost
2009	50	0.8000	\$40
2010	50	\$0,808.0	\$40
2011	50	\$0.8161	541
2012	50	\$0.0242	541
2013	50	\$0.8325	\$42
2074	50	\$0,8408	542
2015	50	\$0.8492	\$42
2016	50	\$0,8577	\$43
2017	50	\$0.8863	\$43
2018	50	50.0749	\$44
2019	50	\$0.8837	\$44
2020	50	50.8925	\$45
2021	50	\$0.9015	\$45
2022	50	\$0,9105	\$46
2023	50	\$0.9196	\$46
2024	50	\$0.0288	\$46
2025	50	\$0.9381	\$47
2026	50	\$0,9474	\$47
2027	50	\$0.9569	548
2028	50	\$0.9665	\$48

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Cooking

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$25	\$36	\$10	\$71	\$36	\$9	\$6	\$100.58	\$152
2010	\$25	\$36	\$10	\$71	\$36	\$ 9	\$ 6	\$0.58	\$52
2011	\$25	\$37	\$10	\$71	\$37	\$8	\$6	\$0.58	\$52
2012	\$25	\$37	\$10	\$72	\$37	\$8	\$ 6	\$0.58	\$52
2013	\$25	\$37	\$10	\$72	\$37	\$8	\$6	\$0.58	\$52
2014	\$25	\$38	\$10	\$72	\$38	\$8	\$ 6	\$0.58	\$52
2015	\$25	\$38	\$10	\$73	\$38	\$8	\$6	\$0.58	\$53
2016	\$25	\$39	\$10	\$73	\$39	\$7	\$6	\$0.58	\$53
2017	\$25	\$39	\$10	\$74	\$39	\$7	\$6	\$0.58	\$53
2018	\$25	\$39	\$10	\$74	\$39	\$7	\$6	\$0.58	\$53
2019	\$25	\$40	\$10	\$74	\$40	\$ 7	\$7	\$0.58	\$54
2020	\$25	\$40	\$10	\$75	\$40	\$7	\$ 7	\$0.58	\$54
2021	\$25	\$41	\$10	\$75	\$41	\$6	\$7	\$0.58	\$54
2022	\$25	\$41	\$10	\$76	\$41	\$6	\$ 7	\$0.58	\$54
2023	\$25	\$41	\$10	\$76	\$41	\$6	\$7	\$100.58	\$155
2024	\$25	\$42	\$10	\$76	\$42	\$ 6	\$7	\$0.58	\$55
2025	\$25	\$42	\$10	\$77	\$42	\$ 6	\$ 7	\$0.58	\$55
2026	\$25	\$43	\$10	\$77	\$4 3	\$ 5	\$7	\$0.58	\$56
2027	\$25	\$43	\$10	\$78	\$43	\$ 5	\$ 7	\$0.58	\$56
2028	\$25	\$43	\$10	\$78	\$43	\$ 5	\$ 7	\$0.58	\$56

Present Value of Benefits

\$719

Present Value of Costs

\$645

Benefit/Cost	**************************************
Ratio	1.11

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Ī	Appliance Type
ſ	Cooking

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.60%
Base Rate Escalator	0%	Depreciation Rate - Development Main	2.60%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.20%
O&M/InRation Escatator	1.0%	Depreciation Rate - Meler	3.30%

Revenue - Energy Charge								
1	2	3	2*3					
Year	Thems	Bass Rate	Total Charge					
2009	45	\$0.5511	\$25					
2010	45	\$0.5511	\$25					
2011	45	\$0.5511	\$25					
2012	45	\$0.5511	\$25					
2013	45	\$0.5511	\$25					
2014	45	\$0.5511	\$25					
2015	45	\$0.5511	\$25					
2016	45	\$0.5511	\$25					
2017	45	\$0.5511	\$25					
2018	45	\$0.5511	\$25					
2019	45	\$0.5511	\$25					
2020	45	\$0.5511	\$25					
2021	45	\$0.5511	\$25					
2022	45	\$0.5511	\$25					
2023	45	\$0.5511	\$25					
2024	45	\$0.5511	\$25					
2025	45	\$0.5511	\$25					
2026	45	\$0.5511	\$25					
2027	45	\$0.5511	525					
2028	45	\$0.5511	\$25					

Revenue - Cost of Gas								
11	2	4	2*3					
Year	Therms	Fuel Rale	Total Charge					
2009	45	\$0.8000	\$36					
2010	45	\$0.8080	536					
2011	45	\$0.8161	\$37					
2012	45	\$0.8242	\$37					
2013	45	\$0.8325	\$37					
2014	45	\$0.8408	\$38					
2015	45	\$0.8492	\$38					
2016	45	\$0.8577	\$39					
2017	45	\$0.8863	\$38					
2018	45	\$0,8749	\$39					
2019	45	\$0.8837	\$40					
2020	45	\$0.8925	\$40					
2021	45	\$0,9015	\$41					
2022	45	\$0.9105	541					
2023	45	\$0.9196	\$41					
2024	45	\$0.0288	\$42					
2025	45	\$0.9361	\$42					
2025	45	\$0.9474	\$43					
2027	45	\$0.9569	\$43					
2028	45	\$0.9865	\$43					

Revenue - Customer Charge									
1	2	33	4	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customer	To Total	Prorated Annual					
Year Y	Charge	Charge	Consumed	Customer Charge					
2009	\$8.00	\$96.00	10.18%	\$10					
2010	\$6.00	\$95,00	10.16%	\$10					
2011	\$8.00	\$96.00	10.18%	\$10					
2012	\$6.00	\$96.00	10.16%	\$10					
2013	\$8.00	\$96.00	10.16%	\$10					
2014	\$8.00	\$96.00	10.18%	\$1Q					
2015	\$8.00	\$96.00	10.16%	\$10					
2016	\$8.00	\$96.00	10,16%	\$10					
2017	\$8.00	\$96.00	10.16%	\$10					
2018	\$8.00	\$96.00	10,18%	\$10					
2019	\$8.00	\$96.00	10.15%	\$10					
2020	\$6.00	\$96.00	10.18%	\$10					
2021	\$8.00	\$96.00	10.16%	\$10					
2022	\$8.00	\$96.00	10.16%	\$10					
2023	\$8,00	\$96.00	10.16%	\$10					
2024	\$8.00	\$96,00	10 16%	\$18					
2025	\$8.00	\$96.00	10.16%	\$10					
2026	\$8.00	\$96.00	10,16%	\$10					
2027	\$8.00	\$96.00	10.18%	\$10					
2028	\$8.00	\$96.00	10.16%	\$10					

Investment Carrying Costs									
1	2	3	4	5	6	7	8	6*7*8	
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment	
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos	
2009	\$100	\$500	\$318	\$172	\$1,090	8.12%	10.18%	\$9	
2010	\$97	\$487	\$308	\$166	\$1,058	8.12%	10.18%	\$9	
2011	\$94	\$474	\$298	\$161	\$1,027	8.12%	10 16%	\$8	
2012	\$92	\$462	\$289	\$156	\$998	8.12%	10.16%	\$8	
2013	\$60	\$450	\$279	\$151	\$970	8.12%	10.18%	\$8	
2014	\$68	\$438	\$270	\$146	\$942	8.12%	10.16%	88	
2015	\$86	\$427	\$261	\$141	\$915	8.12%	10.16%	\$8	
2016	\$84	\$416	\$253	\$136	\$889	8.12%	10.18%	\$7	
2017	\$82	\$405	\$245	\$132	\$864	8.12%	10.16%	\$7	
2018	\$8D	\$394	\$237	\$128	\$839	8.12%	10.18%	\$7	
2019	\$78	\$384	\$229	\$124	\$815	8 12%	10.16%	\$7	
2020	\$76	\$374	\$222	\$120	\$792	8.12%	10,18%	\$7	
2021	574	\$364	\$215	\$116	\$766	6.12%	10.16%	\$6	
2022	\$72	\$355	\$208	\$112	\$747	8.12%	10.16%	\$6	
2023	\$70	\$346	\$201	\$108	\$725	8.12%	10,16%	\$6	
2024	\$68	\$337	\$195	\$104	\$704	8.12%	10.16%	\$6	
2025	\$66	\$328	\$189	\$101	\$684	8.12%	10.16%	\$6	
2028	\$64	\$319	\$183	\$98	\$664	8.12%	10.16%	\$5	
2027	\$62	\$311	\$177	\$95	\$845	8.12%	10.16%	\$5	
2028	\$60	\$303	\$171	\$92	\$626	8.12%	10.18%	35	

Incremental Customer Costs									
1	2	3	4	5=3*4	6	7	8=6*7	5+8	
	Monthly	Annuel	Ratio Therms To	Annual Retio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa	
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost	
2009	\$2.40	\$29	10.16%	\$2.95	\$29.57	10.16%	\$ 3	\$6	
2010	\$2 42	\$29	10.18%	\$2.95	\$29.67	10.15%	\$ 3	\$6	
2011	\$2.45	\$29	10.18%	\$2.95	\$30,16	10.16%	\$ 3	\$6	
2012	\$2.47	\$30	10.16%	\$3.05	\$39,47	10.18%	\$3	\$6	
2013	\$2.50	\$30	10.16%	\$3.05	\$30.77	10.16%	\$3	\$6	
2014	\$2.52	\$30	10 16%	\$3.05	\$31.08	10.16%	\$3	\$6	
2015	\$2.55	\$31	10.16%	\$3.15	\$31,39	10 18%	\$3	\$6	
2016	\$2.57	\$31	10.16%	\$3.15	\$31.70	10.16%	\$3	\$6	
2017	\$2.00	\$31	10 16%	\$3.15	\$32.02	10.16%	\$3	5.6	
2018	\$2.62	\$31	10.18%	\$3.15	\$32.34	10.18%	\$3	\$6	
2019	\$2.65	\$32	10.16%	\$3.25	\$32.66	10 16%	\$3	5.7	
2020	\$2.68	\$32	10.16%	\$3.25	\$32.99	10.16%	\$3	57	
2021	\$2.70	\$32	10.16%	\$3.25	\$33.32	10.16%	\$3	57	
2022	\$2.73	\$33	10 16%	\$3.35	\$33.65	10,18%	\$3	\$7	
2023	\$2.76	\$33	10 16%	\$3 35	\$33,99	10 16%	\$3	\$7	
2024	\$2.79	\$33	10,16%	\$3.35	\$34.33	10 16%	\$3	\$7	
2025	\$2.81	\$34	10.18%	\$3.45	\$34.67	10.18%	\$4	\$7	
2026	\$2.84	\$34	10.16%	\$3,45	\$35.02	10 16%	\$4	\$7	
2027	\$2.87	\$34	10.16%	\$3.45	\$35.37	10, 18%	\$4	\$7	
2028	\$2.90	\$35	10.16%	\$3.56	\$35.72	10,16%	\$4	\$7	

Gas Costs								
1	2	3	2*3					
	Therms	Commodity Gas	Gas Supply					
Year		Supply Cost	Cost					
2009	45	0.8000	\$36					
2010	45	\$0.8080	\$36					
2011	45	\$0.8161	\$37					
2012	45	\$0.8242	\$37					
2013	45	\$0,8325	\$37					
2014	45	\$0 8408	\$38					
2015	45	\$0.8492	\$38					
2016	45	\$0.8577	\$39					
2017	45	\$0,8863	\$39					
2018	45	\$0.8749	\$39					
2019	45	\$0.8937	\$40					
2020	45	\$0.8925	\$40					
2021	45	\$0.9015	541					
2022	45	\$0.9105	\$41					
2023	45	\$0.0196	\$41					
2024	45	\$0,9288	\$42					
2025	45	\$0.9361	\$42					
2026	45	\$0,9474	\$43					
2027	45	\$0.9569	\$43					
2028	45	\$0.0686	\$43					

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Storage Tank Water Heating

			Benefit	\$						Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$508	\$350	\$60	\$918	0	\$0	0	\$100	\$60	\$150	\$103	\$41	\$453
2010	2	\$509	0	\$81	\$570	0	\$ 0	0		\$ 61	\$151	\$103	\$41	\$3 55
2011	3	\$511	0	\$61	\$572	0	\$0	0		\$ 61	\$153	\$103	\$41	\$357
2012	4	\$512	0	\$62	\$574	0	\$0	0		\$62	\$154	\$103	\$41	\$360
2013	5	\$514	0	\$62	\$576	0	\$0	0		\$62	\$156	\$103	\$41	\$362
2014	6	\$ 515	0	\$63	\$578	0	\$0	0		\$63	\$157	\$103	\$41	\$364
2015	7	\$517	0	\$64	\$580	0	\$0	0		\$64	\$159	\$ 103	\$41	\$366
2016	8	\$518	0	\$64	\$582	0	\$0	0		\$64	\$160	\$103	\$41	\$368
2017	9	\$519	0	\$ 65	\$584	0	\$0	0		\$65	\$162	\$103	\$41	\$371
2018	10	\$521	350	\$66	\$937	421	(\$659)	239		\$66	\$164	\$103	\$41	\$373
2019	11	\$522	0	\$6 6	\$589	0	\$0	0		\$66	\$165	\$103	\$41	\$375
2020	12	\$524	0	\$67	\$591	0	\$0	0		\$67	\$167	\$103	\$41	\$377
2021	13	\$525	0	\$68	\$593	0	\$0	0		\$68	\$169	\$103	\$41	\$380
2022	14	\$527	0	\$68	\$ 59 5	0	\$0	0		\$68	\$170	\$103	\$41	\$382
2023	15	\$528	0	\$ 69	\$597	0	\$0	0		\$69	\$172	\$103	\$41	\$385
2024	16	\$530	0	\$70	\$599	0	\$0	0		\$70	\$174	\$ 103	\$41	\$387
2025	17	\$531	0	\$70	\$601	0	\$0	0		\$70	\$175	\$103	\$41	\$389
2026	18	\$533	0	\$71	\$604	0	\$0	0	*	\$7 1	\$177	\$103	\$41	\$392
2027	19	\$534	0	\$72	\$606	0	\$0	0		\$72	\$179	\$103	\$41	\$394
2028	20	\$535	0	\$72	\$608	0	\$0	0		\$72	\$181	\$103	\$41	\$397

Present Value of Benefits \$6,206

Present Value of Costs \$3,713

Benefit/Cost 1.67
Ratio

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Storage Tank Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	pane Cost - Tabi	le 1			Natural Gas Sup	oply Cost -	Table 2		Natural Gas Energy Charge - Table 3							ı	Natural Gas C	Customer Ch	narge - Table 4		
Year	Cost Per Gallon	Annuai Gallons	Tex Rate	Propane Cost	Year	Cost Per Therm	Annual Thorms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	nG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tex Rate	Pro-Rated Customer Charge
A	В	c	Ð	B*C*(1+D)	А	В	С	D	B*C*(1+D)	A	В	С	۵	B*C*(1+D)	Α	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	186	7.5%	\$508	2009	\$0.8000	170	10%	\$150	2009	\$0.5511	170	10%	\$103	2009	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2010	\$2.5533	186	7.5%	\$509	2010	\$0.8080	170	10%	\$161	2010	\$0.5511	170	10%	\$103	2010	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2011	\$2.5605	186	7.5%	\$511	2011	\$0.8161	170	10%	\$153	2011	\$0.5511	170	10%	\$103	2011	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2012	\$2.5678	186	7.5%	\$512	2012	\$0.8242	170	10%	\$184	2012	\$0.5511	170	10%	\$103	2012	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2013	\$2.5750	186	7.5%	\$514	2013	\$0.8325	170	10%	\$156	2013	\$0.5511	170	10%	\$103	2013	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2014	\$2.5823	186	7.5%	\$518	2014	\$0.6408	170	10%	\$157	2014	\$0.5511	170	10%	\$103	2014	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2015	\$2.5896	186	7.5%	\$517	2015	\$0.6492	170	10%	\$159	2015	\$0.5511	170	10%	\$103	2015	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2016	\$2.5968	186	7.5%	\$518	2016	\$0.8577	170	10%	\$160	2016	\$0.5511	170	10%	\$103	2016	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2017	\$2.6041	186	7.5%	\$519	2017	\$0.8663	170	10%	\$162	2017	\$0.5511	170	10%	\$103	2017	\$8.00	\$96.00	170	443	38,37%	10%	\$41
2018	\$2.6113	186	7.5%	\$521	2018	\$0.6749	170	10%	\$164	2018	\$0.5511	170	10%	\$103	2018	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2019	\$2.6186	186	7.5%	\$522	2019	\$0.8837	170	10%	\$165	2019	\$0.5511	170	10%	\$103	2019	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2020	\$2.6259	186	7.5%	\$524	2020	\$0.8925	170	10%	\$167	2020	\$0.5511	170	10%	\$103	2020	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2021	\$2.6331	186	7.5%	\$525	2021	\$0.9015	170	10%	\$169	2021	\$0.5511	170	10%	\$103	2021	\$8.00	\$96,00	170	443	38.37%	10%	\$41
2022	\$2.6404	186	7.5%	\$527	2022	\$0.9105	170	10%	\$170	2022	\$0.5511	170	10%	\$103	2022	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2023	\$2.6476	186	7.5%	\$628	2023	\$0.9196	170	10%	\$172	2023	\$0.5511	170	10%	\$103	2023	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2024	\$2.6549	186	7.5%	\$530	2024	\$0.9288	170	10%	\$174	2024	\$0.5511	170	10%	\$103	2024	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2025	\$2.6622	186	7.5%	\$531	2025	\$0.9381	170	10%	\$178	2025	\$0.5511	170	10%	\$103	2025	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2026	\$2.6694	186	7.5%	\$633	2026	\$0.9474	170	10%	\$177	2026	\$0.5511	170	10%	\$103	2026	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2027	\$2.6767	186	7.5%	\$534	2027	\$0.9569	170	10%	\$179	2027	\$0.5511	170	10%	\$103	2027	\$8.00	\$96.00	170	443	38.37%	10%	\$41
2028	\$2.6839	186	7.5%	\$635	2028	\$0.9665	170	10%	\$181	2028	\$0.6511	170	10%	\$103	2028	\$8.00	\$96.00	170	443	38.37%	10%	\$41

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Tankless Water Heating

			Benefits	············	Costs ded NG Propane NG										
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS	
		Table 1							,		Table 2	Table 3	Table 4		
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13	
2009	1	\$448	\$450	\$60	\$958	\$0	\$0	\$0	\$100	\$60	\$132	\$91	\$37	\$420	
2010	2	\$449	0	\$61	\$510	0	\$0	0		\$61	\$133	\$ 91	\$37	\$322	
2011	3	\$451	0	\$ 61	\$512	0	\$0	0		\$61	\$135	\$ 91	\$37	\$324	
2012	4	\$452	0	\$62	\$514	0	\$0	0		\$62	\$136	\$ 91	\$37	\$326	
2013	5	\$453	0	\$ 62	\$516	0	\$0	0		\$62	\$137	\$91	\$37	\$328	
2014	6	\$455	0	\$63	\$518	0	\$0	0		\$ 63	\$139	\$91	\$37	\$330	
2015	7	\$456	0	\$64	\$520	0	\$0	0		\$64	\$140	\$91	\$37	\$332	
2016	8	\$457	0	\$64	\$521	0	\$0	0		\$64	\$142	\$91	\$37	\$334	
2017	9	\$458	0	\$6 5	\$523	0	\$0	0		\$65	\$143	\$ 91	\$37	\$336	
2018	10	\$460	0	\$66	\$525	0	\$0	0		\$66	\$144	\$ 91	\$37	\$338	
2019	11	\$461	0	\$6 6	\$527	0	\$0	0		\$ 66	\$146	\$9 1	\$37	\$340	
2020	12	\$462	0	\$ 67	\$529	0	\$0	0		\$67	\$147	\$91	\$ 37	\$343	
2021	13	\$463	0	\$ 68	\$531	0	\$0	0		\$68	\$149	\$ 91	\$37	\$345	
2022	14	\$465	0	\$68	\$533	0	\$0	0		\$68	\$150	\$ 91	\$ 37	\$347	
2023	15	\$466	0	\$ 69	\$535	0	\$0	0		\$69	\$152	\$91	\$37	\$349	
2024	16	\$467	0	\$70	\$537	0	\$0	0		\$70	\$153	\$91	\$37	\$351	
2025	17	\$469	0	\$70	\$539	0	\$0	0		\$70	\$155	\$ 91	\$ 37	\$354	
2026	18	\$470	0	\$71	\$541	0	\$0	0		\$ 71	\$156	\$ 91	\$37	\$356	
2027	19	\$471	0	\$72	\$543	0	\$0	0		\$72	\$158	\$91	\$ 37	\$358	
2028	20	\$472	450	\$72	\$995	1,219	(\$1,746)	527		\$72	\$159	\$91	\$37	\$360	

Present Value of Benefits \$5,834

Present Value of Costs \$3,378

Benefit/Cost 1.67

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Tankless Water Heating

Escalation Rates		LP DeVMargin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1,0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Propa	me Cost - Ta	ble 1			Natuari G	as Supply C	ost - Table 2			Natural Ga	s Energy Ch	arge - Table	e 3		***************************************	Natu	ral Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Galion	Annual Gallons	Tax Rate	Propane Cost	Y	cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Thems	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	С	Đ	B*C*(1+D)		A B	c	D	B*C*(1+D)	A	8	c	D	B*C*(1+D)	Α_	8	c	۵	E.	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	164	7.5%	\$448	20	\$0.8000	150	10%	\$132	2009	\$0.5511	150	10%	\$91	2009	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2010	\$2.5533	164	7.5%	\$449	20	010 \$0.8080	150	10%	\$133	2010	\$0.5511	150	10%	\$91	2010	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2011	\$2.5605	164	7.5%	\$451	20	30.8161	150	10%	\$135	2011	\$0.5511	150	10%	\$91	2011	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2012	\$2.5678	164	7.5%	\$482	20	112 \$0.8242	150	10%	\$138	2012	\$0.5511	150	10%	\$91	2012	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2013	\$2.5750	164	7.5%	\$453	20	113 \$0.8325	150	10%	\$137	2013	\$0.5511	150	10%	\$91	2013	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2014	\$2.5823	164	7.5%	\$485	20	114 \$0.8408	150	10%	\$139	2014	\$0.5511	150	10%	\$91	2014	\$8.00	\$98.00	150	423	35.46%	10%	\$37
2015	\$2,5896	164	7.5%	\$466		015 \$0.8492	150	10%	\$140	2015	\$0.5511	150	10%	\$91	2015	\$8.00	\$96,00	150	423	35.46%	10%	\$37
2016	\$2.5968	164	7.5%	\$457	1	018 \$0.8577	150	10%	\$142	2016	\$0.5511	150	10%	\$91	2016	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2017	\$2.6041	164	7.5%	\$458		017 \$0.8663		10%	\$143	2017	\$0.5511				2017	\$8.00	\$96.00		423	35.46%	10%	\$37
						,	150					150	10%	\$91			•	150				
2018	\$2.8113	164	7.5%	\$460		118 \$0.8749	150	10%	\$144	2018	\$0.5511	150	10%	\$91	2018	\$8,00	\$96.00	150	423	35.46%	10%	\$37
2019	\$2,8186	164	7.5%	\$461	20	119 \$0.8837	150	10%	\$148	2019	\$0.5511	150	10%	\$91	2019	\$6.00	\$96.00	150	423	35.46%	10%	\$37
2020	\$2.6259	164	7.5%	\$482	20	20 \$0.8925	150	10%	\$147	2020	\$0.5511	150	10%	\$91	2020	\$8,00	\$96.00	150	423	35.46%	10%	\$37
2021	\$2.8331	164	7.5%	\$483	20	721 \$0.9015	150	10%	\$149	2021	\$0.5511	150	10%	\$81	2021	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2022	\$2.6404	164	7.5%	\$465	20	\$0.9105	150	10%	\$150	2022	\$0.5511	150	10%	\$91	2022	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2023	\$2.6476	164	7.5%	\$486	20	023 \$0.9196	150	10%	\$152	2023	\$0.5511	150	10%	\$91	2023	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2024	\$2.6549	164	7.5%	\$467	20	30.9288	150	10%	\$183	2024	\$0.5511	150	10%	\$91	2024	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2025	\$2.6622	164	7.5%	\$468	20	125 \$0.9381	150	10%	\$156	2025	\$0.5511	150	10%	\$91	2025	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2026	\$2.6694	164	7.5%	\$470	20	026 \$0.9474	150	10%	\$156	2026	\$0.5511	150	10%	\$91	2026	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2027	\$2,6767	164	7.5%	\$471	20	27 \$0.9569	150	10%	\$166	2027	\$0.5511	150	10%	\$91	2027	\$8.00	\$96.00	150	423	35.46%	10%	\$37
2028	\$2,6839	164	7.5%	\$472	20	28 \$0.9865	150	10%	\$159	2028	\$0.5511	150	10%	\$91	2028	\$8.00	\$96.00	150	423	35.46%	10%	\$37

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Heating System

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$532	\$350	\$270	\$1,152	\$0	0	\$0	\$100	\$270	\$157	\$108	\$42	\$677
2010	2	\$533	0	\$273	\$806	0	0	0		\$273	\$158	\$108	\$42	\$581
2011	3	\$535	0	\$275	\$810	0	0	0		\$275	\$160	\$108	\$42	\$586
2012	4	\$536	0	\$278	\$815	0	0	0		\$278	\$161	\$108	\$42	\$590
2013	5	\$538	0	\$281	\$819	0	0	0		\$281	\$163	\$108	\$42	\$594
2014	6	\$539	0	\$284	\$823	0	0	0		\$284	\$165	\$108	\$42	\$599
2015	7	\$541	0	\$287	\$828	0	0	0		\$287	\$166	\$108	\$42	\$603
2016	8	\$542	0	\$289	\$832	0	0	0		\$289	\$168	\$108	\$42	\$608
2017	9	\$544	0	\$292	\$836	0	0	0		\$292	\$170	\$108	\$42	\$612
2018	10	\$545	0	\$295	\$841	0	0	0		\$295	\$171	\$108	\$42	\$617
2019	11	\$547	0	\$298	\$845	0	0	0		\$298	\$173	\$108	\$42	\$622
2020	12	\$548	0	\$301	\$850	0	0	0		\$301	\$175	\$108	\$42	\$626
2021	13	\$550	0	\$304	\$854	0	0	0		\$304	\$177	\$108	\$42	\$831
2022	14	\$552	0	\$307	\$859	0	0	0		\$307	\$178	\$108	\$42	\$636
2023	15	\$553	0	\$310	\$863	0	0	0		\$310	\$180	\$108	\$42	\$641
2024	16	\$555	0	\$313	\$868	0	0	0		\$313	\$182	\$108	\$42	\$846
2025	17	\$556	0	\$317	\$873	0	0	0		\$ 317	\$184	\$108	\$42	\$651
2026	18	\$558	350	\$320	\$1,227	2,882	(4,657)	1,775		\$320	\$186	\$108	\$42	\$656
2027	19	\$559	0	\$323	\$882	0	0	0		\$323	\$187	\$108	\$42	\$661
2028	20	\$561	0	\$326	\$887	0	0	0		\$326	\$189	\$108	\$42	\$666

Present Value \$8,585
of Benefits Present Value \$6,068

Benefit/Cost 1.41
Ratio

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type	
 Heating System	

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tab	ole 1			Natural G	as Supply C	ost - Table 2		Natural Gas Energy Charge - Table 3						Natur	el Gas Custo	omer Charg	e - Table 4			
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propene Cost	Ye	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Thorm	Annual Themas	Tex Rate	NG Cost	Year	Monthly Customer Charge	Annuel Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	С	D	8°C*(1+D)	A	В	С	D	B*C*(1+D)	Α	В	c	D	8*C*(1+D)	A	8	c	۵	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2,5460	194	7.5%	\$532	200	9 \$0.8000	178	10%	\$167	2009	\$0,5511	178	10%	\$108	2009	\$8.90	\$96.00	178	443	40.18%	10%	\$42
2010	\$2.5533	194	7.5%	\$533	20	0 \$0.8080	178	10%	\$158	2010	\$0.5511	178	10%	\$108	2010	\$8.00	\$96,00	178	443	40.18%	10%	\$42
2011	\$2,5605	194	7.5%	1638	201	1 \$0.8161	178	10%	\$160	2011	\$0.5511	178	10%	\$108	2011	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2012	\$2.5678	194	7,5%	1636	201		178	10%	\$161	2012		178	10%	\$108	2012	\$8.00	\$96.00	178	443	40.16%	10%	\$42
2013	\$2,5750	194	7.5%	\$638	20		178	10%	\$163	2013	\$0,5511	178	10%	\$108	2012	\$8.90	\$96.00	178	443	40.18%	10%	\$42
2014	\$2.5823	194							,	1							,					1
ļ			7.5%	\$539	201	*	178	10%	\$ 165	2014	\$0,5511	178	10%	\$106	2014	\$8.00	\$96.00	176	443	40.18%	10%	\$42
2015	\$2,5696	194	7.5%	\$841	201	• • • • • • • • • • • • • • • • • • • •	178	10%	\$166	2015		178	10%	\$108	2015	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2016	\$2.5968	194	7.5%	\$642	201	8 \$0.8577	178	10%	\$168	2016	\$0.5511	178	10%	\$108	2016	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2017	\$2.6041	194	7.5%	\$544	201	7 \$0.8663	178	10%	\$170	2017	\$0.5511	178	10%	\$108	2017	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2018	\$2,6113	194	7.5%	\$545	201	8 \$0.8749	178	10%	\$171	2018	\$0,5511	178	10%	\$188	2018	\$8.00	\$96.00	178	443	40.15%	10%	\$42
2019	\$2.6186	194	7.5%	\$547	201	9 \$0.8837	178	10%	\$173	2019	\$0,5511	178	10%	\$108	2019	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2020	\$2.8259	194	7.5%	\$548	202	\$0.8925	178	10%	\$175	2020	\$0.5511	178	10%	\$108	2020	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2021	\$2.6331	194	7.5%	\$880	202	1 \$0.9015	176	10%	\$177	2021	\$0.5511	178	10%	\$108	2021	\$8.00	\$96.00	175	443	40.18%	10%	\$42
2022	\$2.6404	194	7.5%	\$852	202	2 \$0.9105	178	10%	\$178	2022	\$0,5511	178	10%	\$108	2022	\$8.00	\$96.00	178	443	40.18%	10%	842
2023	\$2.8476	194	7.5%	\$583	202	3 \$0,9196	178	10%	\$180	2023	\$0.5511	178	10%	\$108	2023	\$8.00	\$96,00	178	443	40.18%	10%	\$42
2024	\$2,6549	194	7.5%	3656	202		178	10%	\$182	2024	\$0.5511	178	10%	\$106	2024	\$8.00	\$96,00	178	443	40.18%	10%	\$42
2025	\$2,6622	194	7.5%	\$556	202		178	10%	\$184	2025					2025	-	\$96,00	178				
2026	\$2,6694	194							1		\$0.5511	178	10%	\$108	, , , , ,	\$8.00			443	40.18%	10%	\$42
			7.5%	\$558	202	•	178	10%	\$186	2026	\$0.5511	178	10%	\$108	2026	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2027	\$2.6767	194	7.5%	\$559	202	********	178	10%	\$187	2027	\$0.5511	178	10%	\$108	2027	\$8.00	\$96.00	178	443	40.18%	10%	\$42
2028	\$2.6839	194	7.5%	\$561	202	\$0.9665	178	10%	\$189	2028	\$0,5511	178	10%	\$108	2028	\$8.00	\$96.00	178	443	40.18%	10%	\$42

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Clothes Drying

			Benefits						C	osts				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propene Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$149	\$100	\$60	\$309	\$0	\$0	\$0	\$100	\$60	\$44	\$30	\$12	\$246
2010	2	\$150	0	\$6 1	\$210	0	\$0	0		\$ 61	\$44	\$30	\$12	\$147
2011	3	\$150	0	\$6 1	\$211	0	\$0	0		\$61	\$45	\$30	\$12	\$148
2012	4	\$151	0	\$ 62	\$212	0	\$ 0	0		\$62	\$45	\$30	\$12	\$149
2013	5	\$151	0	\$62	\$214	0	\$0	0		\$62	\$46	\$30	\$12	\$150
2014	6	\$152	0	\$63	\$215	0	\$0	0		\$ 63	\$46	\$30	\$12	\$152
2015	7	\$152	0	\$64	\$216	0	\$0	0		\$64	\$47	\$30	\$12	\$153
2016	8	\$152	0	\$64	\$217	0	\$0	0		\$64	\$47	\$30	\$12	\$154
2017	9	\$153	0	\$65	\$218	0	\$0	0		\$65	\$48	\$30	\$12	\$155
2018	10	\$153	0	\$66	\$219	0	\$0	0		\$66	\$48	\$30	\$12	\$156
2019	11	\$154	0	\$66	\$220	0	\$0	0		\$66	\$49	\$30	\$12	\$157
2020	12	\$154	0	\$67	\$221	0	\$0	0		\$67	\$49	\$30	\$12	\$158
2021	13	\$154	100	\$68	\$322	533	(\$697)	164		\$68	\$50	\$30	\$12	\$159
2022	14	\$155	0	\$68	\$223	0	\$0	0		\$6 8	\$50	\$30	\$12	\$161
2023	15	\$155	0	\$69	\$224	0	\$0	0		\$ 69	\$ 51	\$30	\$12	\$162
2024	16	\$156	0	\$70	\$225	0	\$0	0		\$70	\$51	\$30	\$12	\$163
2025	17	\$156	0	\$70	\$227	0	\$0	0		\$ 70	\$52	\$30	\$12	\$164
2026	18	\$157	0	\$7 1	\$228	0	\$0	0		\$ 71	\$52	\$30	\$12	\$165
2027	19	\$157	0	\$72	\$229	0	\$0	0		\$72	\$53	\$30	\$12	\$167
2028	20	\$157	0	\$72	\$230	0	\$0	0		\$72	\$53	\$30	\$12	\$168

Present Value of Benefits \$2,258

Present Value of Costs \$1,604

Benefit/Cost 1.41
Ratio

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Clothes Drying

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tab	ile 1			Natural G	as Supply C	ost - Table 2			Natural Ga	s Energy Ch	arge - Tabk	e 3			Natur	rai Gas Custo	mer Charge	- Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propase Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Vear	Rate Per Therm	Annuel Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	8	С	a	B*C*(1+D)	A	В	С	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	А	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	55	7.5%	\$149	2009	\$0.8000	50	10%	\$44	2009	\$0.5511	50	10%	\$30	2009	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2010	\$2.5533	55	7.5%	\$150	2010	\$0.8080	50	10%	544	2010	\$0.5511	50	10%	\$30	2010	\$8,00	\$96.00	50	443	11.29%	10%	\$12
2011	\$2.5605	55	7.5%	\$150	2011	\$0.8161	50	10%	\$46	2011	\$0.5511	50	10%	\$30	2011	\$8.00	\$98.00	50	443	11.29%	10%	\$12
2012	\$2.5678	55	7.5%	\$151	2012	\$0.8242	50	10%	\$46	2012	\$0.5511	50	10%	\$30	2012	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2013	\$2.5750	55	7.5%	\$151	2013	\$0.8325	50	10%	\$46	2013	\$0.5511	50	10%	\$30	2013	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2014	\$2.5823	55	7.5%	\$152	2014	\$0.8498	50	10%	\$46	2014	\$0.5511	50	10%	\$30	2014	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2015	\$2.5896	55	7.5%	\$152	2015	\$0.8492	50	10%	\$47	2015	\$0.5511	50	10%	\$30	2015	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2016	\$2.5968	55	7.5%	\$182	2016	\$0.8577	50	10%	\$47	2016	\$0.5511	50	10%	\$30	2016	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2017	\$2.6041	55	7.5%	\$153	2017	\$0.8663	50	10%	\$48	2017	\$0.5511	50	10%	\$30	2017	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2018	\$2.6113	55	7.5%	\$153	2018	\$0.8749	50	10%	\$48	2018	\$0.5511	50	10%	\$30	2018	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2019	\$2,6186	55	7.5%	\$154	2019	\$0.8837	50	10%	\$49	2019	\$0,5511	50	10%	\$30	2019	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2020	\$2.6259	55	7,5%	\$154	2020	\$0.8925	50	10%	\$48	2020	\$0.5511	50	10%	\$30	2020	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2021	\$2,6331	55	7.5%	\$154	2021	\$0.9015	50	10%	\$50	2021	\$0.5511	50	10%	\$30	2021	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2022	\$2.6404	55	7.5%	\$185	2022	\$0.9105	50	10%	\$50	2022	\$0.5511	50	10%	\$30	2022	\$8.00	\$96,00	50	443	11.29%	10%	\$12
2023	\$2,8476	55	7.5%	\$155	2023	\$0.9196	50	10%	\$51	2023	\$0.5511	50	10%	\$30	2023	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2024	\$2.6549	55	7.5%	\$156	2024	\$0.9288	50	10%	\$51	2024	\$0.5511	50	10%	130	2024	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2025	\$2.6622	55	7.5%	\$156	2025	\$0.9381		10%			\$0.5511	50	10%		2024	\$8.00	\$96.00	50	443	11.29%	10%	\$12 \$12
2028	\$2,6694	55	7.5%	\$157			50		\$62	2025				\$30								
2020	***************************************			,	2028	\$0.9474	50	10%	\$52	2026	\$0,5511	50	10%	\$30	2026	\$8.00	\$96.00	50	443	11.29%	10%	\$12
2027	\$2.6767 \$2.6839	55 55	7.5% 7.5%	\$187	2027	\$0.9569 \$0.9665	50 50	10%	\$63 \$63	2027	\$0.5511 \$0.5511	50 50	10%	\$30 \$30	2027	\$8.00 \$8.00	\$96.00 \$96.00	50 50	443 443	11.29% 11.29%	10%	\$12 \$12

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type
Cooking

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$134	\$100	\$60	\$294	\$0	\$0	\$0	\$100	\$60	\$40	\$27	\$11	\$238
2010	2	\$135	0	\$61	\$195	0	\$0	0		\$61	\$40	\$27	\$11	\$139
2011	3	\$135	0	\$ 61	\$196	0	\$0	0		\$61	\$40	\$27	\$11	\$140
2012	4	\$136	0	\$ 62	\$197	0	\$0	0		\$62	\$41	\$27	\$11	\$141
2013	5	\$136	0	\$62	\$198	0	\$0	0		\$62	\$4 1	\$27	\$11	\$142
2014	6	\$136	0	\$63	\$199	0	\$0	0		\$63	\$42	\$27	\$11	\$143
2015	7	\$137	0	\$64	\$200	0	\$0	0		\$64	\$42	\$27	\$11	\$144
2016	8	\$137	0	\$64	\$201	0	\$0	0		\$64	\$42	\$27	\$11	\$145
2017	9	\$138	0	\$65	\$202	0	\$0	0		\$65	\$43	\$27	\$11	\$146
2018	10	\$138	0	\$66	\$204	0	\$0	0		\$66	\$43	\$27	\$11	\$147
2019	11	\$138	0	\$66	\$205	0	\$0	0		\$66	\$44	\$27	\$11	\$148
2020	12	\$139	0	\$6 7	\$206	0	\$0	0		\$67	\$44	\$27	\$11	\$149
2021	13	\$139	0	\$68	\$207	0	\$0	0		\$68	\$45	\$27	\$11	\$150
2022	14	\$139	0	\$68	\$208	0	\$0	0		\$68	\$45	\$27	\$11	\$151
2023	15	\$140	100	\$69	\$309	637	(\$805)	167		\$69	\$4 6	\$27	\$11	\$162
2024	16	\$140	0	\$70	\$210	0	\$0	0		\$70	\$46	\$27	\$11	\$154
2025	17	\$141	0	\$70	\$211	0	\$0	0		\$70	\$46	\$27	\$11	\$155
2026	18	\$141	0	\$71	\$212	0	\$0	0		\$71	\$47	\$27	\$11	\$156
2027	19	\$141	0	\$72	\$213	0	\$0	0		\$72	\$47	\$27	\$11	\$157
2028	20	\$142	0	\$72	\$214	0	\$0	0		\$72	\$48	\$27	\$11	\$156

of Benefits \$2,103

Present Value of Costs \$1,516

Benefit/Cost	1.39
Ratio	

Florida Public Utilities Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Cooking

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tab	le 1			Natural Ga	s Supply Co	ost - Table 2			Natural Gas	Energy Cha	rge - Tabk	e 3			Natu	rel Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gallon	Annual Gallon	Tux Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rete	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Thomas	Ratio - Appliance to Total	Tax Rata	Pro-Raind Customer Charge
Α	8	С	D	B*C*(1+D)	А	В	С	D	B*C*(1+D)	Α	В	C	D	B*C*(1+D)	A	8	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	49	7.5%	\$134	2009	\$0.8990	45	10%	\$40	2009	\$0.5511	45	10%	\$27	2009	\$8.00	\$96.00	45	443	10.18%	10%	\$11
2010	\$2.5533	49	7.5%	\$138	2010	\$0.8080	45	10%	\$40	2010	\$0.5511	45	10%	\$27	2010	\$8.00	\$96.00	45	443	10.16%	10%	\$11
2011	\$2,5605	49	7.5%	\$136	2011	\$0.8161	45	10%	\$40	2011	\$0.5511	45	10%	\$27	2011	\$8.00	\$96.00	45	443	10,16%	10%	\$11
2012	\$2.5678	49	7.5%	\$136	2012	\$0.8242	45	10%	\$41	2012	\$0.5511	45	10%	\$27	2012	\$8,00	\$96.00	45	443	10.16%	10%	\$11
2013	\$2.5750	49	7,5%	\$136	2013	\$0.8325	45	10%	841	2013	\$0.5511	45	10%	\$27	2013	\$8.00	\$96,00	45	443	10.16%	10%	\$11
2014	\$2.5823	49	7.5%	\$138	2014	\$0.8408	45	10%	\$42	2014	\$0.5511	45	10%	\$27	2014	\$8.00	\$96.00	45	443	10.16%	10%	\$11
2015	\$2.5896	49	7.5%	\$137	2015	\$0.8492	45	10%	\$42	2015	\$0.5511	45	10%	\$27	2015	\$8,00	\$96.00	45	443	10.16%	10%	\$11
2016	\$2.5968	49	7.5%	\$137	2016	\$0.6577	45	10%	\$42	2016	\$0.5511	45	10%	\$27	2016	\$8.00	\$98.00	45	443	10.16%	10%	\$11
2017	\$2.6041	49	7.5%	\$138	2017	\$0.8863	45	10%	\$43	2017	\$0.5511	45	10%	\$27	2017	\$8.00	\$96.00	45	443	10,16%	10%	\$11
2018	\$2.8113	49	7.5%	\$138	2018	\$0.8749	45	10%	\$43	2018	\$0.5511	45	10%	\$27	2018	\$6.00	\$96.00	45	443	10.16%	10%	\$11
2019	\$2.5186	49	7.5%	\$136		\$0.8837			1					ĺ								
2020	\$2.6259				2018		45	10%	\$44	2019	\$0.5511	45	10%	\$27	2019	\$8.00	\$96.00	45	443	10.16%	10%	\$11
		49	7.5%	\$139	2020	\$0.6925	45	10%	\$44	2020	\$0.5511	45	10%	\$27	2020	\$8.00	\$96.00	45	443	10.16%	10%	\$11
2021	\$2.6331	49	7.5%	\$139	2021	\$0.9015	45	10%	\$45	2021	\$0,5511	45	10%	\$27	2021	\$8.00	\$96.00	45	443	10.16%	10%	\$11
2022	\$2.6404	49	7.5%	\$139	2022	\$0.9105	45	10%	\$45	2022	\$0.5511	45	10%	\$27	2022	\$8.00	\$96.00	45	443	10.18%	10%	\$11
2023	\$2.8478	49	7.5%	\$140	2023	\$0.9198	45	10%	\$46	2023	\$0.5511	45	10%	\$27	2023	\$8.00	\$96.00	45	443	10.16%	10%	\$11
2024	\$2.8549	49	7.5%	\$140	2024	\$0.9288	45	10%	\$46	2024	\$0.5511	45	10%	\$27	2024	\$8.00	\$96.00	45	443	10.18%	10%	\$11
2025	\$2.6822	49	7.5%	\$141	2025	\$0.9381	45	10%	\$46	2025	\$0.5511	45	10%	\$27	2025	\$8.00	\$96.00	45	443	10.18%	10%	\$11
2026	\$2.6694	49	7.5%	\$141	2026	\$0.9474	45	10%	\$47	2026	\$0.5511	45	10%	\$27	2026	\$8.00	\$96.00	45	443	10.16%	10%	\$11
2027	\$2,6767	49	7.5%	\$141	2027	\$0.9569	45	10%	\$47	2027	\$0.5511	45	10%	\$27	2027	\$8.00	\$96.00	45	443	10.16%	10%	\$11
2028	\$2.6839	49	7.5%	\$142	2028	\$0.9665	45	10%	\$48	2028	\$0.5511	45	10%	\$27	2028	\$8.00	\$96.00	45	443	10.16%	10%	\$11

Reorder No. 5126 NYC 10013 NYC 10013

7

Attachment 2.4

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

Indiantown Gas Company Rate Impact Measurement Test Participants Test

Summary of RIM Test and Participants Test Results

	Proposed <u>Allowance</u>	Participants Test	RIM Test
Gas Storage Tank Water Heating	\$350	1.75	1.06
Gas Tankless Water Heating	\$450	1.75	1.02
Gas Heating	\$350	1.46	1.11
Gas Clothes Drying	\$100	1.45	1.08
Gas Cooking	\$100	1.43	1.07

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Storage Tank Water Heating

	Incremental	Incremental	incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$67	\$142	\$41	\$250	\$142	\$36	\$10	\$352.89	\$542
2010	\$67	\$144	\$4 1	\$252	\$144	\$ 35	\$10	\$2.89	\$192
2011	\$67	\$145	\$41	\$253	\$145	\$34	\$11	\$2.89	\$192
2012	\$67	\$146	\$41	\$254	\$146	\$33	\$11	\$2.89	\$193
2013	\$67	\$148	\$41	\$256	\$148	\$32	\$11	\$2.89	\$193
2014	\$67	\$149	\$41	\$257	\$149	\$31	\$11	\$2.89	\$194
2015	\$67	\$151	\$41	\$259	\$151	\$30	\$11	\$2.89	\$194
2016	\$67	\$152	\$41	\$260	\$152	\$29	\$11	\$2.89	\$195
2017	\$67	\$154	\$41	\$262	\$154	\$28	\$11	\$2.89	\$195
2018	\$ 67	\$155	\$4 1	\$263	\$155	\$27	\$11	\$352.89	\$546
2019	\$67	\$157	\$41	\$265	\$157	\$26	\$11	\$2.89	\$197
2020	\$67	\$159	\$41	\$267	\$159	\$25	\$12	\$2,89	\$198
2021	\$67	\$160	\$41	\$268	\$160	\$24	\$12	\$2.89	\$19 9
2022	\$ 67	\$162	\$4 1	\$270	\$162	\$23	\$12	\$2.89	\$200
2023	\$67	\$163	\$41	\$271	\$163	\$22	\$12	\$2.89	\$201
2024	\$67	\$165	\$41	\$273	\$165	\$22	\$12	\$2.89	\$202
2025	\$67	\$167	\$41	\$275	\$167	\$21	\$12	\$2.89	\$203
2026	\$6 7	\$168	\$4 1	\$276	\$168	\$20	\$12	\$2.89	\$204
2027	\$67	\$170	\$4 1	\$278	\$170	\$20	\$12	\$2.89	\$205
2028	\$67	\$172	\$41	\$280	\$172	\$19	\$12	\$2.89	\$206

Present Value of Benefits

\$2,560

Present Value of Costs

\$2,408

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type
Storage Tank Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	3,30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3,30%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter	3.80%

		energy Cha	
1	2	3	2.3
Year	Therms	Base Rate	Total Charge
2009	170	\$0.3917	\$67
2010	170	\$0.3917	\$67
2011	170	\$0.3917	\$67
2012	170	\$0.3917	\$67
2013	170	\$0.3917	\$67
2014	170	\$0.3917	\$67
2015	170	\$0.3917	\$67
2016	170	\$0.3917	\$67
2017	170	\$0.3917	\$67
2018	170	\$0,3917	\$67
2019	170	\$0.3917	\$67
2020	170	\$0,3917	\$67
2021	170	\$0.3917	\$67
2022	170	\$0.3917	\$67
2023	170	\$0.3917	\$67
2024	170	\$0,3917	\$67
2025	170	\$0.3917	\$67
2026	170	\$0.3917	\$67
2027	170	\$0,3917	\$67
2028	170	\$0.3917	\$67

	Revenue - Co	st of Gas	
1	2	4	2*3
Year	Therms	Fuel Rate	Total Charge
2009	170	\$0.8360	\$142
2010	170	\$0,8444	\$144
2011	170	\$0.8528	\$145
2012	170	\$0.8813	\$148
2013	170	\$0.8699	\$148
2014	170	\$0.8788	\$149
2015	170	\$0.8874	\$151
2016	170	\$0,8963	\$152
2017	170	\$0.9053	\$154
2018	170	\$0.9143	\$155
2019	170	· \$0.9235	\$157
2020	170	\$0,9327	\$159
2021	170	\$0.9420	\$180
2022	170	\$0.9514	\$162
2023	170	\$0.9610	\$163
2024	170	\$0.9700	\$165
2025	170	\$0.9803	\$167
2026	170	\$0.9901	3168
2027	170	\$1,0000	\$170
2028	170	\$1,0100	5172

Revenue - Customer Charge									
1	2	3	4	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customer	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$9.00	\$108.00	38.37%	\$41					
2010	\$9.00	20.8012	38.37%	\$41					
2011	\$9.00	\$108,00	38.37%	\$41					
2012	\$9.00	\$108.00	38.37%	\$41					
2013	\$9.00	\$108.00	38.37%	\$41					
2014	\$8.00	\$108.00	38.37%	\$41					
2015	\$9.00	\$108,00	38.37%	\$41					
2016	\$9.00	\$108.00	38.37%	\$41					
2017	\$9.00	\$108.00	38,37%	\$41					
2018	\$9.00	\$108.00	38.37%	\$41					
2019	\$9.00	\$108.00	38.37%	\$41					
2020	\$9.00	\$108.00	38.37%	\$41					
2021	\$9.00	\$108.00	38.37%	\$41					
2022	\$9,00	\$108.00	36.37%	\$41					
2023	\$9.00	\$108.00	38,37%	\$41					
2024	\$9.00	\$108.00	38.37%	\$41					
2025	\$9.00	\$108.00	38.37%	\$41					
2026	\$9.00	\$108.00	38.37%	\$41					
2027	\$9.00	\$108.00	36.37%	\$41					
2028	\$9.00	\$108.00	38.37%	\$41					

			Inve	stment Ca	rrying Costs			
1	2	3	4	5	6	7	8	6*7*8
	Supply	Development	Sarvice		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$260	\$163	\$1,023	9.25%	38.37%	\$36
2010	\$97	\$484	\$251	\$157	\$989	9.25%	38.37%	\$35
2011	\$94	\$468	\$243	\$151	\$956	9.25%	38,37%	\$34
2012	\$91	\$453	\$235	\$145	\$924	9.25%	36.37%	\$32
2013	\$88	\$438	\$227	\$139	\$892	9.25%	38 37%	\$32
2014	\$85	\$424	\$220	\$134	\$863	9.25%	38.37%	\$31
2015	\$82	\$410	\$213	\$129	\$834	9.25%	38.37%	\$30
2016	\$79	\$396	\$206	\$124	\$805	8,25%	38.37%	\$29
2017	\$76	\$383	\$199	\$119	\$777	9.25%	38.37%	\$28
2018	\$73	\$370	\$192	\$114	\$749	9.25%	38.37%	\$27
2019	\$71	\$358	\$188	\$110	\$725	9.25%	38,37%	\$26
2020	369	\$346	\$180	\$106	\$701	9.25%	38.37%	\$25
2021	\$67	\$335	\$174	\$102	\$878	9.25%	38.37%	\$24
2022	\$65	\$324	\$168	\$96	\$655	9.25%	38.37%	\$23
2023	\$63	\$313	\$162	\$94	\$832	9.25%	38.37%	\$22
2024	\$61	\$303	\$157	\$90	\$611	9.25%	38.37%	\$22
2025	\$59	\$293	\$152	\$67	\$591	9.25%	38.37%	\$21
2026	\$57	\$253	\$147	\$84	\$571	9.25%	38.37%	\$20
2027	\$55	\$274	\$142	\$61	\$552	9.25%	38 37%	520
2028	453	\$265	\$137	278	\$532	0.25%	38 37%	\$40

			Incre	mental Custo	mer Costs			
1	2	3	4	5=3*4	- 6	7	0×6*7	5+B
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Thems To	Annuel Ratio	Total Incremental
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	OSM Cost	Adm. & O&M Cost
2008	\$1.73	\$21	38.37%	\$8,06	\$6,25	38.37%	\$2	\$10
2010	\$1.75	\$21	38,37%	\$6.06	\$8.31	38.37%	52	\$18
2011	\$1.76	\$21	38.37%	\$8.08	\$6.38	38.37%	\$ 2	\$11
2012	\$1,78	\$21	38.37%	\$8.06	\$6.44	38.37%	\$2	\$11
2013	\$1.80	\$22	38.37%	\$8.44	\$6.50	38.37%	\$2	\$11
2014	\$1.82	\$22	38.37%	\$8.44	\$6.57	38.37%	\$3	\$11
2015	\$1.84	\$22	38.37%	\$8.44	\$6.83	38.37%	\$3	\$11
2018	\$1.85	\$22	38 37%	\$8.44	\$8.70	38.37%	\$3.	\$11
2017	\$1.87	\$22	38.37%	\$8.44	\$8.77	39,37%	\$3	\$11
2016	\$1.89	\$23	38.37%	\$8.83	\$6.84	38.37%	\$3	\$11
2019	\$1.91	\$23	38.37%	\$8.83	\$6.90	38.37%	\$3	\$1 t
2020	\$1.93	\$23	38.37%	\$8.83	\$6.97	38.37%	\$3	\$12
2021	\$1.95	\$23	38.37%	\$8.83	\$7.04	38.37%	\$3	\$12
2022	\$1.97	\$24	38.37%	\$9.21	\$7.11	36.37%	\$3	\$12
2023	\$1,99	\$24	38.37%	\$9.21	\$7.18	38.37%	\$ 3	\$12
2024	\$2.01	\$24	38.37%	\$9.21	\$7.26	38.37%	\$3	\$12
2025	\$2.03	\$24	38 37%	\$6.21	\$7.33	36 37%	\$3	\$12
2028	\$2.05	\$25	38.37%	\$9.59	\$7.40	38.37%	\$3	\$12
2027	\$2.07	\$25	38.37%	\$9.50	\$7.48	38.37%	\$3	\$12
2028	\$2.09	\$25	38.37%	\$9.59	\$7.55	38.37%	\$3	\$12

	Gas	Costs	
1	2	3	5.3
	Therms	Gas Supply	Gas Supply
Year		Rate	Cost
2009	170	0.6360	\$142
2010	170	50 8444	\$144
2011	170	\$0,6528	\$145
2012	170	\$0.8613	\$146
2013	170	\$0.8689	\$148
2014	170	\$0.8766	\$149
2015	170	\$6.8874	\$151
2016	170	\$0,8963	\$152
2017	170	\$0.9053	\$154
2018	170	\$0.0143	\$155
2019	170	\$0.9235	\$157
2020	170	\$0.9327	\$159
2021	170	\$0.9420	\$160
2022	170	\$0.9514	\$162
2023	170	\$0.9610	\$163
2024	170	\$0.9706	\$165
2025	170	\$0.9803	\$187
2026	170	\$0.9901	\$166
2027	170	\$1,0000	\$170
2028	170	\$1,0100	\$172

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Tankless Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental			
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total	
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs	
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4			
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9	
2009	\$59	\$125	\$38	\$222	\$125	\$34	\$10	\$452.89	\$622	
2010	\$59	\$127	\$38	\$224	\$127	\$32	\$10	\$2.89	\$172	
2011	\$59	\$128	\$38	\$225	\$128	\$31	\$10	\$2.89	\$172	
2012	\$59	\$129	\$38	\$226	\$129	\$30	\$10	\$2.89	\$172	
2013	\$59	\$130	\$38	\$228	\$130	\$29	\$10	\$2.89	\$173	
2014	\$59	\$132	\$38	\$229	\$132	\$28	\$10	\$2.89	\$173	
2015	\$59	\$133	\$38	\$230	\$133	\$27	\$10	\$2.89	\$174	
2016	\$59	\$134	\$38	\$232	\$134	\$2 6	\$10	\$2.89	\$174	
2017	\$59	\$136	\$38	\$233	\$136	\$25	\$10	\$2.89	\$174	
2018	\$59	\$137	\$38	\$234	\$ 137	\$25	\$11	\$2.89	\$175	
2019	\$59	\$139	\$38	\$236	\$139	\$24	\$11	\$2.89	\$176	
2020	\$ 59	\$140	\$38	\$237	\$140	\$23	\$11	\$2.89	\$176	
2021	\$59	\$141	\$38	\$238	\$141	\$22	\$11	\$2.89	\$177	
2022	\$59	\$143	\$38	\$240	\$143	\$21	\$11	\$2.89	\$178	
2023	\$59	\$144	\$38	\$241	\$144	\$21	\$11	\$2.89	\$179	
2024	\$59	\$146	\$38	\$243	\$146	\$20	\$11	\$2.89	\$180	
2025	\$59	\$147	\$38	\$244	\$147	\$19	\$11	\$2.89	\$180	
2026	\$59	\$149	\$38	\$246	\$149	\$19	\$11	\$2.89	\$182	
2027	\$59	\$150	\$38	\$247	\$150	\$18	\$12	\$2.89	\$183	
2028	\$59	\$151	\$38	\$249	\$151	\$17	\$12	\$452.89	\$633	

Present Value of Benefits

\$2,275

Present Value of Costs

\$2,228

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type Tankless Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rato - Development Main	3.30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.30%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter	3.80%

1 elds T			~~~~
	Ravenue -	Energy Ch	arge
1	2	3	2*3
Year	Therms	Base Rate	Total Charge
2009	150	\$0.3917	\$59
2010	150	\$0.3917	\$59
2011	150	\$0.3917	\$59
2012	150	\$0.3917	\$59
2013	150	\$0,3917	\$58
2014	150	\$0.3917	\$59
2015	150	\$0.3917	\$50
2016	150	\$0,3917	\$59
2017	150	\$0.3917	\$59
2018	150	\$0.3917	\$59
2019	150	\$0.3917	359
2020	150	\$0.3917	\$59
2021	150	\$0.3917	\$59
2022	150	\$0,3917	\$59
2023	150	\$0.3917	\$59
2024	150	\$D.3917	\$59
2025	150	\$0.3917	\$59
2026	150	\$0.3917	\$59
2027	150	\$0.3917	\$59
2028	150	\$0.3917	\$59

	Revenue - Co		
1	2	4	2*3
Year	w	Fuel Rate	7.1.1.05
2009	Therms 150	\$0.8380	Total Charge \$125
2009 2010	150	\$0.8344	\$127
2011	150	\$0.8528	\$128
2012	150	\$0.8613	\$129
2012	150	\$0.8699	\$130
2014	150	\$0.8786	\$132
2015	150	\$0.8874	\$133
2016	150	\$0,8983	\$134
2017	150	\$0,0063	\$136
2018	150	\$0.9143	\$137
2018	150	\$0.9235	\$139
2020	150	\$0.9327	\$140
2021	150	\$0.9420	\$141
2022	150	\$0.9514	\$143
2023	150	\$0,961D	\$144
2024	150	\$0,9706	\$148
2025	150	\$0.9803	\$147
2026	150	\$0,8901	\$149
2027	150	\$1,9900	\$150
2028	150	\$1,0100	\$151

	Re	venue - Custome	r Charge	
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Proreted Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$9.00	\$108.00	35.48%	\$35
2010	\$9.00	\$108.00	35,46%	\$38
2011	\$9.00	\$108.00	35.46%	\$38
2012	\$9.00	\$108.00	35.46%	\$38
2013	\$9.00	\$109.00	35.46%	\$38
2014	\$9.00	\$108.00	35.46%	\$38
2015	\$9.00	\$108.00	35.40%	\$38
2018	\$9.00	\$108.00	35,46%	\$38
2017	\$9.00	\$108.00	35.46%	\$38
2018	\$9.00	\$108.00	35.48%	\$38
2019	\$9.00	\$108.00	35,46%	\$38
2020	\$9,00	\$108.00	35.48%	\$38
2021	\$9,00	\$108.00	35.46%	\$38
2022	\$9.00	\$108.00	35.46%	\$38
2023	\$9.00	\$108.00	35,48%	\$38
2024	\$9.00	\$108.00	35.46%	\$38
2025	\$9.00	\$108.00	35.48%	\$38
2026	\$9.00	\$108,00	35,46%	\$38
2027	\$8.00	\$108.00	35.48%	\$38
2028	\$9.00	\$108.00	35.46%	\$38

			inv	estment Ca	arrying Costs			
1	2	3	4 .	5	8	7	- 8	6'7'8
	Supply	Developmen:	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$260	\$163	\$1,023	9.25%	35.46%	\$34
2010	\$97	\$484	\$251	\$157	\$989	9.25%	35.46%	\$32
2011	\$94	\$468	\$243	\$151	\$956	9.25%	35.46%	\$31
2012	391	\$453	\$235	\$145	\$924	9.25%	35.46%	\$30
2013	\$66	\$438	\$227	\$139	\$892	9.25%	35 45%	\$29
2014	\$85	\$424	\$220	\$134	2663	9.25%	35.46%	\$28
2015	\$82	\$410	\$213	\$129	\$834	9.25%	35.48%	\$27
2016	579	\$390	\$206	\$124	\$605	9.25%	35,46%	\$26
2017	\$76	\$303	\$198	\$119	\$777	9.25%	35.46%	\$25
2018	\$73	\$370	\$192	\$114	\$749	0.25%	35.46%	\$25
2019	\$71	\$358	\$186	\$110	\$725	0.25%	35.48%	524
2020	\$69	\$346	\$180	\$108	\$701	9.25%	35.46%	\$23
2021	\$67	\$335	\$174	\$102	\$878	9,25%	35 46%	\$22
2022	\$85	\$324	\$188	\$98	\$655	9.25%	35.48%	\$21
2023	\$63	\$313	\$182	\$94	\$632	9.25%	35 46%	\$21
2024	\$61	\$303	\$157	\$90	\$611	9.25%	35 46%	\$20
2025	\$59	\$293	\$152	\$87	\$591	8.25%	35.46%	\$19
2028	\$57	\$283	\$147	\$84	\$571	9.25%	35.46%	\$19
2027	\$55	\$274	\$142	\$81	\$552	9.25%	35.48%	\$18
2028	853	\$265	\$137	\$78	\$533	9.25%	35 46%	\$57

			Incre	mental Custo	mer Costs			
1	2	3	4	5=3*4	- 6		8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Retio	Annual	Ratio Therms To	Annual Ratio	Total Incremental
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.73	\$21	35.46%	\$7.45	\$6.25	35 46%	\$2	\$10
2010	\$1.75	\$21	35.46%	\$7.45	\$6.31	35.46%	\$2	\$10
2011	\$1.78	\$21	35 46%	\$7.45	\$6.38	35.46%	\$2	\$10
2012	\$1.76	\$21	35.46%	\$7.45	\$8 44	35,46%	\$2	\$10
2013	\$1.60	\$22	35.46%	\$7.80	\$6.50	35.48%	\$2	\$16
2014	\$1.82	\$22	35.46%	\$7.80	\$6.57	35.46%	\$2	\$10
2015	\$1.84	\$22	35.46%	\$7.80	\$6.63	35.46%	\$2	\$10
2016	\$1.85	\$22	35.46%	\$7.80	\$6.70	35.46%	\$2	\$10
2017	\$1,87	\$22	35.46%	\$7.80	\$6.77	35.46%	\$2	\$10
2018	\$1.89	\$23	35.48%	\$8.16	\$6.84	35.46%	\$2	\$11
2019	\$1.91	\$23	35.46%	\$8.16	\$6.90	35 46%	\$2	\$11
2020	\$1.93	\$23	35.46%	\$8.16	\$6.97	35.46%	\$2	\$11
2021	\$1.95	\$23	35.46%	\$8.16	\$7.04	35.46%	\$2	\$11
2022	\$1,97	\$24	35.46%	\$6,51	\$7.11	35.46%	\$3	\$11
2023	\$1.99	\$24	35.46%	\$8.51	\$7.18	35.46%	\$ 3	\$11
2024	\$2.01	\$24	35.46%	\$8.51	\$7.28	35.48%	\$3	\$11
2025	\$2.03	\$24	35.46%	\$6.51	\$7.33	35.46%	\$3	\$11
2026	\$2.05	\$25	35.46%	\$8,87	\$7.40	35.46%	\$3	\$11
2027	\$2.07	\$25	35.46%	\$8.67	\$7.48	35 46%	\$3	\$12
2026	\$2.09	\$25	35.46%	\$8.87	\$7.55	35.46%	\$3	\$12

	Gas C	osts	
1	2	3	2°3
	Therms	Per Them	Gas Supply
Year		Supply Cast	Cost
2009	150	0.8360	\$125
2010	150	\$0.8444	\$127
2011	150	\$0.8528	\$128
2012	150	\$0.8613	\$129
2013	150	\$0.8699	\$130
2014	150	\$0.8786	\$132
2015	150	\$0.8874	\$133
2016	150	\$0.8983	\$134
2017	150	50.9053	\$136
2018	150	\$0.9143	\$137
2019	150	\$0.9235	\$130
2020	150	\$0 9327	\$140
2021	150	\$0.9420	\$141
2022	150	\$0,9514	\$143
2023	150	\$0.9610	\$144
2024	150	\$0.9706	\$146
2025	150	\$0.9803	\$147
2026	150	\$0,9901	\$149
2027	150	\$1.0000	\$150
2028	150	\$1,0100	\$151

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Heating System

	Incremental	Incremental	incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$70	\$149	\$43	\$262	\$149	\$38	\$11	\$353.03	\$551
2010	\$70	\$150	\$43	\$263	\$150	\$37	\$11	\$3.03	\$201
2011	\$70	\$152	\$43	\$265	\$152	\$36	\$11	\$3.03	\$201
2012	\$70	\$153	\$43	\$266	\$153	\$34	\$11	\$3.03	\$202
2013	\$70	\$155	\$43	\$268	\$155	\$33	\$11	\$3.03	\$202
2014	\$70	\$156	\$43	\$270	\$156	\$32	\$11	\$3.03	\$203
2015	\$70	\$158	\$43	\$271	\$158	\$31	\$12	\$3.03	\$203
2016	\$70	\$160	\$43	\$273	\$160	\$30	\$12	\$3.03	\$204
2017	\$70	\$161	\$43	\$274	\$161	\$29	\$12	\$3.03	\$205
2018	\$70	\$163	\$43	\$276	\$163	\$28	\$12	\$3.03	\$206
2019	\$70	\$164	\$43	\$278	\$164	\$27	\$12	\$3.03	\$206
2020	\$70	\$166	\$43	\$279	\$166	\$26	\$12	\$3.03	\$207
2021	\$70	\$168	\$43	\$281	\$168	\$25	\$12	\$3.03	\$208
2022	\$70	\$169	\$43	\$282	\$169	\$24	\$13	\$3.03	\$209
2023	\$70	\$171	\$43	\$284	\$171	\$23	\$13	\$3.03	\$210
2024	\$70	\$173	\$43	\$286	\$173	\$23	\$ 13	\$3.03	\$211
2025	\$70	\$174	\$43	\$288	\$174	\$22	\$13	\$3.03	\$212
2026	\$70	\$176	\$43	\$289	\$176	\$21	\$13	\$353.03	\$564
2027	\$70	\$178	\$ 43	\$291	\$178	\$21	\$13	\$3.03	\$215
2028	\$70	\$180	\$43	\$293	\$180	\$20	\$ 13	\$3.03	\$216

Present Value of Benefits

\$2,680

Present Value of Costs

\$2,423

Benefit/Cost Ratio

1.11

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

 Applian	ce	Type	
 Heating	Sy	stem	

Fuel Rata Escalator	1.0%	Depreciation Rate - Supply Main	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	3.30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3,30%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Mater	3.90%

Revenue - Energy Charge							
1	2	33	5.3				
Year	Therms	Base Rate	Total Charge				
2009	178	\$0.3917	\$70				
2010	178	\$0.3917	\$70				
2011	178	\$0.3917	\$70				
2012	178	\$0,3917	\$70				
2013	176	\$0,3917	\$70				
2014	178	\$0.3917	\$70				
2015	178	\$0.3917	\$70				
2016	178	\$0.3917	\$70				
2017	178	\$0,3917	\$70				
2018	178	\$0.3917	\$70				
2019	178	\$0.3917	\$70				
2020	178	\$0.3917	\$70				
2021	178	\$0,3917	\$70				
2022	178	\$0.3917	\$70				
2023	178	\$0.3917	\$70				
2024	178	\$0.3917	\$70				
2025	178	\$0.3917	\$70				
2026	178	\$0.3917	\$70				
2027	178	\$0.3917	\$70				
2028	176	\$0,3917	\$70				

Revenue - Cost of Gas						
	2	44	2*3			
Year	Therms	Fuel Rate	Total Charge			
2009	178	\$0.8360	\$149			
2010	178	\$0.8444	\$150			
2011	178	\$0.8528	\$152			
2012	178	\$0.8613	\$153			
2013	178	\$0,8899	\$155			
2014	178	\$0,8786	\$156			
2015	178	\$0.8674	\$158			
2018	178	\$0,8963	\$180			
2017	17B	\$0.9053	\$181			
2018	178	\$0.9143	\$183			
2019	178	\$0,9235	\$184			
2020	178	\$0,9327	\$186			
2021	178	\$0.9420	\$168			
2022	178	\$0.9514	\$169			
2023	178	\$0.9610	\$171			
2024	178	\$0.9706	\$173			
2025	178	\$0.9803	\$174			
2028	178	\$0.9901	\$176			
2027	178	\$1.0000	\$178			
2028	178	\$1,0100	\$180			

	Revenue - Customer Charge						
1	2	3	4	4*3			
	Monthly		Ratio Therms				
	Customer	Annual Customer	To Total	Prorated Annual			
Year	Charge	Charge	Consumed	Customer Charge			
2009	\$9.00	\$108.00	40.18%	\$43			
2010	\$9,00	\$108.00	40.18%	\$43			
2011	-\$9.00	\$108.00	40.18%	\$43			
2012	\$9.00	\$ 108.00	40.18%	\$43			
2013	\$9.00	\$108.00	40.18%	\$43			
2014	\$9.00	\$108.00	40.18%	\$43			
2015	\$9.00	\$108.00	40.18%	\$43			
2016	\$9.00	\$108.00	40,18%	\$43			
2017	\$9.00	\$108,06	40.18%	\$43			
2016	\$9.00	\$108.00	40.18%	\$43			
2019	\$9.00	\$108.00	40.16%	\$43			
2020	\$9.00	\$108.00	40.18%	\$43			
2021	\$9.00	\$108.00	40.18%	\$43			
2022	\$9.00	\$108.00	40.18%	\$43			
2023	\$9.00	\$108.00	40.18%	\$43			
2024	\$9.00	\$108.00	40.18%	\$43			
2025	\$9.00	\$108.00	40.18%	\$43			
2026	\$9.00	\$108.00	40.18%	\$43			
2027	\$9.00	\$108.00	40.18%	\$43			
2026	59.00	\$108.00	40.18%	\$43			

Investment Carrying Costs								
1	2	3	4	5	6		8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Macri	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$260	\$183	\$1,023	9.25%	40.18%	\$38
2010	\$97	\$484	\$251	\$157	\$989	9.25%	40.18%	\$37
2011	\$94	\$468	\$243	\$151	1958	8.25%	40.18%	\$36
2012	\$91	\$453	\$235	\$145	\$924	9.25%	40.18%	\$34
2013	\$88	\$438	\$227	\$139	\$892	9.25%	40, 18%	\$33
2014	\$85	\$424	\$220	\$134	\$863	9.25%	40.18%	\$32
2015	\$82	\$410	\$213	\$129	\$834	9.25%	40.18%	\$31
2016	\$70	\$396	\$208	\$124	\$805	9 25%	40.18%	\$30
2017	\$78	\$383	\$199	\$119	\$777	9.25%	40.18%	229
2018	\$73	\$370	\$192	\$114	\$749	9.25%	40.18%	\$28
2019	\$71	\$358	\$186	\$110	\$725	9.25%	40.18%	\$27
2020	\$89	\$346	\$180	\$106	\$701	9.25%	40.18%	\$26
2021	\$67	\$335	\$174	\$102	\$678	9.25%	40.18%	\$25
2022	\$65	\$324	\$168	\$98	\$655	9.25%	40.18%	\$24
2023	\$83	\$313	\$182	\$94	\$632	9.25%	40,18%	\$23
2024	\$61	\$303	\$157	\$90	\$811	9.25%	40.18%	\$23
2025	\$59	\$293	\$152	\$87	\$591	9 25%	40.18%	\$22
2028	\$57	\$283	\$147	\$84	\$571	9.25%	40.18%	\$21
2027	\$55	\$274	\$142	\$81	\$552	9.25%	40.18%	\$21
2028	\$53	\$265	\$137	\$78	\$533	9.25%	40 18%	\$20

Incremental Customer Costs								
1	2	3	4	5=3'4	- 6	7	8=6*7	5+8
	Monthly	Annual	Relio Therms To	Annual Retio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.73	\$21	40.18%	\$8.44	\$6.25	40.18%	\$3	\$11
2010	\$1.75	\$21	40.18%	\$8.44	\$6.31	40.18%	\$3	\$11
2011	\$1.76	321	40.18%	\$8.44	\$6.38	40.18%	\$3	\$11
2012	\$1.78	\$21	40.18%	\$8.44	\$6 44	40.18%	\$3	\$11
2013	\$1.80	\$22	40.18%	\$8.84	\$6.50	40.18%	\$3	\$11
2014	\$1.82	\$22	40.18%	\$6.84	\$6.57	40.18%	\$3	\$11
2015	\$1.84	\$22	40.18%	\$8.84	\$6.63	40.18%	\$3	\$12
2016	\$1.85	\$22	40.18%	\$8.84	\$6.70	40.18%	\$3	\$12
2017	\$1.87	\$22	40.18%	\$8,84	\$6.77	40.18%	\$3	\$12
2018	\$1.89	523	40.18%	\$9.24	\$6.84	40.18%	\$3	\$12
2019	\$1.91	\$23	40.18%	\$9.24	\$6.90	40.18%	\$3	\$12
2020	\$1,93	\$23	40.18%	39.24	\$6,97	40.18%	\$3	\$12
2021	\$1.95	\$23	40.18%	\$9.24	\$7.04	40.18%	\$3	\$12
2022	\$1.97	\$24	40.18%	\$9.64	\$7.11	40.18%	\$3	\$13
2023	\$1.99	\$24	40.18%	\$9.64	\$7.18	40,18%	\$3	\$13
2024	\$2.01	\$24	40,18%	\$9.64	\$7.26	40.18%	\$3	\$13
2025	\$2.03	\$24	40.18%	\$9.64	\$7.33	40.18%	\$3	\$13
2026	\$2.05	\$25	40.18%	\$10.05	\$7.40	40.18%	\$3	\$13
2027	\$2.07	\$25	40.18%	\$10.05	\$7,48	40.18%	\$3	\$13
2028	\$2.09	\$25	40.18%	\$10,05	\$7.55	40.18%	\$3	\$13

Gas Costs							
1	2	3	2.3				
	Therms	Per Therm	Gas Supply				
Year		Supply Cost	Cost				
2009	178	\$0.8360	\$149				
2010	178	\$0.8444	\$150				
2011	178	\$0.6528	\$152				
2012	178	\$0.8613	\$153				
2013	178	\$0.8899	\$155				
2014	178	\$0.8786	\$156				
2015	178	\$0.8874	\$158				
2016	178	\$0.8983	\$160				
2017	178	\$0,9053	5161				
2018	178	\$0,9143	\$163				
2019	178	\$0 9235	\$164				
2020	178	\$0.9327	5166				
2021	178	\$0.9420	\$168				
2022	178	\$0 9514	5169				
2023	178	\$0.9610	\$171				
2024	178	\$0.9708	\$173				
2025	178	\$0.9803	5174				
2026	178	\$0.9901	\$176				
2027	178	\$1,0000	\$176				
2028	178	\$1,0100	\$180				

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Clothes Drying

	Incremental	Incremental	incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge C		Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$20	\$42	\$12	\$74	\$42	\$11	\$3	\$100,85	\$156
2010	\$20	\$42	\$12	\$74	\$42	\$10	\$3	\$0.85	\$56
2011	\$20	\$4 3	\$12	\$74	\$43	\$10	\$3	\$0.85	\$57
2012	\$20	\$43	\$12	\$75	\$43	\$10	\$ 3	\$0.85	\$57
2013	\$20	\$43	\$12	\$75	\$43	\$ 9	\$ 3	\$0.85	\$57
2014	\$20	\$44	\$12	\$76	\$44	\$9	\$3	\$0.85	\$57
2015	\$20	\$44	\$12	\$ 76	\$44	\$ 9	\$3	\$0.85	\$57
2016	\$20	\$4 5	\$12	\$77	\$45	\$8	\$3	\$0.85	\$57
2017	\$20	\$45	\$12	\$77	\$45	\$8	\$3	\$0.85	\$57
2018	\$20	\$46	\$12	\$77	\$46	\$8	\$3	\$0.85	\$58
2019	\$20	\$46	\$12	\$78	\$4 6	\$8	\$ 3	\$0.85	\$58
2020	\$20	\$47	\$12	\$78	\$47	\$ 7	\$3	\$0.85	\$58
2021	\$20	\$47	\$12	\$79	\$47	\$ 7	\$3	\$100.85	\$158
2022	\$20	\$48	\$12	\$79	\$48	\$7	\$4	\$0.85	\$59
2023	\$20	\$48	\$12	\$80	\$48	\$ 7	\$4	\$0.85	\$59
2024	\$20	\$4 9	\$12	\$80	\$49	\$ 6	\$4	\$0.85	\$59
2025	\$20	\$49	\$12	\$81	\$49	\$6	\$4	\$0.85	\$60
2026	\$20	\$50	\$12	\$81	\$50	\$6	\$4	\$0.85	\$60
2027	\$20	\$50	\$12	\$82	\$50	\$6	\$4	\$0.85	\$60
2028	\$20	\$50	\$ 12	\$82	\$50	\$6	\$4	\$0.85	\$61

Present Value of Benefits \$753

Present Value of Costs \$694

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type
 Clothes Drying

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Dayetopment Mein	3.30%
Gas Customer Charge Escalator	0%	Depraciation Rate - Service Line	3.30%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Mater	3.80%

R	Revenue - Energy Charge						
1	2	3	2'3				
Year	Therms	Base Rate	Total Charge				
2009	50	\$0.3917	\$20				
2010	50	\$0.3917	\$20				
2011	50	\$0.3917	\$20				
2012	50	\$0.3917	\$20				
2013	50	\$0.3917	\$20				
2014	50	\$0.3917	\$20				
2015	50	\$0.3917	\$20				
2016	50	\$0,3917	\$20				
2017	50	\$0.3917	\$20				
2018	50	\$0.3917	\$20				
2018	50	\$0.3917	\$20				
2020	50	\$0.3917	\$20				
2021	50	\$0.3917	\$20				
2022	50	\$0.3917	\$20				
2023	50	\$0,3917	\$28				
2024	50	\$0.3917	\$20				
2025	50	\$0.3917	\$20				
2026	50	\$0.3917	\$20				
2027	50	\$0.3917	\$20				
2028	50	\$0.3917	\$20				

Revenue - Cost of Gas									
	2	4	2*3						
Year	Therms	Fuel Rate	Total Charge						
2009	50	\$0.8360	\$42						
2018	50	\$0.8444	\$42						
2011	50	\$0.6526	\$43						
2012	50	\$0,8613	\$43						
2013	50	\$0.8699	\$43						
2014	50	\$0.6786	\$44						
2015	50	\$0.8874	\$44						
2016	50	\$0.0963	\$45						
2017	50	\$0,0053	\$45						
2018	50	\$0.9143	\$46						
2019	50	\$0.9235	\$46						
2020	50	\$0.9327	\$47						
2021	50	\$0.9420	\$47						
2022	50	\$0.9514	\$48						
2023	50	\$0,9610	\$48						
2024	50	\$0.9706	\$49						
2025	50	\$0.9803	349						
2026	50	\$0,9901	\$50						
2027	50	\$1,0000	\$50						
2028	50	\$1,0100	\$56						

	Revenue - Customer Charge										
	2	3	4	4*3							
	Monthly		Ratio Therms								
	Customer	Annual Customer	To Total	Prorated Annual							
Year	Charge	Charge	Consumed	Customer Charge							
2009	\$9.00	\$108.00	11.29%	\$12							
2010	\$9.00	\$108,00	11.29%	\$12							
2011	\$9.00	\$109.00	11.29%	\$12							
2012	\$9.00	\$108.00	11.29%	\$12							
2013	\$9,00	\$108.00	11.29%	\$12							
2014	\$9.00	\$108.00	11.29%	\$12							
2015	\$9.00	\$108.00	11.29%	\$12							
2016	\$9.00	\$108.00	11.29%	\$12							
2017	\$9.00	\$108.00	11.29%	\$12							
2018	\$9.00	\$108.00	11.20%	\$12							
2019	\$9.00	\$108.00	11.29%	\$12							
2020	\$9.00	\$108.00	11.29%	\$12							
2021	\$9.00	\$108.00	11.29%	\$12							
2022	\$9.00	\$108.00	11.29%	\$12							
2023	\$9.00	\$106,00	11.29%	\$12							
2024	\$9.00	\$108.00	11.29%	\$12							
2025	\$9.00	\$108.00	11.29%	\$12							
2026	\$9.00	\$108.00	11.29%	\$12							
2027	\$9.00	\$108.00	11.29%	\$12							
2028	\$9.00	\$108.00	11.29%	\$12							

			Inve	stment Ca	rrying Costs			_
1	2	3	4	5	В	7	- 8	6*7*8
	Supply	insmqoleved.	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$280	\$163	\$1,023	9.25%	11.29%	\$11
2010	\$97	\$484	\$251	\$157	9992	9.25%	11.29%	\$40
2011	\$94	\$466	\$243	\$151	\$656	9.25%	11.29%	\$10
2012	\$91	\$453	\$235	\$145	\$924	9.25%	11.29%	\$10
2013	\$86	\$438	\$227	\$139	\$892	9.25%	11.29%	\$9
2014	\$65	\$424	\$220	\$134	\$963	9.25%	11.29%	\$9
2015	\$82	\$410	\$213	\$129	\$834	9.25%	11.29%	\$9
2016	\$79	\$396	\$206	\$124	\$805	9.25%	11,29%	\$6
2017	\$76	\$383	\$199	\$119	\$777	9.25%	11.29%	\$8
2018	\$73	\$370	\$192	\$114	\$749	9.25%	11.29%	\$8
2019	\$71	\$356	\$186	\$110	\$725	9.25%	11.29%	\$8
2020	\$69	\$346	\$180	\$100	\$701	9.25%	11.29%	\$7
2021	\$67	\$335	\$174	\$102	\$676	9.25%	11,29%	\$7
2022	\$65	\$324	\$188	\$98	\$655	9.25%	11.29%	\$7
2023	\$63	\$313	\$162	\$94	\$632	9.25%	11.29%	\$7
2024	\$61	\$303	\$157	\$90	\$611	9.25%	11.29%	\$6
2025	\$59	\$293	\$152	\$67	\$591	9.25%	11.29%	\$6
2026	\$57	\$283	\$147	\$84	\$571	9.25%	11.29%	\$6
2027	\$55	\$274	\$142	\$81	\$552	9.25%	11.29%	26
2028	\$63	\$265	\$137	\$76	\$633	9.25%	11.29%	\$6

			Incre	amental Custi	omer Costs			
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
5006	\$1.73	\$21	11.20%	\$2.37	\$6.25	11.29%	\$1	\$3
2010	\$1.75	\$21	11.29%	\$2.37	\$6.31	11.29%	31	\$3
2011	\$1.76	\$21	11,29%	\$2.37	\$6.38	11.29%	\$1	\$3
2012	\$1.78	\$21	11.29%	\$2.37	\$8.44	11.29%	S1	\$3
2013	\$1.80	\$22	11.29%	\$2.48	\$6,50	11.29%	51	\$3
2014	\$1.62	\$22	11,29%	\$2.48	\$6,57	11.29%	\$1	\$3
2015	\$1.84	\$22	11.29%	\$2.46	\$6.63	11.29%	\$1	\$3
2016	\$1,85	\$22	11.29%	\$2.48	\$6,70	11.29%	\$1	\$3
2017	\$1.87	\$22	11.29%	\$2.48	\$8.77	11.29%	\$1	\$3
2018	\$1.89	\$23	11.29%	\$2.60	\$8.84	11.29%	\$1	23
2019	\$1.91	\$23	11.29%	\$2.60	\$6,90	11.29%	31	\$3
2020	\$1.93	\$23	11.29%	\$2,60	\$6.97	11.29%	\$1	\$3
2021	\$1.95	\$23	11,28%	\$2.60	\$7.04	11.29%	\$1	\$3
2022	\$1.97	\$24	11.29%	\$2.71	\$7.11	11.29%	\$1	54
2023	\$1.99	\$24	11 29%	\$2.71	\$7.18	11.29%	\$1	\$4
2024	\$2.01	\$24	11,29%	\$2.71	\$7,26	11.29%	\$1	\$4
2025	\$2.03	\$24	11.29%	\$2.71	\$7.33	11.29%	\$1	54
2028	\$2.05	\$25	11.29%	\$2.82	\$7.40	11.28%	\$1	\$4
2027	\$2.07	\$25	11.29%	\$2.82	\$7.48	11.29%	\$1	54
2028	\$2.09	\$25	11,29%	\$2.82	\$7.55	11.29%	\$1	\$4

	Gas Costs									
1	2	3	5.3							
	Therms	Per Tharm	Gas Supply							
Year		Supply Cost	Cost							
2009	50	0.9360	\$42							
2010	50	\$0.8444	\$42							
2011	50	\$0.8528	\$43							
2012	50	\$0.8813	\$43							
2013	50	\$0,6699	543							
2014	50	\$0.8788	\$44							
2015	50	\$0.8874	\$44							
2016	50	\$0.8993	\$45							
2017	50	\$0.9053	\$45							
2016	50	\$0.9143	548							
2019	50	\$0.9235	546							
2020	50	\$0.9327	\$47							
2021	50	50.9420	547							
2022	50	\$0.9514	548							
2023	50	\$0.9810	\$48							
2024	50	\$0.9706	\$49							
2025	50	\$0.9803	549							
2026	50	\$0.9901	\$50							
2027	50	\$1.0000	\$50							
2028	50	\$1.0100	\$50							

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Cooking

	Incremental	Incremental	Incremental	Total	Gas	Investment	incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$18	\$38	\$11	\$66	\$38	\$10	\$3	\$100.77	\$151
2010	\$18	\$38	\$11	\$67	\$38	\$9	\$3	\$0.77	\$51
2011	\$18	\$38	\$11	\$67	\$38	\$9	\$3	\$0.77	\$51
2012	\$18	\$39	\$11	\$67	\$39	\$9	\$ 3	\$0.77	\$51
2013	\$18	\$39	\$11	\$68	\$39	\$8	\$3	\$0.77	\$51
2014	\$18	\$40	\$11	\$68	\$40	\$8	\$ 3	\$0.77	\$51
2015	\$18	\$40	\$11	\$69	\$40	\$8	\$3	\$0.77	\$51
2016	\$18	\$40	\$11	\$69	\$40	\$8	\$ 3	\$0.77	\$52
2017	\$18	\$41	\$11	\$69	\$41	\$7	\$3	\$0.77	\$52
2018	\$18	\$41	\$11	\$70	\$41	\$7	\$3	\$0.77	\$52
2019	\$ 18	\$42	\$11	\$70	\$42	\$ 7	\$3	\$0.77	\$52
2020	\$18	\$42	\$11	\$71	\$42	\$7	\$3	\$0.77	\$52
2021	\$18	\$42	\$11	\$71	\$42	\$6	\$3	\$0.77	\$53
2022	\$18	\$43	\$11	\$71	\$43	\$6	\$3	\$0.77	\$53
2023	\$18	\$43	\$11	\$72	\$43	\$ 6	\$3	\$100.77	\$153
2024	\$18	\$44	\$11	\$72	\$44	\$6	\$3	\$0.77	\$53
2025	\$18	\$44	\$11	\$73	\$44	\$6	\$3	\$0.77	\$54
2026	\$18	\$45	\$11	\$73	\$45	\$ 5	\$3	\$0.77	\$54
2027	\$18	\$45	\$11	\$74	\$45	\$ 5	\$3	\$0.77	\$54
2028	\$18	\$45	\$11	\$74	\$45	\$5	\$3	\$0.77	\$55

Present Value of Benefits \$678

Present Value of Costs \$633

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Typ	90
Cooking	

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main 3.3	30%
Base Rate Escalator	0%	Depreciation Rate - Development Main 3.3	30%
Gas Customer Cherge Escalator	0%	Depraciation Rate - Service Line 3.3	30%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter 3.8	30%

		Energy Cha	
1	2	3	2*3
Year	Therms	Base Rate	Total Charge
2009	45	\$0.3017	\$18
2010	45	\$0.3917	\$18
2011	45	\$0.3917	\$18
2012	45	\$0,3917	\$18
2013	45	\$0,3917	\$18
2014	45	\$0.3917	\$18
2015	45	\$0,3917	\$18
2016	45	\$0.3917	518
2017	45	\$0.3917	\$18
201B	45	\$0.3917	\$18
2019	45	\$0.3917	\$18
2020	45	\$0.3917	\$18
2021	45	\$0.3917	\$18
2022	45	\$0.3917	\$18
2023	45	\$0.3917	\$18
2024	45	\$0,3917	\$18
2025	45	\$0.3917	\$18
2026	45	\$0.3917	\$18^
2027	45	\$0.3917	\$18
2028	45	\$0.3917	518

Revenue - Cost of Gas										
1	1 2		2*3							
Yesr	Therms	Fuei Rate	Total Charge							
2009	45	\$0.8360	\$38							
2010	45	\$0.8444	\$38							
2011	45	\$0.8528	\$38							
2012	45	\$0.8613	\$39							
2013	45	\$0.8699	\$39							
2014	45	\$0.8788	\$40							
2015	45	\$0.8874	\$40							
2016	45	\$0.8963	\$40							
2017	45	\$0.9053	\$41							
2018	45	\$0.9143	\$41							
2019	45	\$0.9235	\$42							
2020	45	\$0.9327	\$42							
2021	45	\$0.9420	\$42							
2022	45	\$0.9514	\$43							
2023	45	\$0.9610	\$43							
2024	45	\$0.9706	\$44							
2025	45	\$0.9803	\$44							
2026	45	\$0.9901	\$45							
2027	45	\$1,0000	\$45							
2028	45	\$1.0100	\$45							

	Revenue - Customer Charge									
1	2	3	4	4*3						
	Monthly		Ratio Therms							
	Customer	Annual Customer	To Total	Prorated Annual						
Year	Charge	Charge	Consumed	Customer Charge						
2009	\$9.00	\$108.00	10.16%	\$11						
2010	\$9.00	\$198.00	10.16%	\$11						
2011	\$9.00	\$108.00	10.18%	\$11						
2012	\$9.00	\$108.00	10.18%	511						
2013	\$9.00	\$108.00	10.16%	\$11						
2014	\$9.00	\$108.00	10.18%	\$11						
2015	\$9.00	\$108.00	10.16%	\$11						
2016	\$9.00	\$108.00	10 18%	\$11						
2017	\$9.00	\$108.00	10.16%	\$11						
2018	\$9.00	\$108.00	10.16%	\$11						
2019	\$9.00	\$108.00	10,16%	\$11						
2020	\$9.00	\$108.00	10.16%	\$11						
2021	\$9.00	\$108.00	10.16%	\$11						
2022	\$9.00	\$108.00	10.16%	\$11						
2023	\$9,00	\$108.00	10.16%	\$11						
2024	\$9.00	\$108.00	10.16%	\$11						
2025	\$9.00	\$106,00	10 16%	\$11						
2026	\$9.00	\$108.00	10 16%	\$11						
2027	\$9.00	\$108.00	10.16%	\$11						
2028	\$9.00	\$106.00	10.16%	511						

			Inve	stment Ca	rrying Costs			
1	2	3	4	5	8	7	8	6*7*8
	Supply	Development	Service		Total	Cost	Retio of Therms	investment
Year _	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$260	\$163	\$1,023	9.25%	10.16%	\$10
2010	\$97	\$484	\$251	\$157	\$989	9.25%	10 18%	\$9
2011	\$94	\$466	\$243	\$151	\$956	9.25%	10.18%	\$9
2012	591	\$453	\$235	\$145	\$924	9.25%	10.18%	\$9
2013	\$88	\$438	\$227	\$139	\$892	9.25%	10 16%	\$8
2014	\$85	\$424	\$220	\$134	\$863	9.25%	10.16%	\$8
2015	\$82	\$410	\$213	\$129	\$834	9.25%	10,18%	\$8
2016	\$79	\$396	\$206	\$124	\$805	9.25%	10.18%	\$8
2017	\$76	\$383	\$199	\$179	\$777	9.25%	10 18%	57
2016	\$73	\$370	\$192	\$114	\$749	9.25%	10.16%	\$7
2019	\$71	\$358	\$166	\$110	\$725	9.25%	10.18%	\$7
2020	\$69	\$346	\$180	\$106	\$701	9.25%	10.16%	\$7
2021	\$67	\$335	\$174	\$102	\$676	9.25%	10.16%	\$8
2022	\$65	\$324	\$168	\$98	\$655	9.25%	10.16%	\$6
2023	\$63	\$313	\$162	\$94	\$832	9.25%	10.16%	\$6
2024	\$61	\$303	\$157	\$90	\$811	0.25%	10.18%	\$6
2025	\$59	\$293	\$152	\$87	\$591	9.25%	10.16%	56
2028	\$57	\$283	\$147	\$84	\$571	0.25%	10.16%	\$5
2027	\$55	\$274	\$142	\$81	\$552	0.25%	10.18%	\$5
2028	862	*205	0127	\$78	\$622	0.25%	10 16%	84

			Incre	mental Custo	omer Costs	i		
1	2	3	4	5=3"4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incremental
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.73	\$21	10.16%	\$2.13	\$6.25	10.18%	\$1	\$3
2010	\$1.75	\$21	10.18%	\$2.13	\$6.31	10.18%	\$1	\$3
2011	\$1,76	\$21	10.18%	\$2.13	\$6.38	10.18%	81	\$3
2012	\$1.76	\$21	10.18%	\$2.13	\$6.44	10,16%	\$1	\$3
2013	\$1.80	\$22	10.18%	\$2.23	\$8.50	10.18%	\$1	\$3
2014	\$1.82	\$22	10.18%	\$2.23	\$6.57	10.16%	\$1	\$3
2015	\$1.84	\$22	10.18%	\$2.23	\$8.63	10.18%	\$1	\$3
2016	\$1.65	\$22	10.16%	\$2.23	\$6.70	10.18%	\$1	\$3
2017	\$1.87	\$22	10.18%	\$2.23	\$6.77	10.16%	\$1	\$3
2018	\$1,89	\$23	10.16%	\$2.34	\$6.84	10 18%	\$1	\$3
2019	\$1.91	\$23	10.16%	\$2.34	\$6.90	10 18%	S 1	\$3
2020	\$1.93	\$23	10.18%	\$2.34	\$8,97	10.18%	\$1	\$3
2021	\$1.95	\$23	10,16%	\$2.34	\$7.04	10.18%	\$1	\$3
2022	\$1.97	\$24	10.16%	\$2.44	\$7.11	10,18%	\$1	\$3
2023	\$1.90	\$24	10.16%	\$2.44	\$7,18	10.16%	\$1	\$3
2024	\$2.01	\$24	10.16%	\$2.44	\$7.26	10,18%	\$1	\$3
2025	\$2.03	\$24	10.18%	\$2.44	\$7.33	10.18%	\$1	\$3
2026	\$2.05	\$25	10.16%	\$2.54	\$7.40	10.16%	\$1	\$3
2027	\$2.07	\$25	10.16%	\$2,54	\$7.48	10,16%	\$1	\$3
2026	\$2.09	\$25	10.16%	\$2.54	\$7.55	10.16%	S 1	53

	Gas	Costs	
1	2	3	2.3
	Thems	Commodity Gas	Gas Supply
Year		Supply Cost	Cost
2009	45	0.8360	\$38
2010	45	\$0.8444	\$38
2011	45	\$0.8528	\$38
2012	45	\$0.8813	\$39
2013	45	\$0.8699	\$39
2014	45	\$0.8786	\$40
2015	45	\$0 8874	\$40
2018	45	\$0.8963	\$40
2017	45	\$0.9053	\$41
2018	45	\$0.9143	\$41
2019	45	\$0.9235	\$42
2020	45	\$0.6327	\$42
2021	45	\$0.9420	\$42
2022	45	\$0.9514	\$43
2023	45	\$0,9810	\$43
2024	45	\$0.9706	\$44
2025	45	\$0.9803	\$44
2026	45	\$0.9901	\$45
2027	45	\$1 0000	\$45
2028	45	\$1,0100	\$45

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Storage Tank Water Heating

			Benefit	5					(Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$508	\$350	\$60	\$918	0	\$0	0	\$100	\$60	\$156	\$73	\$46	\$435
2010	2	\$509	0	\$ 61	\$570	. 0	\$0	0		\$61	\$158	\$73	\$46	\$337
2011	3	\$511	0	\$6 1	\$572	0	\$0	0		\$ 61	\$159	\$73	\$46	\$340
2012	4	\$512	0	\$62	\$574	0	\$0	0		\$62	\$161	\$73	\$46	\$342
2013	5	\$514	0	\$62	\$578	0	\$0	0		\$62	\$163	\$ 73	\$48	\$344
2014	6	\$515	0	\$63	\$578	0	\$0	0		\$63	\$164	\$73	\$46	\$346
2015	7	\$517	0	\$64	\$580	0	\$0	0		\$64	\$166	\$73	\$46	\$348
2016	8	\$518	0	\$64	\$582	0	\$0	0		\$64	\$168	\$73	\$46	\$351
2017	9	\$519	0	\$65	\$584	0	\$0	0		\$65	\$169	\$73	\$46	\$353
2018	10	\$521	350	\$66	\$937	421	(\$659)	239		\$66	\$171	\$7 3	\$46	\$355
2019	11	\$522	0	\$66	\$589	0	\$0	0		\$66	\$173	\$73	\$46	\$358
2020	12	\$524	0	\$67	\$591	0	\$0	0		\$67	\$174	\$73	\$46	\$360
2021	13	\$525	0	\$68	\$593	0	\$0	0		\$68	\$176	\$73	\$46	\$363
2022	14	\$527	0	\$68	\$595	0	\$0	0		\$68	\$178	\$73	\$46	\$365
2023	15	\$528	0	\$69	\$597	0	\$0	0		\$69	\$180	\$73	\$46	\$368
2024	16	\$530	0	\$70	\$599	0	\$0	0		\$70	\$161	\$73	\$46	\$370
2025	17	\$531	0	\$70	\$601	0	\$0	0		\$70	\$183	\$73	\$46	\$373
2026	18	\$533	0	\$7 1	\$604	0	\$0	0		\$71	\$185	\$ 73	\$46	\$375
2027	19	\$534	0	\$72	\$606	0	\$0	0		\$72	\$187	\$ 73	\$46	\$378
2028	20	\$535	0	\$72	\$608	0	\$0	0		\$72	\$169	\$73	\$46	\$380

Present Value of Benefits \$6,206 Present Value of Costs \$3,541

Benefit/Cost 1.75
Ratio

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Storage Tank Water Heating

Escalation Rates		LP Del/Mergin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tab	le 1			Natural Gas Su	ply Cost -	- Table 2			Natural Gas	Energy Ch	arge - Tab	ole 3				Natural Gas C	Customer C	harge - Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rati	e NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α	В	_с	D	8°C*(1+D)	_ A_	В	С_	D	B*C*(1+D)	A	В	С		B*C*(1+D)	A	В	С	Đ	Ε	D/E	G	C*(D/E)*(1+Z)
2009	\$2,5460	186	7.5%	\$508	2009	\$0.8360	170	10%	\$158	2009	\$0.3917	170	10%	\$73	2009	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2010	\$2,5533	186	7.5%	\$508	2010	\$0.8444	170	10%	\$158	2010	\$0.3917	170	10%	\$73	2010	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2011	\$2.5605	186	7.5%	\$511	2011	\$0.8528	170	10%	\$159	2011	\$0.3917	170	10%	\$73	2011	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2012	\$2,5676	186	7.5%	\$512	2012	\$0,8613	170	10%	\$181	2012	\$0.3917	170	10%	\$73	2012	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2013	\$2.5750	186	7.5%	\$814	2013	\$0.8599	170	10%	\$163	2013	\$0.3917	170	10%	\$73	2013	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2014	\$2.5823	186	7.5%	\$518	2014	\$0.8786	170	10%	\$164	2014	\$0,3917	170	10%	\$73	2014	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2015	\$2.5896	186	7.5%	\$817	2015	\$0.8874	170	10%	\$166	2015	\$0.3917	170	10%	\$73	2015	\$9.00	\$108.00	170	443	38.37%	10%	\$40
2018	\$2.5968	186	7.5%	\$518	2016	\$0.8963	170	10%	\$ 168	2018	\$0.3917	170	10%	\$73	2018	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2017	\$2.6041	186	7.5%	\$519	2017	\$0.9053	170	10%	\$169	2017	\$0,3917	170	10%	\$73	2017	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2018	\$2.6113	186	7.5%	\$521	2016	\$0.9143	170	10%	\$171	2018	\$0.3917	170	10%	\$73	2018	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2019	\$2,6186	186	7.5%	\$522	2019	\$0.9235	170	10%	\$173	2019	\$0.3917	170	10%	\$73	2019	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2020	\$2.6259	186	7.5%	\$824	2028	\$0.9327	170	10%	\$174	2020	\$0.3917	170	10%	\$73	2020	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2021	\$2.5331	186	7.5%	\$825	2021	\$0.9420	170	10%	\$176	2021	\$0.3917	170	10%	\$73	2021	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2022	\$2.6494	186	7.5%	\$527	2022	\$0.9514	170	10%	\$178	2022	\$0.3917	170	10%	\$73	2022	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2023	\$2.8476	186	7.5%	\$528	2023	\$0.9610	170	10%	\$180	2023	\$0.3917	170	10%	\$73	2023	\$9.00	\$108.00	170	443	38,37%	10%	\$46
2024	\$2.6549	186	7.5%	\$630	2024	\$0.9706	170	10%	\$181	2024	\$0.3917	170	10%	\$73	2024	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2025	\$2.6622	186	7.5%	\$531	2025	\$0.9803	170	10%	\$183	2025	\$0.3917	170	10%	\$73	2025	\$9.00	\$198.00	170	443	38.37%	10%	\$46
2026	\$2.6694	186	7.5%	\$633	2026	\$0.9901	170	10%	\$188	2026	\$0.3917	170	10%	\$73	2026	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2027	\$2.6767	186	7.5%	\$634	2027	\$1.0000	170	10%	\$187	2027	\$0,3917	170	10%	\$73	2027	\$9.00	\$108.00	170	443	38.37%	10%	\$46
2028	\$2.6839	186	7.5%	\$535	2028	\$1.0100	170	10%	\$159	2026	\$0.3917	170	10%	\$73	2028	\$9.00	\$108.00	170	443	38.37%	10%	\$46

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Tankless Water Heating

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$448	\$450	\$60	\$958	\$0	\$0	\$0	\$100	\$60	\$138	\$65	\$42	\$405
2010	2	\$449	0	\$ 61	\$510	0	\$0	0		\$61	\$139	\$65	\$42	\$307
2011	3	\$451	0	\$61	\$512	0	\$0	0		\$61	\$141	\$65	\$42	\$309
2012	4	\$452	0	\$62	\$514	0	\$0	0		\$62	\$142	\$65	\$42	\$311
2013	5	\$453	0	\$62	\$516	0	\$0	0		\$62	\$144	\$65	\$42	\$313
2014	6	\$455	0	\$63	\$518	0	\$0	0		\$63	\$145	\$65	\$42	\$315
2015	7	\$456	0	\$64	\$520	0	\$0	0		\$64	\$146	\$65	\$42	\$317
2016	8	\$457	0	\$64	\$521	0	\$0	0		\$64	\$148	\$ 65	\$42	\$319
2017	9	\$458	0	\$6 5	\$523	0	\$0	0		\$65	\$149	\$ 65	\$42	\$321
2018	10	\$460	0	\$66	\$525	0	\$0	0		\$66	\$151	\$ 65	\$42	\$323
2019	11	\$461	0	\$66	\$527	0	\$0	0		\$66	\$152	\$65	\$42	\$325
2020	12	\$462	0	\$67	\$52 9	0	\$0	0		\$67	\$154	\$6 5	\$42	\$328
2021	13	\$463	0	\$68	\$531	0	\$0	0		\$68	\$155	\$65	\$42	\$330
2022	14	\$465	0	\$68	\$533	0	\$0	0		\$68	\$157	\$65	\$42	\$332
2023	15	\$466	0	\$69	\$535	0	\$0	0		\$69	\$159	\$65	\$42	\$334
2024	16	\$467	0	\$70	\$537	0	\$0	0		\$70	\$160	\$65	\$42	\$337
2025	17	\$469	0	\$70	\$539	0	\$0	0		\$70	\$162	\$65	\$42	\$339
2026	18	\$470	0	\$71	\$541	0	\$0	0		\$71	\$163	\$65	\$42	\$341
2027	19	\$471	0	\$72	\$543	0	\$0	0		\$72	\$16 5	\$65	\$42	\$344
2028	20	\$472	450	\$72	\$995	1,219	(\$1,746)	527		\$72	\$167	\$65	\$42	\$346

Present Value of Benefits \$5,634

Present Value of Costs \$3,228

Benefit/Cost 1.75
Ratio

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Particlpants Test - Data

Appliance Type Tankless Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Propi	ane Cost - Ta	ble 1			N	istuari Ga	s Supply Co	st - Table 2			Natural G	ias Energy Cl	arge - Tab	le 3			Nati	ural Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gailon	Annual Gallons	Tax Raio	Propene Cost			Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Yes	r Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Ye	Monthly ar Custome Charge	Annual r Customer Charge	Appliance Annual Therms	Total Annuel Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
	В	С	D	B*C*(1+D)		Α	В	С	Ð	B*C*(1+D)	A	В	С	D	B*C*(1+D)		8	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	164	7.5%	\$448	-	2009 \$	\$0.8360	150	10%	\$138	200	9 \$0.3917	150	10%	\$85	20	9 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2010	\$2.5533	164	7.5%	\$449		2010 S	50.8444	150	10%	\$139	201	0 \$0.3917	150	10%	\$65	20	0 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2011	\$2,5605	164	7.5%	\$451		2011 \$	0.8528	150	10%	\$141	201	1 \$0.3917	150	10%	\$85	20	\$9.00	\$108.00	150	423	35.48%	10%	\$42
2012	\$2.5678	164	7.5%	\$452		2012 \$	\$0,8613	150	10%	\$142	201	2 \$0.3917	150	10%	\$85	20	2 \$9.00	\$108.90	150	423	35.46%	10%	\$42
2013	\$2.5750	164	7.5%	\$463		2013 \$	0.8699	150	10%	\$144	201	3 \$0.3917	150	10%	\$65	20	3 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2014	\$2.5823	164	7.5%	\$455		2014 3	80.8786	150	10%	\$148	201	4 \$0.3917	150	10%	\$65	20	4 \$9.00	\$108.00	150	423	35,46%	10%	\$42
2015	\$2,5896	164	7.5%	\$456		2015 \$	\$0.8874	150	10%	\$146	201	5 \$0.3917	150	10%	\$65	20	5 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2016	\$2,5968	164	7.5%	\$457		2016 \$	\$0.8963	150	10%	\$148	201	8 \$0.3917	150	10%	\$65	20	8 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2017	\$2,8041	164	7.5%	\$458		2017 \$	\$0.9053	150	10%	\$149	201	7 \$0,3917	150	10%	\$45	20	7 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2018	\$2.6113	164	7.5%	\$460		2018 \$	0.9143	150	10%	\$151	201	8 \$0.3917	150	10%	\$65	20	8 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2019	\$2.6186	164	7.5%	\$481		2019 \$	\$0.9235	150	10%	\$152	201	9 \$0.3917	150	10%	\$85	20	9 \$9.00	\$108.00	150	423	35,46%	10%	\$42
2020	\$2.6259	164	7.5%	\$462		2020 \$	0.9327	150	10%	\$154	202	0 \$0.3917	150	10%	\$65	20	9.00	\$108.00	150	423	35.46%	10%	\$42
2021	\$2.8331	164	7.5%	\$463		2021 \$	0.9420	150	10%	\$185	202	1 \$0.3917	150	10%	\$65	20	\$9.00	\$106.00	150	423	35.46%	10%	\$42
2022	\$2.6404	164	7.5%	\$465	-	2022 \$	0.9514	150	10%	\$187	202	2 \$0,3917	150	10%	\$65	20	2 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2023	\$2.6476	164	7.5%	\$466		2023 \$	0.9610	150	10%	\$159	202	3 \$6.3917	150	10%	\$85	20	3 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2024	\$2,6549	164	7.5%	\$497		2024 \$	90.9706	150	10%	\$160	202	4 \$0.3917	150	10%	\$65	20	\$9.00	\$108.00	150	423	35,46%	10%	\$42
2025	\$2.6622	164	7.5%	\$469		2025 \$	\$0.9803	150	10%	\$162	202	5 \$0.3917	150	10%	\$65	20	25 \$9.00	\$108.00	150	423	35,46%	10%	\$42
2026	\$2,6694	164	7.5%	\$470		2026 \$	\$0.9901	150	10%	\$163	202	6 \$0.3917	150	10%	\$65	20	26 \$9.00	\$108.00	150	423	35.46%	10%	\$42
2027	\$2.8767	164	7.5%	\$471		2027	\$1,0000	150	10%	\$165	202	7 \$0.3917	150	10%	\$65	20	7 \$9.00	\$198.00	150	423	35.46%	10%	\$42
2028	\$2.6839	164	7.5%	\$472	L	2028 \$	\$1.0100	150	10%	\$167	202	8 \$0.3917	150	10%	\$65	20	8 \$9.00	\$108.00	150	423	35.46%	10%	\$42

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Heating System

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$532	\$350	\$270	\$1,152	\$0	0	\$0	\$100	\$270	\$164	\$77	\$ 48	\$658
2010	2	\$533	0	\$273	\$806	0	0	0		\$273	\$165	\$77	\$48	\$562
2011	3	\$535	0	\$275	\$810	0	0	0		\$275	\$167	\$77	\$4 8	\$567
2012	4	\$536	0	\$278	\$815	0	0	0		\$278	\$169	\$77	\$48	\$571
2013	5	\$538	0	\$281	\$819	0	0	0		\$281	\$170	\$7 7	\$48	\$576
2014	6	\$ 539	0	\$284	\$823	0	0	0		\$284	\$172	\$77	\$48	\$580
2015	7	\$541	0	\$287	\$826	0	0	0		\$287	\$174	\$77	\$48	\$585
2016	8	\$542	0	\$289	\$832	0	0	0		\$289	\$175	\$77	\$48	\$589
2017	9	\$544	0	\$292	\$836	0	0	0		\$292	\$177	\$77	\$48	\$594
2018	10	\$545	0	\$295	\$841	0	0	0		\$295	\$179	\$77	\$48	\$599
2019	11	\$547	0	\$298	\$845	0	0	0		\$298	\$181	\$77	\$48	\$603
2020	12	\$548	0	\$301	\$850	0	0	0		\$301	\$183	\$77	\$48	\$608
2021	13	\$550	0	\$304	\$854	0	0	0		\$304	\$184	\$77	\$48	\$613
2022	14	\$552	0	\$307	\$859	. 0	0	0		\$307	\$186	\$77	\$48	\$618
2023	15	\$553	0	\$310	\$863	0	0	0		\$310	\$188	\$77	\$48	\$623
2024	16	\$555	0	\$313	\$868	0	0	0		\$313	\$190	\$77	\$48	\$628
2025	17	\$556	0	\$317	\$873	0	0	0		\$317	\$192	\$77	\$48	\$633
2026	18	\$558	350	\$320	\$1,227	2,882	(4,657)	1,775		\$320	\$194	\$77	\$48	\$638
2027	19	\$ 559	0	\$323	\$882	0	0	0		\$323	\$19 6	\$77	\$48	\$643
2028	20	\$561	0	\$326	\$887	0	0	0		\$326	\$198	\$77	\$48	\$648

Present Value \$8,585
of Benefits of Costs

Benefit/Cost 1.46
Ratio

\$5,888

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Heating System

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tabi	le 1	
Year	Cost Per Gallon	Annual Gallons	Tax Rele	Propane Cost
Α	В	С	D	B*C*(1+D
2009	\$2,5460	194	7.5%	\$532
2010	\$2.5533	194	7.5%	\$533
2011	\$2.5605	194	7.5%	\$538
2012	\$2.5678	194	7.5%	\$536
2013	\$2.5750	194	7.5%	\$538
2014	\$2.5823	194	7.5%	\$538
2015	\$2,5896	194	7.5%	\$541
2016	\$2,5968	194	7.5%	\$642
2017	\$2.6041	194	7.5%	\$544
2018	\$2.6113	194	7.5%	\$548
2019	\$2.6188	194	7.5%	\$647
2020	\$2.6259	184	7.5%	\$848
2021	\$2.6331	194	7.5%	\$550
2022	\$2.6404	194	7.5%	\$852
2023	\$2.6476	194	7.5%	\$853
2024	\$2.6549	194	7.5%	\$555
2025	\$2.6622	194	7.5%	\$556
2026	\$2.8694	194	7.5%	\$555
2027	\$2.6767	194	7.5%	\$559
2028	\$2,6839	194	7.5%	\$561

		Natural Ga	s Supply Co	ost - Table 2			Natu
	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate
	A	В	С	Q	B*C*(1+D)	A	
	2009	\$0.8360	178	10%	\$164	2009	\$0.3
	2010	\$0.8444	178	10%	\$165	2010	\$0.3
	2011	\$0.8528	178	10%	\$187	2011	\$0.3
	2012	\$0.8613	178	10%	\$169	2012	\$0.3
	2013	\$0.8699	178	10%	\$170	2013	\$0.3
	2014	\$0.8786	176	10%	\$172	2014	\$0.3
	2015	\$0.8874	178	10%	\$174	2015	\$0.3
	2016	\$0.8963	178	10%	\$175	2016	\$0.3
	2017	\$0.9053	178	10%	\$177	2017	\$0.3
	2018	\$0.9143	178	10%	\$179	2018	\$0.3
	2019	\$0.9235	176	10%	\$181	2019	\$0.3
	2020	\$0.9327	178	10%	\$183	2020	\$0.3
	2021	\$0.9420	178	10%	\$184	2021	\$0.3
	2022	\$0.9514	178	10%	\$188	2022	\$0.3
1	2023	\$0.9610	178	10%	\$188	2023	\$0.3
	2024	\$0,9706	178	10%	\$190	2024	\$0.3
	2025	\$0.9803	178	10%	\$182	2025	\$0.3
	2026	\$0.9901	178	10%	\$194	2026	\$0.3
	2027	\$1,0000	178	10%	\$196	2027	\$0.3
	1					. 1	

	Natural Gas	Energy Cha	rge - Table	3
Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost
Α	8	С	D	B*C*(1+D)
2009	\$0.3917	176	10%	\$77
2010	\$0.3917	178	10%	\$77
2011	\$0.3917	178	10%	\$77
2012	\$0.3917	178	10%	\$77
2013	\$0.3917	178	10%	\$77
2014	\$0.3917	178	10%	\$77
2015	\$0.3917	178	10%	\$77
2016	\$0.3917	178	10%	\$77
2017	\$0.3917	178	10%	\$77
2018	\$0.3917	178	10%	\$77
2019	\$0.3917	178	10%	\$77
2020	\$0.3917	178	10%	\$77
2021	\$0.3917	178	10%	\$77
2022	\$0.3917	178	10%	\$77
2023	\$0.3917	178	10%	\$77
2024	\$0.3 9 17	178	10%	\$77
2025	\$0.3917	178	10%	\$77
2026	\$0.3917	178	10%	\$77
2027	\$0.3917	178	10%	\$77
2028	\$0,3917	178	10%	\$77

	Monthly	Annual	Appliance	Total	Ratio -		Pro-Rated
Year	Customer Charge	Customer Charge	Ahnuel Therms	Annual Therms	Appliance to Total	Tax Rate	Customer Charge
Α	В	С	D	E	D/E	G	C*(D/E)*(1+Z
2009	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2010	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2011	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2012	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2013	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2014	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2015	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2016	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2017	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2018	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2019	\$9.00	\$108.00	179	443	40.18%	10%	\$48
2020	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2021	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2022	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2023	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2024	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2025	\$9.00	\$108.00	178	443	40,18%	10%	\$48
2026	\$9.00	\$108.00	179	443	40.18%	10%	\$48
2027	\$9.00	\$108.00	178	443	40.18%	10%	\$48
2028	\$9.00	\$108.00	178	443	40.18%	10%	\$48

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Clothes Drying

			Benefits		***************************************				C	Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$149	\$100	\$60	\$309	\$0	\$0	\$0	\$100	\$60	\$46	\$22	\$13	\$241
2010	2	\$150	0	\$ 61	\$210	0	\$0	0		\$61	\$46	\$22	\$ 13	\$142
2011	3	\$150	0	\$61	\$211	0	\$0	0		\$61	\$47	\$22	\$13	\$143
2012	4	\$1 51	0	\$62	\$212	0	\$0	0		\$62	\$47	\$22	\$13	\$144
2013	5	\$1 51	0	\$62	\$214	0	\$0	0		\$82	\$48	\$22	\$13	\$145
2014	6	\$152	0	\$63	\$215	0	\$0	0		\$63	\$48	\$2 2	\$13	\$146
2015	7	\$152	0	\$64	\$216	0	\$0	0		\$64	\$49	\$22	\$13	\$147
2016	8	\$152	0	\$64	\$217	0	\$0	0		\$64	\$49	\$22	\$13	\$149
2017	9	\$153	0	\$65	\$218	0	\$0	0		\$6 5	\$50	\$22	\$13	\$150
2018	10	\$153	0	\$66	\$219	0	\$0	0		\$6 6	\$50	\$22	\$ 13	\$151
2019	11	\$154	0	\$66	\$220	0	\$0	0		\$66	\$ 51	\$22	\$13	\$152
2020	12	\$154	0	\$67	\$221	0	\$0	0		\$ 67	\$ 51	\$22	\$ 13	\$153
2021	13	\$154	100	\$68	\$322	533	(\$697)	164		\$68	\$52	\$22	\$13	\$154
2022	14	\$155	0	\$68	\$223	0	\$0	0		\$68	\$52	\$22	\$13	\$156
2023	15	\$155	0	\$69	\$224	0	\$0	0		\$69	\$ 53	\$22	\$13	\$157
2024	16	\$156	0	\$70	\$225	0	\$0	0		\$70	\$53	\$22	\$13	\$158
2025	17	\$156	0	\$70	\$227	0	\$0	0		\$70	\$54	\$22	\$13	\$159
2026	18	\$157	0	\$71	\$228	0	\$0	0		\$71	\$54	\$22	\$13	\$160
2027	19	\$157	0	\$72	\$229	0	\$0	0		\$72	\$55	\$22	\$13	\$162
2028	20	\$157	0	\$72	\$230	0	\$0	0		\$72	\$56	\$22	\$13	\$163

Present Value of Benefits \$2,258

Present Value of Costs \$1,553

Benefit/Cost 1.45
Ratio

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Clothes Drying

1			
Escalation Rates		LP DeVMargin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Proj	sane Cost - Tal	ble 1			Natural Ga	s Supply Co	ost - Table 2			Natural Ga	Energy Ch	arge - Table	a 3			Natur	al Gas Custo	mer Charge	- Table 4		
Year	Cost Per Galion	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Ratu	Pro-Rated Customer Charge
Α.	8	С	a	B*C*(1+D)	A	8	c	D	B*C*(1+D)	A	8	С	۵	B*C*(1+D)	A	В	С	D	E	D/E	G	C*(D/E)*(1+2)
2009	\$2,5460	55	7.5%	\$149	2009	\$0.8360	50	10%	\$46	2009	\$0.3917	50	10%	\$22	2009	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2010	\$2.5533	55	7.5%	\$150	2010	\$0,8444	50	10%	\$49	2010	\$0.3917	50	10%	\$22	2010	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2011	\$2,5605	55	7.5%	\$160	2011	\$0.8528	50	10%	\$47	2011	\$0.3917	50	10%	\$22	2011	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2012	\$2.5678	55	7.5%	\$181	2012	\$0,8613	50	10%	\$47	2012	\$0,3817	50	10%	\$22	2012	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2013	\$2.5750	55	7.5%	\$161	2013	\$0.8699	50	10%	\$48	2013	\$0.3917	50	10%	\$22	2013	\$9.00	\$108,00	50	443	11.29%	10%	\$13
2014	\$2.5823	55	7.5%	\$152	2014	\$0.8786	50	10%	348	2014	\$0.3917	50	10%	\$22	2014	\$9.00	\$106,00	50	443	11.29%	10%	\$13
2015	\$2,5896	55	7.5%	\$152	2015	\$0.8674	50	10%	\$49	2015	\$0.3917	50	10%	\$22	2015	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2016	\$2,5968	55	7.5%	\$152	2016	\$0.8963	50	10%	\$49	2016	\$0.3917	50	10%	\$22	2016	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2017	•										•				1							
	\$2,6041	55	7.5%	\$163	2017	\$0.9053	50	10%	\$50	2017	\$0.3917	50	10%	\$22	2017	\$9.00	\$106.00	50	443	11.29%	10%	\$13
2018	\$2.6113	55	7.5%	\$153	2018	\$0.9143	50	10%	\$60	2018	\$0.3917	50	10%	\$22	2018	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2019	\$2.8186	55	7.5%	\$184	2019	\$0.9235	50	10%	\$51	2019	\$0.3917	50	10%	\$22	2019	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2020	\$2.6259	55	7.5%	\$184	2020	\$0.9327	50	10%	\$61	2020	\$0.3917	50	10%	\$22	2020	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2021	\$2.6331	55	7.5%	\$154	2021	\$0.9420	50	10%	\$52	2021	\$0,3917	50	10%	\$22	2021	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2022	\$2.8404	55	7.5%	\$165	2022	\$0.9514	50	10%	\$62	2022	\$0.3917	50	10%	\$22	2022	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2023	\$2.6476	55	7.5%	\$185	2023	\$0.9610	50	10%	\$53	2023	\$0.3917	50	10%	\$22	2023	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2024	\$2.6549	55	7.5%	\$166	2024	\$0.9706	50	10%	\$53	2024	\$0.3917	50	10%	\$22	2024	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2025	\$2.6622	55	7.5%	\$166	2025	\$0.9803	50	10%	\$64	2025	\$0.3917	50	10%	\$22	2025	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2026	\$2.6694	55	7.5%	\$187	2026	\$0,9901	50	10%	\$64	2026	\$0.3917	50	10%	\$22	2028	\$9.00	\$108.00	50	443	11.29%	10%	\$13
2027	\$2.6767	55	7. 5%	\$167	2027	\$1.0000	50	10%	\$55	2027	\$0.3917	50	10%	\$22	2027	\$9.00	\$108.90	50	443	11.29%	10%	\$13
2028	\$2.6839	55	7.5%	\$157	2028	\$1.0100	50	10%	\$56	2028	\$0.3917	50	10%	\$22	2028	\$9.00	\$108.00	50	443	11.29%	10%	\$13

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Cooking

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$134	\$100	\$60	\$294	\$0	\$0	\$0	\$100	\$60	\$41	\$19	\$12	\$233
2010	2	\$135	0	\$ 61	\$195	0	\$0	0		\$61	\$42	\$19	\$12	\$134
2011	3	\$135	0	\$ 61	\$196	0	\$0	0		\$ 61	\$42	\$19	\$12	\$135
2012	4	\$136	0	\$62	\$197	0	\$0	0		\$62	\$43	\$19	\$12	\$136
2013	5	\$136	0	\$62	\$198	0	\$0	0		\$62	\$43	\$19	\$12	\$137
2014	6	\$136	0	\$63	\$199	0	\$0	0		\$63	\$43	\$19	\$12	\$138
2015	7	\$137	0	\$64	\$200	0	\$0	0		\$64	\$44	\$ 19	\$12	\$139
2016	8	\$137	0	\$64	\$201	0	\$0	0		\$64	\$44	\$ 19	\$12	\$140
2017	9	\$138	0	\$ 65	\$202	0	\$0	0		\$65	\$45	\$ 19	\$12	\$141
2018	10	\$138	0	\$66	\$204	0	\$0	0		\$66	\$45	\$1 9	\$12	\$142
2019	11	\$138	0	\$66	\$205	0	\$0	0		\$66	\$46	\$19	\$12	\$143
2020	12	\$139	0	\$67	\$206	0	\$0	0		\$67	\$46	\$19	\$12	\$145
2021	13	\$139	0	\$68	\$207	0	\$0	0		\$66	\$47	\$19	\$12	\$146
2022	14	\$139	0	\$68	\$208	0	\$0	0		\$68	\$47	\$19	\$12	\$147
2023	15	\$140	100	\$69	\$309	637	(\$805)	167		\$69	\$48	\$19	\$12	\$148
2024	16	\$140	0	\$ 70	\$210	0	\$0	0		\$ 70	\$48	\$19	\$ 12	\$149
2025	17	\$141	0	\$70	\$211	0	\$0	0		\$70	\$49	\$19	\$12	\$150
2026	18	\$141	0	\$71	\$212	0	\$0	0		\$71	\$49	\$19	\$12	\$152
2027	19	\$141	0	\$72	\$213	0	\$0	0		\$72	\$49	\$19	\$12	\$153
2028	20	\$142	0	\$72	\$214	0	\$0	0		\$72	\$50	\$19	\$12	\$154

Present Value of Costs \$1,471

Benefit/Cost 1.43
Ratio

Indiantown Gas Company - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type	
Cooking	

Escalation Rates		LP DeVMargin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Proj	pane Cost - Ta	ible 1			Natural Ge	s Supply Co	ost - Table 2			Natural Gas	Energy Cha	ırge - Tabl	le 3			Nati	ural Gas Cust	omer Charg	e - Table 4		
Yea	Cost Per Gallon	Annual Gallon	Tex Rate	Propene Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tex Rat	e NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α.	8	С	D	8*C*(1+D)	Α	Ð	С	0	B*C*(1+D)	A	В	Ç	D	B*C*(1+D)	Α	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2000	\$2,5460	49	7.5%	\$134	2009	\$0.8380	45	10%	\$41	2009	\$0,3917	45	10%	\$19	2009	\$9.00	\$108.00	45	443	10.18%	10%	\$12
2010	\$2.5533	49	7.5%	\$138	2010	\$0.8444	45	10%	\$42	2010	\$0.3917	45	10%	\$19	2010	\$9.00	\$106.00	45	443	10.16%	10%	\$12
2011	\$2.5605	49	7.5%	\$135	2011	\$0.8528	45	10%	\$42	2011	\$0.3917	45	10%	\$19	2011	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2012	\$2.5678	49	7.5%	\$136	2012	\$0.8813	45	10%	\$43	2012	\$0.3917	45	10%	\$19	2012	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2013	\$2,5750	49	7.5%	\$136	2013	\$0.8699	45	10%	34 3	2013	\$0,3917	45	10%	\$19	201	\$9.00	\$108.00	45	443	10,16%	10%	\$12
2014	\$2,5823	49	7.5%	\$138	2014	\$0.8788	45	10%	\$43	2014	\$0.3917	45	10%	\$19	2014	\$9.00	\$108,00	45	443	10.16%	10%	\$12
2015		49	7.5%	\$137	2015	\$0.8874	45	10%	\$44	2015	\$0,3917	45	10%	\$19	201		\$108.00	45	443	10.16%	10%	\$12
2016		49	7.5%	\$137	2016	\$0.6983	45	10%	\$44	2016	\$0.3917	45	10%	\$19	2016	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2017		49	7.5%	\$138	2017	\$0.9053	45	10%	\$45	2017	\$0,3917	45	10%	\$19	201	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2016	*	49	7.5%	\$136	2016	\$0.9143	45	10%	\$45	2017	\$0,3917	45	10%		201	\$9.00	\$108.00	45	443	10.16%	10%	
2016						*			1					\$19								\$12
	*	49	7.5%	\$128	2019	\$0.9235	45	10%	\$46	2019	\$0.3917	45	10%	\$19	2011	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2020		49	7,5%	\$139	2020	\$0.9327	45	10%	\$46	2020	\$0.3917	45	10%	\$19	2020	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2021	\$2,6331	49	7.5%	\$139	2021	\$0.9420	45	10%	\$47	2021	\$0.3917	45	10%	\$19	202	\$9.00	\$108.00	45	443	10.18%	10%	\$12
2022	\$2.6404	49	7.5%	\$139	2022	\$0.9514	45	10%	\$47	2022	\$0.3917	45	10%	\$19	2022	\$9.00	\$106.00	45	443	10.16%	10%	\$12
2023	\$2.6476	49	7.5%	\$146	2023	\$0.9610	45	10%	\$48	2023	\$0.3917	45	10%	\$19	202	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2024	\$2.6549	49	7.5%	\$146	2024	\$0.9706	45	10%	\$48	2024	\$0.3917	45	10%	\$19	202	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2025	\$2,6622	49	7.5%	\$141	2025	\$0.9803	45	10%	\$49	2025	\$0.3917	45	10%	\$19	202	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2026	\$2,6894	49	7.5%	\$141	2026	\$0.9901	45	10%	\$49	2026	\$0.3917	45	10%	\$19	2020	\$9.00	\$108.00	45	443	10.18%	10%	\$12
2027	\$2.6767	49	7.5%	\$141	2027	\$1.0000	45	10%	\$49	2027	\$0.3917	45	10%	\$19	202	\$9.00	\$108.00	45	443	10.16%	10%	\$12
2026	\$2.6839	49	7.5%	\$142	2028	\$1.0100	45	10%	\$50	2028	\$0.3917	45	10%	\$19	202	\$9.00	\$108.00	45	443	10.16%	10%	\$12

Attachment 2.5

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

Peoples Gas System Rate Impact Measurement Test Participants Test

Summary of RIM Test and Participants Test Results

	Proposed Allowance	Participants Test	RIM Test
Gas Storage Tank Water Heating	\$350	1.39	1.04
Gas Tankless Water Heating	\$450	1.40	1.01
Gas Heating	\$350	1.25	1.07
Gas Clothes Drying	\$100	1.24	1.06
Gas Cooking	\$100	1.23	1.05

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Storage Tank Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		-
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$71	\$213	\$46	\$330	\$213	\$46	\$17	\$350.69	\$626
2010	\$ 71	\$215	\$46	\$332	\$215	\$44	\$17	\$0.69	\$276
2011	\$71	\$217	\$46	\$334	\$217	\$42	\$17	\$0.69	\$276
2012	\$71	\$220	\$46	\$336	\$220	\$40	\$17	\$0.69	\$277
2013	\$7 1	\$222	\$46	\$338	\$222	\$38	\$17	\$0.69	\$278
2014	\$71	\$224	\$46	\$340	\$224	\$37	\$17	\$0.69	\$279
2015	\$71	\$226	\$46	\$343	\$226	\$35	\$17	\$0.69	\$279
2016	\$ 71	\$228	\$46	\$345	\$228	\$34	\$17	\$0.69	\$280
2017	\$7 1	\$231	\$46	\$347	\$231	\$32	\$18	\$0.69	\$282
2018	\$7 1	\$233	\$4 6	\$350	\$233	\$3 1	\$ 18	\$350.69	\$633
2019	\$ 71	\$235	\$46	\$352	\$235	\$30	\$18	\$0.69	\$284
2020	\$71	\$238	\$46	\$354	\$238	\$28	\$19	\$0.69	\$285
2021	\$71	\$240	\$46	\$357	\$240	\$27	\$19	\$0.69	\$287
2022	\$ 71	\$242	\$46	\$359	\$242	\$26	\$ 19	\$0.69	\$288
2023	\$71	\$245	\$46	\$361	\$245	\$25	\$19	\$0.69	\$289
2024	\$7 1	\$247	\$46	\$364	\$247	\$24	\$19	\$0.69	\$291
2025	\$ 71	\$250	\$4 6	\$366	\$250	\$23	\$19	\$0.69	\$293
2026	\$ 71	\$252	\$46	\$369	\$252	\$22	\$19	\$0.69	\$295
2027	\$71	\$255	\$46	\$371	\$255	\$21	\$20	\$0.69	\$296
2028	\$71	\$257	\$4 6	\$374	\$257	\$20	\$20	\$0.69	\$298

Present Value of Benefits \$3,391

Present Value of Costs \$3,253

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type Storage Tank Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	5.10%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Mater	8.80%

F	tevenue - E	Energy Cha	
11	2	3	2*3
Year	Thems	Base Rate	Total Charge
2008	170	\$0.4147	\$71
2010	170	\$0.4147	\$71
2011	170	\$0,4147	\$71
2012	170	\$0.4147	\$71
2013	170	\$0.4147	\$71
2014	170	\$0.4147	\$71
2015	170	\$0.4147	\$71
2018	170	\$0,4147	\$71
2017	170	\$0.4147	\$71
2018	170	\$0.4147	\$71
2019	170	\$0.4147	\$71
2020	170	\$0.4147	\$71
2021	170	\$0.4147	\$71
2022	170	\$0 4147	\$71
2023	170	\$0,4147	571
2024	170	\$0.4147	\$71
2025	170	\$0.4147	\$71
2028	170	\$0.4147	\$71
2027	170	\$0.4147	\$71
2028	170	\$0.4147	\$71

Revenue - Cost of Gas							
_ 1	2	4	2*3				
		•					
Year	Therms	Fuel Rate	Total Charge				
2009	170	\$1.2533	\$213				
2010	170	\$1.2658	\$215				
2011	170	\$1,2785	\$217				
2012	170	\$1,2913	\$220				
2013	170	\$1,3042	\$222				
2014	170	\$1,3172	\$224				
2015	170	\$1.3304	\$226				
2016	170	\$1,3437	\$228				
2017	170	\$1.3571	\$231				
2018	170	\$1.3707	\$233				
2019	170	\$1,3844	\$235				
2020	170	\$1,3093	\$238				
2021	170	\$1.4122	\$240				
2022	170	\$1.4284	\$242				
2023	170	\$1,4408	\$245				
2024	170	\$1.4550	\$247				
2025	170	\$1.4696	\$250				
202€	170	\$1.4843	\$252				
2027	170	\$1,4991	\$255				
2028	170	\$1.5141	3257				

	Revenue - Customer Charge								
1	2	3	4	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customo	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$10.00	\$120.00	38.37%	\$46					
2010	\$10.00	\$120.00	38,37%	\$46					
2011	\$10.00	\$120.00	38.37%	\$46					
2012	\$10.00	\$120.00	35.37%	\$46					
2013	\$10.00	\$120.00	38.37%	\$46					
2014	\$10.00	\$120.00	38.37%	\$46					
2015	\$10.00	\$120.00	3B.37%	\$46					
2016	\$10.00	\$120.00	38.37%	\$46					
2017	\$10.00	\$120.00	38.37%	\$46					
2018	\$10.00	\$120,00	38.37%	\$46					
2019	\$10.00	\$120.00	38.37%	\$46					
2020	\$10.00	\$120,00	38.37%	\$45					
2021	\$10.00	\$120.00	35.37%	\$45					
2022	\$10.00	\$120.00	38.37%	\$46					
2023	\$10.00	\$120.00	38.37%	\$46					
2024	\$10.00	\$120.00	38 37%	\$46					
2025	\$10.00	\$120.00	38.37%	\$46					
2026	\$10.00	\$120.00	38 37%	\$46					
2027	\$10.00	\$120.00	36.37%	\$46					
2028	\$10.00	\$120.00	38.37%	\$46					

Investment Carrying Costs									
1	2	3	4	5	6	7	8	6*7*8	
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment	
Year	Main	Main	Line	Mater	Investment	of Debt	Consumed To Total	Carrying Cos	
8008	\$100	\$500	\$600	\$163	\$1,363	5.72%	38.37%	\$46	
2010	\$97	\$486	\$509	\$152	\$1,304	8.72%	38.37%	\$44	
2011	\$94	\$472	\$540	\$142	\$1,248	8.72%	38.37%	\$42	
2012	\$91	\$458	\$512	\$133	\$1,194	8.72%	38.37%	\$40	
2013	\$68	\$445	\$488	\$124	\$1,143	8.72%	38.37%	\$38	
2014	\$65	\$432	\$461	\$118	\$1,094	8.72%	38.37%	\$37	
2015	\$83	\$419	\$4 37	\$108	\$1,047	8.72%	38.37%	\$35	
2018	\$81	\$407	\$415	\$101	\$1,004	8.72%	38.37%	\$34	
2017	\$79	\$395	\$394	\$94	\$982	8.72%	38.37%	\$32	
2018	\$77	\$384	\$374	\$88	\$923	8.72%	38.37%	\$31	
2019	\$75	\$373	\$355	\$82	\$885	8.72%	38.37%	\$30	
2020	\$73	\$362	\$337	\$77	\$849	8.72%	38.37%	\$28	
2021	\$71	\$352	\$320	\$72	\$815	8.72%	38.37%	\$27	
2022	\$89	\$342	\$304	\$87	\$782	8.72%	38.37%	\$26	
2023	\$67	\$332	\$288	\$83	\$750	8.72%	38.37%	\$25	
2024	\$65	\$322	\$273	\$59	\$719	8.72%	38.37%	\$24	
ZD25	\$63	\$313	\$250	\$55	\$890	8.72%	38.37%	\$23	
2026	\$81	\$304	\$248	\$51	\$662	8.72%	38.37%	522	
2027	\$59	\$295	\$233	\$48	\$835	8.72%	38.37%	\$21	
2028	\$57	\$286	\$221	\$45	\$809	8.72%	38.37%	\$20	

			Incre	mental Custo	mer Costs			
1	2	3	44	5=3*4	6	7	8=8*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To		Total incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	OSM Cost	Total Consumed	O&M Cost	Adm. & O&M Cos
2009	\$1.98	\$24	38.37%	\$9,21	\$19.13	38.37%	\$7	\$17
2010	\$2.00	\$24	38.37%	\$9.21	\$19,32	38.37%	\$7	\$17
2011	\$2.02	\$24	38.37%	\$9,21	\$19.51	38.37%	\$7	\$17
2012	\$2.04	\$24	38.37%	\$9,21	\$19,71	38.37%	\$8	\$17
2013	\$2,06	\$25	36.37%	\$9,59	\$10.91	38.37%	\$8	\$17
2014	\$2.08	\$25	36.37%	\$9.59	\$20.11	38.37%	\$6	\$17
2015	\$2.10	\$25	38.37%	\$9.59	\$20.31	38.37%	\$8	\$17
2016	\$2,12	\$25	38.37%	\$9.59	\$20.51	38,37%	\$8	\$17
2017	\$2.14	\$26	38.37%	\$9.98	\$20.72	38.37%	\$8	\$18
2018	\$2.17	\$28	38,37%	\$9,98	\$20.02	38,37%	\$8	\$18
2019	\$2.19	\$26	38.37%	\$9.98	\$21.13	38.37%	\$8	\$18
2020	\$2.21	\$27	38.37%	\$10.38	\$21.34	38.37%	\$8	\$19
2021	\$2.23	\$27	38.37%	\$10.36	\$21.58	38,37%	\$8	\$19
2022	\$2,25	\$27	38,37%	\$10.36	\$21.77	38.37%	\$B	\$19
2023	\$2.28	\$27	38.37%	\$10.36	\$21.99	38,37%	\$8	\$19
2024	\$2.30	\$28	38.37%	\$10,74	\$22.21	38.37%	\$9	\$19
2025	\$2.32	\$28	38.37%	\$10.74	\$22.43	38.37%	\$9	\$19
2026	\$2.34	\$28	38.37%	\$10.74	\$22.00	38,37%	\$9	\$19
2027	\$2.37	\$28	38.37%	\$10.74	\$22.88	38.37%	26	\$20
2026	\$2.39	529	38.37%	\$11.13	\$23.11	38.37%	\$9	\$20

	Gas	Costs	
1	2	3	2.3
	Therms	Gas Supply	Gas Supply
Year		Rate	Cost
2009	170	1.2533	\$213
2010	170	\$1,2658	\$215
2011	170	\$1,2785	\$217
2012	170	\$1,2613	\$220
2013	170	\$1,3042	\$222
2014	170	\$1.3172	\$224
2015	170	\$1.3304	5226
2016	170	\$1,3437	\$228
2017	170	\$1.3571	\$231
2018	170	\$1.3707	\$233
2019	170	\$1,3844	\$235
2020	170	\$1.3983	\$236
2021	170	\$1 4122	\$240
2022	170	\$1,4264	\$242
2023	170	\$1.4406	\$245
2024	170	\$1.4550	\$247
2025	170	\$1 4696	\$250
2026	170	\$1.4843	\$252
2027	170	\$1.4991	\$255
2028	170	\$1,5141	\$257

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Tankless Water Heating

	Incremental	incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	evenue Cost Costs		Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$62	\$188	\$43	\$293	\$188	\$42	\$15	\$450.69	\$696
2010	\$62	\$190	\$43	\$295	\$190	\$40	\$15	\$0.69	\$246
2011	\$62	\$192	\$43	\$297	\$192	\$39	\$15	\$0.69	\$246
2012	\$62	\$194	\$43	\$298	\$194	\$ 37	\$15	\$0.69	\$247
2013	\$62	\$196	\$43	\$300	\$196	\$35	\$16	\$0.69	\$248
2014	\$62	\$198	\$43	\$302	\$198	\$34	\$16	\$0.69	\$248
2015	\$62	\$200	\$4 3	\$304	\$200	\$32	\$16	\$0.69	\$249
2016	\$62	\$202	\$43	\$306	\$202	\$31	\$16	\$0.69	\$249
2017	\$62	\$204	\$43	\$308	\$204	\$30	\$ 17	\$0.69	\$251
2018	\$62	\$206	\$43	\$310	\$206	\$29	\$17	\$0.69	\$251
2019	\$62	\$208	\$43	\$312	\$208	\$27	\$17	\$0.69	\$252
2020	\$62	\$210	\$43	\$315	\$210	\$26	\$17	\$0.69	\$254
2021	\$62	\$212	\$4 3	\$317	\$212	\$25	\$17	\$0.69	\$255
2022	\$62	\$214	\$43	\$319	\$214	\$24	\$17	\$0.69	\$256
2023	\$62	\$216	\$43	\$321	\$216	\$23	\$17	\$0.69	\$257
2024	\$62	\$218	\$43	\$323	\$218	\$22	\$18	\$0.69	\$259
2025	\$62	\$220	\$43	\$325	\$220	\$21	\$18	\$0.69	\$260
2026	\$62	\$223	\$43	\$327	\$223	\$20	\$18	\$0.69	\$262
2027	\$62	\$225	\$4 3	\$330	\$225	\$20	\$18	\$0.69	\$263
2028	\$62	\$227	\$4 3	\$332	\$227	\$19	\$18	\$450.69	\$715

Present Value 53,011

Present Value of Costs \$2,976

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type Tankless Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	5.10%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Motor	6 60%

R	evenue -	Energy Ch	arge
1	2	3	2*3
Year	Thems	Base Rate	Total Charge
2009	150	\$0.4147	\$62
2010	150	\$0.4147	\$62
2011	150	\$0.4147	162
2012	150	\$0.4147	\$62
2013	150	\$0.4147	\$6.2
2014	150	\$0.4147	\$62
2015	150	\$0.4147	\$62
2016	150	\$0.4147	\$62
2017	150	\$0.4147	\$62
2018	150	\$0.4147	\$82
2019	150	\$0.4147	\$82
2020	150	\$0.4147	\$62
2021	150	\$0,4147	\$62
2022	150	\$0.4147	\$82
2023	150	\$0.4147	\$62
2024	150	\$0,4147	\$82
2025	150	\$0.4147	\$62
2028	150	\$0.4147	\$62
2027	150	\$0.4147	\$82
2028	150	\$0.4147	\$62

	Revenue - Co	st of Gas	
	2	4	2*3
Year	Therms	Fuel Rate	Total Charge
2000	150	\$1,2533	\$188
2010	150	\$1,2858	\$190
2011	150	\$1,2785	\$192
2012	150	\$1,2913	\$194
2013	150	\$1,3042	\$196
2014	150	\$1,3172	\$198
2015	150	\$1.3304	\$200
2016	150	\$1,3437	\$202
2017	150	\$1,3571	\$204
2016	150	\$1,3707	\$206
2019	150	\$1.3844	\$208
2020	t50	\$1,3983	\$210
2021	150	\$1.4122	5212
2022	150	\$1.4284	\$214
2023	150	\$1.4406	\$215
2024	150	\$1.4550	\$216
2025	150	\$1,4896	\$220
2026	150	\$1.4843	\$223
2027	150	\$1.4991	\$225
2028	150	\$1,5141	\$227

	Revenue - Customer Charge								
1	2	3	44	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customer	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$10.00	\$120.00	35.46%	\$43					
2010	\$10.00	\$120.00	35.46%	\$43					
2011	\$10.00	\$120.00	35.46%	\$43					
2012	\$10.00	\$120.00	35.46%	\$43					
2013	\$10.00	\$120.00	35.48%	\$43					
2014	\$10.00	\$120.00	35.40%	\$43					
2015	\$10.00	\$120.00	35.48%	\$43					
2018	\$10.00	\$120.00	35.46%	\$43					
2017	\$10.00	\$120.00	35.48%	\$43					
2018	\$10.00	\$120.00	35.48%	\$43					
2019	\$10.00	\$120.00	35.46%	\$43					
2020	\$10,00	\$120.00	35.48%	\$43					
2021	\$10.00	\$120.00	35.46%	\$43					
2022	\$10.00	\$120.00	35.46%	\$43					
2023	\$10.00	\$120.00	35.46%	\$43					
2024	\$10.00	\$120.00	35.46%	\$43					
2025	\$10.00	\$120.00	35.48%	\$43					
2026	\$10.00	\$120.00	35.48%	\$43					
2027	\$10.00	\$120.00	35.46%	\$43					
2028	\$10.00	\$120.00	35.46%	\$43					

			tov	estment Ca	arrying Costs			
1	2	3	4	5	- 6	7	8	6'7'8
	Supply	Development	Service		Total	Cost	Relic of Therms	Investment
Year	Main	Main	Lme	Meter	investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$600	\$163	\$1,363	8,72%	35.46%	\$42
2010	\$97	\$486	\$569	\$152	\$1,304	8.72%	35.48%	\$40
2011	\$94	\$472	\$540	\$142	\$1,24E	8 72%	35.46%	\$39
2012	\$91	\$458	\$512	\$133	\$1,194	6.72%	35,46%	\$37
2013	\$68	\$445	\$486	\$124	\$1,143	9.72%	35.46%	\$35
2014	\$85	\$432	\$461	\$116	\$1,094	8.72%	35.46%	\$34
2015	\$83	\$419	\$437	\$108	\$1,047	8.72%	35.46%	\$32
2010	\$81	\$407	\$415	\$101	\$1,004	8.72%	35,48%	\$31
2017	\$79	\$395	\$394	\$94	\$962	8.72%	35.46%	\$30
2018	\$77	\$384	\$374	\$88	\$923	8.72%	35.40%	\$29
2019	\$75	\$373	\$355	\$82	\$885	8.72%	35.48%	\$27
2020	\$73	\$362	\$337	\$77	\$849	8.72%	35.45%	\$26
2021	\$71	\$352	\$320	\$72	\$815	8 72%	35.48%	\$25
2022	\$69	\$342	\$304	\$67	\$782	8.72%	35.46%	\$24
2023	\$67	\$332	\$288	\$63	\$750	8.72%	35.48%	\$23
2024	\$65	\$322	\$273	\$59	\$719	8.72%	35.46%	\$22
2025	\$63	\$ 313	\$259	\$55	\$690	8.72%	35.46%	\$21
2028	\$81	\$304	\$246	1 51	\$662	8.72%	35.46%	\$20
2027	\$59	\$295	\$233	\$48	\$635	B.72%	35.48%	\$20
2028	\$57	\$286	\$221	\$45	\$609	8.72%	35.46%	\$19

			Incre	mental Custo	mer Costs			
1	2	3	4	5×3'4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total increme
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	D&M Cost	Adm. & O&M C
2009	\$1.98	\$24	35.46%	\$8.51	\$10.13	35.46%	3.7	\$15
2010	\$2.00	\$24	35.46%	\$8.51	\$19.32	35.46%	\$7	\$15
2011	\$2.02	\$24	35.46%	\$8.51	\$19.51	35.46%	\$7	\$15
2012	\$2.04	\$24	35.48%	\$8.51	\$19.71	35.46%	\$7	\$15
2013	\$2.06	\$25	35.46%	\$6.87	\$19,91	35.48%	\$7	\$16
2014	\$2.08	\$25	35.48%	\$8.87	\$20.11	35.46%	\$7	\$16
2015	\$2.10	\$25	35.46%	\$8.87	\$20.31	35.46%	\$7	\$16
2018	\$2.12	\$25	35.46%	\$8.87	\$20.51	35.46%	\$7	\$16
2017	\$2.14	\$26	35.46%	\$9.22	\$20.72	35.46%	\$7	\$17
2018	\$2.17	\$25	35.40%	\$9.22	\$20.92	35.46%	\$7	\$17
2019	\$2.19	\$26	35.46%	\$9.22	\$21.13	35.48%	\$7	\$17
2020	\$2.21	\$27	35.46%	\$9.57	\$21.34	35.46%	\$8	\$17
2021	\$2.23	\$27	35.48%	\$9.57	\$21.56	35.46%	\$8	\$17
2022	\$2.25	\$27	35.46%	\$9.67	\$21.77	35.46%	\$8	\$17
2023	\$2.28	\$27	35.46%	\$9.57	\$21.99	35.46%	\$8	\$17
2024	\$2.30	\$28	35.46%	\$9.93	\$22.21	35.46%	\$8	\$18
2025	\$2.32	\$28	35.46%	\$9.93	\$22.43	35.46%	\$8	\$18
2026	\$2.34	\$28	35.46%	\$9.93	\$22.66	35.46%	\$8	\$18
2027	\$2.37	\$28	35.48%	\$0.93	\$22.88	35.48%	\$8	\$18
2028	\$2.39	\$20	35 46%	\$10.28	\$23.11	35.45%	\$8	\$18

	Gas C	osts	
1	2	3	2.3
	Thems	Per Therm	Gas Supply
Year		Supply Cost	Cost
2009	150	1.2533	\$188
2010	150	\$1,2858	\$190
2011	150	\$1.2785	\$192
2012	150	\$1,2913	\$194
2013	150	\$1.3042	\$195
2014	150	\$1.3172	\$198
2015	150	\$1.3304	\$200
2016	150	\$1 3437	\$202
2017	150	\$1,3571	\$204
2018	159	\$1 3707	\$206
2019	150	\$1 3844	\$208
2020	150	\$1,3983	5210
2021	150	\$1.4122	\$212
2022	150	\$1,4264	5214
2023	150	\$1.4406	\$216
2024	150	\$1 4550	\$218
2025	150	\$1.4896	\$220
2028	150	\$1 4843	\$223
2027	150	\$1,4991	\$225
2028	150	\$1.5141	\$227

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Heating System

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$74	\$223	\$48	\$345	\$223	\$48	\$17	\$350.72	\$639
2010	\$74	\$225	\$48	\$347	\$225	\$4 6	\$17	\$0.72	\$289
2011	\$74	\$228	\$48	\$350	\$228	\$44	\$17	\$0.72	\$290
2012	\$74	\$230	\$48	\$352	\$230	\$42	\$18	\$0.72	\$290
2013	\$74	\$232	\$48	\$354	\$232	\$40	\$18	\$0.72	\$291
2014	\$74	\$234	\$48	\$357	\$234	\$38	\$18	\$0.72	\$292
2015	\$74	\$237	\$48	\$359	\$237	\$37	\$18	\$0.72	\$292
2016	\$74	\$239	\$48	\$361	\$239	\$35	\$18	\$0.72	\$293
2017	\$74	\$242	\$48	\$364	\$242	\$34	\$19	\$0.72	\$295
2018	\$74	\$244	\$48	\$366	\$244	\$32	\$19	\$0.72	\$296
2019	\$74	\$246	\$48	\$368	\$246	\$31	\$19	\$0.72	\$297
2020	\$74	\$249	\$48	\$371	\$249	\$30	\$19	\$0.72	\$299
2021	\$74	\$251	\$48	\$373	\$251	\$29	\$20	\$0.72	\$300
2022	\$74	\$254	\$48	\$376	\$254	\$27	\$20	\$0.72	\$302
2023	\$74	\$256	\$48	\$378	\$256	\$26	\$20	\$0.72	\$303
2024	\$74	\$259	\$48	\$381	\$259	\$25	\$20	\$0.72	\$305
2025	\$74	\$262	\$4 8	\$384	\$262	\$24	\$20	\$0.72	\$307
2026	\$74	\$264	\$48	\$386	\$264	\$2 3	\$20	\$350.72	\$658
2027	\$74	\$267	\$48	\$389	\$267	\$22	\$20	\$0.72	\$310
2028	\$74	\$270	\$48	\$392	\$270	\$21	\$21	\$0.72	\$313

Present Value of Benefits

\$3,551

Present Value of Costs

\$3,308

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliar	ice	Туре	
Heating	Sy	stem	

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%	
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%	
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	5.10%	
O&M/InBation Escalator	1.0%	Depreciation Rate - Meter	6 80%	

	Revenue - I	Energy Chai	rge
1	2	3	2*3
Year	Therms	Base Rate	Total Charge
2009	178	\$0.4147	\$74
2010	178	\$0.4147	\$74
2011	178	\$0.4147	\$74
2012	178	\$0.4147	\$74
2013	178	\$0.4147	\$74
2014	178	\$0.4147	\$74
2015	178	\$0.4147	\$74
2016	178	\$0.4147	\$74
2017	178	\$0.4147	\$74
2018	178	\$0.4147	574
2019	178	\$0.4147	\$74
2020	178	\$0.4147	574
2021	178	\$0.4147	\$74
2022	178	\$0.4147	574
2023	178	\$0.4147	\$74
2024	178	\$0.4147	\$74
2025	178	\$0.4147	\$74
2026	178	\$0,4147	574
2027	178	\$0.4147	\$74
2028	178	\$0.4147	\$74

Revenue - Cost of Gas								
11	2	4	2*3					
Year	Therms	Fuel Rate	Total Charge					
2009	179	\$1.2533	\$223					
2010	178	\$1.2658	\$225					
201 *	178	\$1,2785	\$228					
2012	178	\$1.2913	\$230					
2013	178	\$1,3042	\$232					
2014	178	\$1.3172	\$234					
2015	178	\$1.3304	\$237					
2016	178	\$1.3437	\$239					
2017	176	\$1.3571	\$242					
2018	178	\$1,3707	\$244					
2019	17B	\$1.3844	\$246					
2020	178	\$1.3993	\$249					
2021	178	\$1,4122	\$251					
2022	178	\$1,4284	\$254					
2023	17B	\$1.4406	\$256					
2024	178	\$1.4550	\$259					
2025	178	\$1,4696	5262					
2026	178	\$1,4843	\$264					
2027	178	\$1,4991	5267					
2028	178	\$1.5141	\$270					

	Revenue - Customer Charge								
1	2	3	44	4'3					
	Monthly		Retio Themis						
	Customer	Annuel Customer	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$10.00	\$120.00	40,18%	\$48					
2010	\$10.00	\$120.00	40.18%	\$48					
2011	\$10.00	\$120.00	40.18%	\$48					
2012	\$10.00	\$120.00	40.18%	\$48					
2013	\$10.00	\$120.00	40.18%	\$48					
2014	\$10.00	\$120.00	40.18%	\$48					
2015	\$10.00	\$120,00	40.18%	\$48					
2016	\$10,00	\$120.00	40.18%	\$48					
2017	\$10.00	\$120.00	40.18%	\$46					
2018	\$10.00	\$120.00	40.18%	\$48					
2019	\$10.00	\$120.00	40.18%	\$48					
2020	\$10.00	\$120.00	40,18%	\$48					
2021	\$10.00	\$120.00	40.18%	\$48					
2022	\$10.00	\$120.00	40.18%	\$46					
2023	\$10.00	\$120.00	40.18%	\$48					
2024	\$10.00	\$120.00	40.18%	\$46					
2025	\$10.00	\$120,00	40.18%	\$48					
2026	\$10.00	\$120.00	40.16%	\$48					
2027	\$10.00	\$120.00	40.18%	\$48					
2028	\$10.00	\$120.00	40.18%	\$48					

	_		Inves	stment Car	rying Costs			
1	2	3	4	5	6	7	8	8*7*8
	Supply	Oavelopment	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Maio	ilne	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$600	\$163	\$1,363	8.72%	40.18%	\$48
2010	\$97	\$486	\$569	\$152	\$1,304	8.72%	40,18%	\$46
2011	\$94	\$472	\$540	\$142	\$1,248	8.72%	40.18%	\$44
2012	\$91	\$458	\$512	\$133	\$1,194	8.72%	40.18%	\$42
2013	\$88	\$445	\$486	\$124	\$1,143	8.72%	40.18%	\$40
2014	\$85	\$432	\$481	\$116	\$1,094	8.72%	40.18%	\$38
2015	\$83	\$419	\$437	\$109	\$1,047	8.72%	40,18%	\$37
2016	\$81	\$407	\$415	\$101	\$1,004	8.72%	40.18%	\$35
2017	\$79	\$395	\$394	\$94	\$962	8.72%	40.18%	\$34
2018	\$77	\$38 4	\$374	\$88	\$923	8.72%	40.18%	532
2019	\$75	\$373	\$356	\$82	\$885	9.72%	40.18%	\$31
2020	\$73	\$362	\$337	\$77	\$849	8.72%	40.18%	\$30
2021	\$71	\$352	\$320	\$72	\$815	8.72%	40.18%	\$29
2022	289	\$342	\$304	\$87	\$782	8.72%	40.18%	\$27
2023	\$67	\$332	\$288	\$83	\$750	8.72%	40.18%	\$26
2024	\$65	\$322	\$273	\$69	\$719	8.72%	40.18%	\$25
2025	\$63	\$313	\$259	\$ 55	\$690	8.72%	40.18%	\$24
2026	\$61	\$304	\$246	\$51	\$662	8.72%	40.16%	\$23
2027	\$59	\$296	\$233	\$48	\$635	8 72%	40.18%	\$22
2028	\$57	\$286	\$221	\$45	\$609	8.72%	40.18%	521

			Inc	remental Cus	tomer Cost	s		
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annuel Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm, Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.98	\$24	40.18%	\$9.64	\$19.13	40.18%	\$9	\$17
2010	\$2.00	\$24	40.18%	\$9.64	\$19.32	40.16%	\$8	\$17
2011	\$2.02	\$24	40.18%	\$9.84	\$19.51	40,18%	\$8	\$17
2012	\$2.04	\$24	40.18%	\$9.64	\$19.71	40.18%	\$8	\$1 8
2013	\$2.06	\$25	40.18%	\$10.05	\$19.91	40 18%	\$8	\$18
2014	\$2.08	\$25	40.18%	\$10.05	\$20.11	40.18%	\$8	\$18
2015	\$2.10	\$25	40,18%	\$10.05	\$20.31	40.18%	\$8	\$18
2016	\$2.12	\$25	40.18%	\$10.05	\$20.51	40.18%	\$6	\$16
2017	\$2.14	\$26	40,18%	\$10,45	\$20.72	40.18%	\$6	\$19
2018	\$2.17	\$26	40.18%	\$10.45	\$20.92	40.18%	\$8	\$18
2019	\$2.19	\$26	40.18%	\$10.45	\$27.13	40.18%	\$8	\$19
2020	52.21	\$27	40.16%	\$10.85	\$21.34	40 18%	82	\$19
2021	\$2.23	\$27	40.18%	\$10.85	\$21.56	40.18%	59	\$20
2022	\$2.25	\$27	40.18%	\$10.85	\$21.77	40.18%	\$8	\$20
2023	\$2.28	\$27	40.18%	\$10.85	\$21.00	40.18%	\$9	\$29
2024	\$2.30	\$28	40.18%	\$11.25	\$22.21	40.18%	\$9	\$20
2025	\$2.32	\$28	40.18%	\$11.25	\$22,43	40.18%	\$₽	\$20
2026	\$2.34	\$28	40.16%	\$11.25	\$22.66	40 18%	\$9	\$20
2027	\$2.37	\$28	40.18%	\$11.25	\$22.88	40 18%	92	\$20
2028	\$2.39	\$29	40.18%	\$11.65	\$23.11	40.18%	\$9	\$21

	Gas	Costs	
1	2	3	2.3
	Thems	Per Therm	Gas Supply
Year		Supply Cost	Cost
2009	178	\$1 2533	5223
2010	178	\$1,2659	\$225
2011	176	\$1.2785	\$228
2012	178	\$1.2913	\$238
2013	178	\$1.3042	\$232
2014	178	\$1.3172	\$234
2015	178	\$1.3304	\$237
2016	178	\$1,3437	\$239
2017	178	\$1.3571	\$242
2018	178	\$1.3707	\$244
2019	176	\$1.3844	\$248
2020	178	\$1.3983	\$249
2021	178	\$1.4122	\$251
2022	176	\$1,4264	\$254
2023	178	\$1,4408	\$256
2024	178	\$1.4550	\$259
2025	178	\$1,4696	\$282
2028	178	\$1.4843	\$264
2027	178	\$1.4991	\$267
2022	178	\$1.5141	\$270

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Clothes Drying

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$21	\$63	\$14	\$97	\$63	\$ 13	\$5	\$100.20	\$181
2010	\$21	\$63	\$14	\$98	\$63	\$13	\$5	\$0.20	\$81
2011	\$21	\$64	\$14	\$98	\$64	\$12	\$ 5	\$0.20	\$81
2012	\$21	\$65	\$14	\$99	\$ 65	\$12	\$5	\$0.20	\$81
2013	\$21	\$65	\$14	\$99	\$6 5	\$11	\$5	\$0.20	\$82
2014	\$21	\$ 66	\$14	\$100	\$6 6	\$11	\$5	\$0.20	\$82
2015	\$21	\$67	\$14	\$101	\$67	\$10	\$5	\$0.20	\$82
2016	\$21	\$ 67	\$14	\$101	\$67	\$10	\$ 5	\$0.20	\$82
2017	\$21	\$68	\$14	\$102	\$68	\$ 9	\$5	\$0.20	\$83
2018	\$21	\$69	\$14	\$103	\$69	\$9	\$5	\$0.20	\$83
2019	\$21	\$69	\$14	\$104	\$69	\$ 9	\$5	\$0.20	\$83
2020	\$21	\$70	\$14	\$104	\$70	\$8	\$5	\$0.20	\$84
2021	\$21	\$71	\$14	\$105	\$71	\$8	\$5	\$100.20	\$184
2022	\$21	\$71	\$14	\$106	\$71	\$8	\$6	\$0.20	\$85
2023	\$21	\$72	\$14	\$106	\$72	\$7	\$ 6	\$0.20	\$85
2024	\$21	\$ 73	\$14	\$107	\$ 73	\$ 7	\$6	\$0.20	\$86
2025	\$21	\$ 73	\$14	\$108	\$73	\$ 7	\$ 6	\$0.20	\$86
2026	\$21	\$74	\$14	\$108	\$74	\$ 7	\$6	\$0.20	\$87
2027	\$21	\$75	\$14	\$109	\$75	\$ 6	\$6	\$0.20	\$87
2028	\$21	\$76	\$14	\$110	\$76	\$6	\$6	\$0.20	\$88

Present Value of Benefits \$997

Present Value of Costs \$943

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

	Appliance Type
į	Clothes Drying

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Mein	2.90%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	5.10%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter	8.60%

Revenue - Energy Charge							
1	2	3	2*3				
Year	Therms	Base Rate	Total Charge				
2009	50	\$0,4147	\$21				
2010	50	\$0.4147	\$21				
2011	50	\$0.4147	\$21				
2012	50	\$0.4147	\$21				
2013	50	\$0.4147	\$21				
2014	50	\$0,4147	\$21				
2015	50	\$0.4147	\$21				
2016	50	\$0.4147	\$21				
2017	50	\$0.4147	\$21				
2018	50	\$0.4147	\$21				
2019	50	\$0.4147	\$21				
2020	50	\$0.4147	\$21				
2021	50	\$0.4147	\$21				
2022	50	\$0.4147	\$21				
2023	50	\$0.4147	\$21				
2024	50	\$0.4147	\$21				
2025	50	\$0.4147	\$21				
2026	50	\$0.4147	321				
2027	50	\$0.4147	\$21				
2028	50	\$0.4147	\$21				

Revenue - Cost of Gas								
11		4	2*3					
Year	Therms	Fuel Rate	Total Charge					
2009	50	\$1.2533	\$63					
2010	50	\$1,2658	\$63					
2011	50	\$1,2785	\$64					
2012	50	\$1.2913	\$65					
2013	50	\$1,3042	\$65					
2014	50	\$1.3172	\$65					
2015	50	\$1.3304	867					
2016	50	\$1.3437	\$67					
2017	50	\$1,3571	\$88					
2018	50	\$1.3707	\$69					
2019	50	\$1,3644	869					
2020	- 50	\$1.3983	\$70					
2021	50	\$1,4122	\$71					
2022	50	\$1.4264	\$71					
2023	50	\$1,4408	\$72					
2024	50	\$1.4550	\$73					
2025	50	\$1,4896	\$73					
2025	50	\$1.4843	\$74					
2027	50	\$1,4991	\$75					
2028	50	\$1.5141	\$76					

Revenue - Customer Charge									
1	2	3	4	4*3					
	Monthly		Ratio Therms						
	Customer	Annual Customer	To Total	Prorated Annual					
Year	Charge	Charge	Consumed	Customer Charge					
2009	\$10.00	\$120.00	11.29%	\$14					
2010	\$10.00	\$120.00	11.29%	\$14					
2011	\$10.00	\$120.00	11.29%	\$14					
2012	\$10.00	\$120,00	11.29%	\$14					
2013	\$10.00	\$120.00	11,29%	514					
2014	\$10.00	\$120.00	11.29%	\$14					
2015	\$10.00	\$120.00	11.20%	\$14					
2018	\$10.00	\$120.00	11.29%	\$14					
2017	\$10.00	\$120.00	11.29%	314					
2018	\$10,00	\$120.00	11.29%	\$14					
2019	\$10.00	\$120.00	11.29%	\$14					
2020	\$10,00	\$120.00	11.29%	\$14					
2021	\$10.00	\$120.00	11.29%	\$14					
2022	\$10.00	\$120.00	11.29%	\$14					
2023	\$10.00	\$120,00	11.20%	\$14					
2024	\$10.00	\$120.00	11,29%	\$14					
2025	\$10.00	\$120.00	11.29%	514					
2026	\$10.00	\$120.00	11.20%	514					
2027	\$10.00	\$120.00	11.29%	514					
2028	\$10.00	\$120.00	11.29%	514					

			Inve	stment Ca	rrying Costs			
1	2	3	4	5	6	7	8	8'7'8
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meler	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$800	\$163	\$1,363	8.72%	11.29%	\$13
2010	\$97	\$466	\$569	\$152	\$1,304	8.72%	11.29%	\$13
2011	\$94	\$472	\$540	\$142	\$1,248	8.72%	11.29%	\$12
2012	\$91	\$458	\$512	\$133	\$1,194	8.72%	11.29%	\$12
2013	\$68	\$445	\$486	\$124	\$1,143	8.72%	11.29%	\$11
2014	\$85	\$432	\$461	\$116	\$1,094	8.72%	11.29%	\$11
2015	\$83	\$419	\$437	\$106	\$1,047	8.72%	11.29%	\$10
2016	\$61	\$407	\$415	\$101	\$1,004	8.72%	11.29%	\$10
2017	\$79	\$395	\$394	\$94	\$962	8.72%	11.29%	\$9
2018	\$77	\$394	\$374	\$98	\$923	8 72%	11.29%	\$9
2019	\$75	\$373	\$355	\$82	\$865	8.72%	11,29%	\$9
2020	\$73	\$362	\$337	\$77	5849	8.72%	11.29%	58
2021	\$71	\$352	\$320	\$72	\$815	8.72%	11.29%	\$8
2022	\$69	\$342	\$304	\$67	\$782	8.72%	11.29%	\$6
2023	\$67	\$332	\$288	\$63	\$750	8.72%	11.29%	\$7
2024	\$65	\$322	\$273	\$59	\$719	8.72%	11.29%	\$7
2025	882	\$313	\$259	\$55	\$690	8.72%	11,29%	\$7
2026	\$81	\$304	\$246	\$51	\$662	8.72%	11.29%	\$7
2027	\$59	\$295	\$233	\$48	\$635	8.72%	11.29%	\$6
2028	357	\$286	\$221	\$45	\$609	8.72%	11.29%	\$6

			Incre	emental Cust	omer Costs			
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Thorns To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cast	Total Consumed	Adm. Cost	D&M Cost	Total Consumed	O&M Cost	Adm & O&M Cost
2009	\$1.98	\$24	11.29%	\$2.71	\$19.13	11.29%	\$2	\$5
2010	\$2.00	\$24	11.29%	\$2.71	\$19.32	11.29%	\$2	\$5
2011	\$2.02	\$24	11.29%	\$2.71	\$19,51	11,29%	\$2	\$5
2012	\$2.04	\$24	11,29%	\$2.71	\$19.71	11.29%	\$2	\$5
2013	\$2.06	\$25	11.29%	\$2.82	\$19.91	11.29%	\$2	\$5
2014	\$2.08	\$25	11.29%	\$2.82	\$20.11	11.29%	\$2	\$5
2015	\$2.10	\$25	11.29%	\$2.82	\$20.31	11.29%	\$2	\$5
2016	\$2.12	\$25	11.29%	\$2.82	\$20.51	11,29%	\$2	3.5
2017	\$2.14	\$28	11,29%	\$2.93	\$20.72	11.29%	\$2	\$5
2018	\$2.17	\$26	11.29%	\$2 93	\$20.92	11.29%	52	\$5
2019	\$2.19	\$26	11.29%	\$2.93	\$21.13	11.29%	52	\$5
2020	\$2.21	\$27	11,29%	\$3.05	\$21.34	11.29%	\$2	\$5
2021	\$2.23	\$27	11.29%	\$3.05	\$21.56	11.29%	52	\$5
2022	\$2.25	\$27	11.29%	\$3.05	\$21.77	11.29%	52	38
2023	\$2.28	\$27	11.29%	\$3.05	\$21.99	11.29%	\$2	\$6
2024	\$2.30	\$28	11.29%	\$3.16	\$22.21	11,29%	53	\$6
2025	\$2.32	\$28	11.29%	\$3 16	\$22.43	11.29%	53	56
2026	\$2.34	\$28	11.29%	\$3.16	\$22 66	11.29%	\$3	\$6
2027	\$2.37	\$28	11.29%	\$3.16	\$22.66	11.29%	53	\$6
2028	\$2.39	\$29	11.29%	\$3,27	\$23,11	11.29%	\$ 3	\$6

	Gas	Costs		
1	2	3	2*3	
	Therms	Per Therm	Gas Supply	
Year		Supply Cost	Cost	
2009	50	1.2533	\$63	
2010	50	\$1,2658	\$63	
2011	50	\$1,2785	\$84	
2012	50	\$1.2913	\$65	
2013	50	\$1.3042	\$65	
2014	50	\$1.3172	\$66	
2015	50	\$1 3304	\$67	
2016	50	\$1.3437	\$67	
2017	50	\$1 3571	\$68	
2018	50	\$1 3707	\$69	
2019	50	\$1,3844	\$69	
2020	50	\$13983	\$70	
2021	50	\$1.4122	\$71	
2022	50	\$1,4264	571	
2023	50	\$1 4406	\$72	
2024	50	\$1.4550	\$73	
2025	50	\$ t 4896	\$73	
2026	50	\$1.4843	\$74	
2027	50	\$1 4991	\$75	
2028	50	\$1,5141	\$76	

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Cooking

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$19	\$56	\$12	\$87	\$56	\$12	\$4	\$100.18	\$173
2010	\$19	\$57	\$12	\$88	\$57	\$12	\$4	\$0.18	\$ 73
2011	\$19	\$5 8	\$12	\$88	\$58	\$11	\$4	\$0.18	\$73
2012	\$19	\$58	\$12	\$89	\$58	\$11	\$4	\$0.18	\$73
2013	\$19	\$59	\$12	\$90	\$59	\$10	\$ 5	\$0,18	\$74
2014	\$19	\$59	\$12	\$90	\$59	\$10	\$ 5	\$0.18	\$74
2015	\$19	\$60	\$12	\$91	\$60	\$9	\$ 5	\$0.18	\$74
2016	\$19	\$60	\$12	\$91	\$60	\$9	\$ 5	\$0.18	\$74
2017	\$19	\$61	\$12	\$92	\$61	\$9	\$ 5	\$0.18	\$75
2018	\$19	\$62	\$12	\$93	\$62	\$8	\$5	\$0.18	\$75
2019	\$19	\$62	\$12	\$93	\$62	\$8	\$5	\$0.18	\$75
2020	\$19	\$63	\$12	\$94	\$63	\$8	\$ 5	\$0.18	\$76
2021	\$19	\$64	\$12	\$94	\$64	\$ 7	\$ 5	\$0.18	\$76
2022	\$ 19	\$64	\$12	\$95	\$64	\$ 7	\$ 5	\$0.18	\$76
2023	\$19	\$65	\$12	\$96	\$65	\$ 7	\$5	\$100.18	\$177
2024	\$19	\$65	\$12	\$96	\$65	\$ 6	\$ 5	\$0.18	\$77
2025	\$ 19	\$66	\$12	\$97	\$66	\$ 6	\$5	\$0.18	\$78
2026	\$19	\$67	\$12	\$96	\$67	\$6	\$5	\$0.18	\$78
2027	\$19	\$67	\$12	\$98	\$67	\$6	\$ 5	\$0.18	\$78
2028	\$19	\$68	\$12	\$99	\$68	\$ 5	\$5	\$0.18	\$79

Present Value Present Value of Benefits \$898 of Costs \$856

Benefit/Cost		
Ratio	1.05	

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

	Appliance Type
ı	Cooking

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Base Rate Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	5.10%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter	6.80%

		Energy Cha	
1	2	3	2.3
ear	Thorms	Baso Rato	Total Charge
900	45	\$0.4147	\$19
010	45	\$0.4147	\$19
110	45	\$0.4147	\$19
012	45	\$0.4147	\$19
013	45	\$0.4147	\$19
014	45	\$0.4147	\$19
015	45	\$0.4147	\$19
016	45	\$0.4147	\$19
017	45	\$0,4147	\$19
018	45	\$0.4147	\$19
019	45	\$0.4147	\$19
020	45	\$0.4147	\$19
021	45	\$0.4147	\$19
022	45	\$0.4147	\$19
023	45	\$0.4147	\$19
024	45	\$0,4147	\$19
025	45	\$0.4147	\$19
026	45	\$0.4147	\$19
027	45	\$0.4147	\$19
028	45	\$0.4147	\$19

	Revenue - Cos	st of Gas	
1	2	4	2*3
Yoar	Therms	Fuel Rate	Total Charge
2009	45	\$1.2533	\$56
2010	45	\$1,2658	\$57
2011	45	\$1,2765	\$58
2012	45	\$1.2913	\$58
2013	45	\$1.3042	\$59
2014	45	\$1,3172	\$59
2015	45	\$1,3304	\$60
2018	45	\$1,3437	580
2017	45	\$1.3571	\$61
2018	45	\$1.3707	\$62
2019	45	\$1.3844	\$62
2020	45	\$1.3983	\$63
2021	45	\$1.4122	\$64
2022	45	\$1.4284	\$84
2023	45	\$1.4406	\$65
2024	45	\$1,4550	\$65
2025	45	\$1,4698	\$66
2028	45	\$1.4843	\$67
2027	45	\$1,4991	\$67
2028	45	\$1.5141	\$68

	Re	venue - Custome	er Charge	
_1	2	3	4	4*3
	Manthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$10.00	\$120.00	10.18%	\$12
2010	\$10.00	\$120.00	10.16%	\$12
2011	\$10.00	\$120.00	10.18%	512
2012	\$10.00	\$120.00	10.16%	\$12
2013	\$10.00	\$120.00	10.18%	\$12
2014	\$10.00	\$120.00	10.18%	\$12
2015	\$10.00	\$120.00	10.18%	\$12
2016	\$10,00	\$120.00	10.18%	\$12
2017	\$10,00	\$120.00	10.16%	\$12
2018	\$10.00	\$120,00	10.16%	\$12
2019	\$10,00	\$120.00	10,16%	\$12
2020	\$10.00	\$120.00	10.18%	\$12
2021	\$10,00	\$120.00	10.18%	\$12
2022	\$10.00	\$120.00	10.16%	\$12
2023	\$10.00	\$120.00	10,18%	\$12
2024	\$10,00	\$120.00	10.16%	\$12
2025	\$10.00	\$120.00	10.16%	\$12
2026	\$10,00	\$120.00	10.16%	\$12
2027	\$10.00	\$120.00	10,18%	\$12
2028	\$10.00	\$120.00	10.18%	\$12

					rrying Costs			
_1	2	33	44		6		8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	hwastmant
Year	Main	Main	Line	Meler	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$600	\$163	\$1,363	8.72%	10.18%	\$12
2010	\$97	\$488	\$569	\$152	\$1,304	8.72%	10.16%	\$12
2011	\$94	\$472	\$540	\$142	\$1,248	8.72%	10.16%	\$11
2012	\$91	\$458	\$512	\$133	\$1,194	8.72%	10.16%	\$11
2013	\$88	\$445	\$486	\$124	\$1,143	8.72%	10.18%	\$10
2014	\$85	\$432	\$461	\$116	\$1,094	8.72%	10.16%	\$19
2015	\$83	\$419	\$437	\$108	\$1,047	8.72%	10.18%	29
2018	\$61	\$407	\$415	\$101	\$1,004	8.72%	10.16%	\$9
2017	\$79	\$395	\$394	\$94	\$962	8 72%	10.16%	29
2018	\$77	\$384	\$374	\$88	\$923	8,72%	10.16%	\$8
2019	\$7.5	\$373	\$355	\$82	\$885	8.72%	10.16%	\$8
2020	\$73	\$362	\$337	\$77	\$849	8.72%	10.18%	\$8
2021	\$71	\$352	\$320	\$72	\$815	8.72%	10.16%	\$7
2022	\$69	\$342	\$304	\$67	\$782	8.72%	10.16%	\$7
2023	\$67	\$332	\$288	\$63	\$750	8.72%	10,18%	\$7
2024	\$65	\$322	\$273	\$50	\$719	8.72%	10.18%	\$6
2025	\$63	\$313	\$259	\$55	\$890	8.72%	10.16%	\$6
2026	\$61	\$304	\$246	\$51	\$662	8,72%	10.16%	\$ 6
2027	\$59	\$295	\$233	\$48	\$635	8.72%	10.16%	\$6
2028	\$57	\$286	\$221	\$45	\$609	8 72%	10 18%	\$5

1 2 3 4 5=3*4 6 7 8=8*7 5													
	Monthly	Annuel	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total incrementa					
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost					
2009	\$1.98	\$24	10 16%	\$2.44	\$19.13	10.18%	\$2	\$4					
2010	\$2.00	\$24	10.16%	\$2.44	\$19,32	10.16%	\$2	\$-4					
2011	\$2.02	\$24	10.16%	\$2.44	\$19.51	10.16%	\$2	\$4					
2012	\$2.04	\$24	10.16%	\$2.44	\$19.71	10.16%	\$2	84					
2013	\$2,06	\$25	10.16%	\$2.54	\$19.91	10.18%	\$2	\$5					
2014	\$2.08	\$25	10.18%	\$2.54	\$20.11	10.16%	\$2	\$5					
2015	\$2.10	\$25	10.18%	\$2.54	\$20.31	10.16%	\$2	\$5					
2016	\$2,12	\$25	10.18%	\$2.54	\$20.51	10.16%	\$2	\$5					
2017	\$2.14	\$26	10.16%	\$2.84	\$20.72	10,16%	\$2	\$5					
2018	\$2.17	\$26	10.16%	\$2.84	\$20,92	10.16%	\$2	\$5					
2019	\$2,19	\$26	10.16%	\$2.64	\$21.13	10.16%	\$2	\$5					
2020	\$2.21	\$27	10 16%	\$2.74	\$21.34	10 16%	\$2	\$.5					
2021	\$2.23	\$27	10.16%	\$2.74	\$21.58	10.16%	\$2	\$5					
2022	\$2.25	\$27	10.16%	\$2.74	\$21.77	10.18%	\$2	\$5					
2023	\$2.28	\$27	10.16%	\$2.74	\$21,99	10.16%	\$2	\$5					
2024	\$2.30	\$28	10.18%	\$2.84	\$22.21	10.16%	\$2	\$5					
2025	\$2.32	\$28	10.16%	\$2.84	\$22 43	10.18%	\$2	\$5					
2028	\$2.34	\$28	10.16%	\$2.84	\$22.66	10 16%	\$2	\$5					
2027	\$2.37	\$28	10.16%	\$2.84	\$22.88	10 16%	\$2	\$5					
2028	\$2.39	\$29	10.16%	\$2.95	523.11	10.10%	\$2	\$5					

Gas Costs												
1	2	3	213									
	Themas	Commodity Gas	Gas Supply									
Year		Supply Cost	Cost									
2009	45	1.2533	\$56									
2010	45	\$1.2658	\$57									
2011	45	\$1,2785	\$58									
2012	45	\$1.2913	\$58									
2013	45	\$1,3042	\$59									
2014	45	\$1 3172	\$59									
2015	45	\$1.3304	\$60									
2016	45	\$1 3437	\$60									
2017	45	\$1 3571	\$61									
2018	45	\$1.3707	\$62									
2019	45	\$1.3844	\$62									
2020	45	\$1 3963	\$63									
2021	45	\$1 4122	\$64									
2022	45	\$1.4284	\$64									
2023	45	\$1 4406	\$65									
2024	45	\$1.4550	\$65									
2025	45	\$1.4696	5.86									
2026	45	\$1.4843	\$67									
2027	45	51 4991	\$67									
202B	45	\$1,5141	\$68									

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Storage Tank Water Heating

			Benefit	s		Costs													
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS					
		Table 1									Table 2	Table 3	Table 4						
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13					
2009	1	\$508	\$350	\$60	\$918	0	\$0	0	\$100	\$60	\$234	\$78	\$51	\$523					
2010	2	\$509	0	\$ 61	\$570	0	\$0	0		\$61	\$237	\$78	\$ 51	\$426					
2011	3	\$511	0	\$ 61	\$572	0	\$0	0		\$61	\$239	\$78	\$51	\$428					
2012	4	\$512	0	\$62	\$574	0	\$0	0		\$62	\$241	\$78	\$ 51	\$431					
2013	5	\$514	0	\$62	\$576	0	\$0	0		\$62	\$244	\$78	\$ 51	\$435					
2014	6	\$515	0	\$6 3	\$578	0	\$0	0		\$63	\$246	\$78	\$ 51	\$438					
2015	7	\$517	0	\$64	\$580	0	\$0	0		\$64	\$249	\$78	\$51	\$441					
2016	8	\$518	0	\$64	\$582	0	\$0	0		\$64	\$251	\$78	\$51	\$444					
2017	9	\$519	0	\$ 65	\$584	0	\$0	0		\$65	\$254	\$78	\$ 51	\$447					
2018	10	\$521	350	\$6 6	\$937	421	(\$659)	239		\$66	\$256	\$78	\$51	\$450					
2019	11	\$522	0	\$66	\$589	0	\$0	0		\$66	\$259	\$78	\$51	\$453					
2020	12	\$524	0	\$67	\$691	0	\$0	0		\$ 67	\$261	\$76	\$ 51	\$467					
2021	13	\$525	0	\$68	\$593	0	\$0	0		\$68	\$264	\$78	\$51	\$480					
2022	14	\$527	0	\$68	\$595	0	\$0	0		\$68	\$267	\$78	\$51	\$463					
2023	15	\$528	0	\$69	\$597	0	\$0	0		\$69	\$269	\$78	\$51	\$467					
2024	16	\$530	0	\$70	\$599	0	\$0	0		\$70	\$272	\$78	\$ 51	\$470					
2025	17	\$531	0	\$70	\$601	0	\$0	0		\$70	\$275	\$78	\$51	\$473					
2026	18	\$533	0	\$71	\$604	0	\$0	0		\$71	\$278	\$78	\$51	\$477					
2027	19	\$534	0	\$72	\$605	0	\$0	0		\$72	\$280	\$78	\$51	\$480					
2028	20	\$535	0	\$72	\$608	0	\$0	0		\$72	\$283	\$78	\$51	\$484					

Present Value of Benefits \$6,206

Present Value of Costs \$4,456

Benefit/Cost 1.39
Ratio

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Storage Tank Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tabi	e 1		Natural Gas Supply Cost - Table 2						Natural Gas	Energy Ch	arge - Tal	ble 3				Natural Gas (Customer Ci	harge - Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	e NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rat	e NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Applisace Annuai Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	С	D	B*C*(1+D)	Α_	В	С	Ð	B*C*(1+D)	A		С	D	B*C*(1+D)	Α	8	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	188	7.5%	\$508	2009	\$1.2533	170	10%	\$234	2009	\$0.4147	170	10%	\$78	2009	\$10.00	\$120.00	170	443	38.37%	10%	\$51
2010	\$2.5533	186	7.5%	\$509	2010	\$1.2658	170	10%	\$237	2010	\$0.4147	170	10%	\$78	2010	\$10.00	\$120.00	170	443	38.37%	10%	\$51
2011	\$2,5605	186	7.5%	\$811	2011	\$1.2785	170	10%	\$239	2011	\$0.4147	170	10%	\$78	2011	\$10.00	\$120,00	170	443	38.37%	10%	\$51
2012	\$2.5678	188	7.5%	\$512	2012	\$1.2913	170	10%	\$241	2012	\$0.4147	170	10%	\$78	2012	\$10.00	\$120.00	170	443	38.37%	10%	\$81
2013	\$2.5750	186	7.5%	\$814	2013	\$1.3042	170	10%	\$244	2013	\$0,4147	170	10%	\$78	2013	\$10.00	\$120.00	170	443	36.37%	10%	\$61
2014	\$2.5823	186	7.5%	\$515	2014	\$1.3172	170	10%	\$246	2014	\$0.4147	170	10%	\$78	2014	\$19.00	\$120.00	170	443	38.37%	10%	\$51
2015	\$2.5896	186	7.5%	\$517	2015	\$1.3304	170	10%	\$248	2015	\$0.4147	170	10%	\$78	2015	\$10.00	\$120.00	170	443	38.37%	10%	\$51
2016	\$2.5986	186	7.5%	\$618	2016	\$1.3437	170	10%	\$251	2016	\$0,4147	170	10%	\$78	2016	\$10.00	\$129.00	170	443	38.37%	10%	\$81
2017	\$2.5041	186	7.5%	\$619	2017	\$1.3571	170	10%	\$254	2017	\$0.4147	170	10%	\$78	2017	\$10.00	\$120.00	170	443	38.37%	10%	\$51
2018	\$2.6113	188	7.5%	\$521	2018	\$1.3707	170	10%	\$256	2018	\$0.4147	170	10%	\$78	2018	\$10.00	\$120.00	170	443	38.37%	10%	\$81
2019	\$2.6188	186	7.5%	\$522	2019	\$1.3844	170	10%	\$2 59	2019	\$0.4147	170	10%	\$78	2019	\$10.00	\$120.00	170	443	36.37%	10%	\$81
2020	\$2,6259	186	7.5%	\$624	2020	\$1.3983	170	10%	\$261	2020	\$0.4147	170	10%	\$78	2020	\$10.00	\$120.00	170	443	38.37%	10%	\$51
2021	\$2.6331	186	7.5%	\$525	2021	\$1.4122	170	10%	\$264	2021	\$0,4147	170	10%	\$78	2021	\$10.00	\$120.00	170	443	38.37%	10%	\$51
2022	\$2.6404	166	7.5%	\$627	2022	\$1.4284	170	10%	\$267	2022	\$0.4147	170	10%	\$78	2022	\$10.00	\$120.00	170	443	38.37%	10%	\$ 51
2023	\$2.6476	186	7.5%	\$628	2023	\$1.4406	170	10%	\$269	2023	\$0.4147	170	10%	\$78	2023	\$10.00	\$120.00	170	443	38.37%	10%	\$81
2024	\$2.6549	186	7.5%	\$830	2024	\$1.4550	170	10%	\$272	2024	\$0,4147	170	10%	\$78	2024	\$10.00	\$120.00	170	443	38.37%	10%	\$81
2025	\$2,8622	186	7.5%	\$631	2025	\$1.4696	170	10%	\$275	2025	\$0.4147	170	10%	\$78	2025	\$10.00	\$120.00	170	443	38.37%	10%	\$51
2026	\$2.6694	186	7.5%	\$633	2026	\$1.4843	170	10%	\$278	2026	\$0,4147	170	10%	\$78	2026	\$10.00	\$120.00	170	443	38.37%	10%	\$81
2027	\$2.6767	186	7.5%	\$834	2027	\$1.4991	170	10%	\$280	2027	\$0.4147	170	10%	\$78	2027	\$10.00	\$120.00	170	443	38.37%	10%	\$81
2028	\$2,6839	186	7.5%	\$535	2028	\$1.5141	170	10%	\$283	2028	\$0.4147	170	10%	\$78	2028	\$10.00	\$120.00	170	443	38.37%	10%	\$51

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Tankless Water Heating

			Benefits			Costs												
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS				
		Table 1									Table 2	Table 3	Table 4					
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13				
2009	1	\$448	\$450	\$60	\$958	\$0	\$0	\$0	\$100	\$60	\$207	\$68	\$47	\$482				
2010	2	\$449	0	\$61	\$510	0	\$0	0		\$61	\$209	\$68	\$47	\$385				
2011	3	\$451	0	\$61	\$512	0	\$0	0		\$ 61	\$211	\$68	\$47	\$387				
2012	4	\$452	0	\$62	\$514	0	\$0	0		\$62	\$213	\$68	\$47	\$390				
2013	5	\$453	0	\$62	\$516	0	\$0	0		\$62	\$215	\$68	\$ 47	\$393				
2014	6	\$455	0	\$63	\$518	0	\$0	0		\$63	\$217	\$68	\$47	\$396				
2015	7	\$456	0	\$64	\$520	0	\$0	0		\$64	\$220	\$68	\$47	\$398				
2016	8	\$457	0	\$64	\$521	0	\$0	0		\$64	\$222	\$68	\$47	\$401				
2017	9	\$458	0	\$65	\$523	0	\$0	0		\$65	\$224	\$68	\$47	\$404				
2018	10	\$460	0	\$66	\$525	0	\$0	0		\$ 66	\$226	\$68	\$47	\$407				
2019	11	\$461	0	\$66	\$527	0	\$0	0		\$66	\$228	\$68	\$47	\$410				
2020	12	\$462	0	\$67	\$529	0	\$0	0		\$67	\$231	\$68	\$47	\$413				
2021	13	\$463	0	\$68	\$531	0	\$0	0		\$68	\$233	\$68	\$47	\$416				
2022	14	\$465	0	\$68	\$533	0	\$0	0		\$68	\$235	\$68	\$47	\$419				
2023	15	\$466	0	\$69	\$535	0	\$0	0		\$69	\$238	\$68	\$47	\$422				
2024	16	\$467	0	\$70	\$537	0	\$0	0		\$70	\$240	\$68	\$47	\$425				
2025	17	\$469	0	\$70	\$539	0	\$0	0		\$70	\$242	\$68	\$47	\$428				
2026	18	\$470	0	\$71	\$541	0	\$0	0		\$71	\$245	\$68	\$47	\$431				
2027	19	\$471	0	\$72	\$543	0	\$0	0		\$72	\$247	\$68	\$47	\$434				
2028	20	\$472	450	\$72	\$995	1,219	(\$1,746)	527		\$72	\$250	\$68	\$47	\$438				

Present Value of Benefits \$5,634

Present Value of Costs \$4,038

Benefit/Cost 1,40
Ratio

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Tankless Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ene Cost - Ta	ble 1			Natuari G	s Supply Co	ost - Table 2			Natural G	as Energy Cl	arge - Tabl	le 3			Nati	ural Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gallon	Annuel Gelions	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annuel Therms	Tax Rate	NG Cost	Ye	Monthly ar Custome Charge		Appliance Annual Thems	Total Annual Themas	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	8	С	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	A	8	С	D	B*C*(1+D)		В	c	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	164	7.5%	\$448	2009	\$1.2533	150	10%	\$207	2009	\$0.4147	150	10%	\$88	20	9 \$10.00	\$120.00	150	423	35.46%	10%	\$47
2010	\$2.5533	164	7.5%	\$449	2010	\$1.2658	150	10%	\$209	2010	\$0,4147	150	10%	\$68	20	10 \$10.00	\$120.00	150	423	35.46%	10%	\$47
2011	\$2.5605	164	7.5%	\$451	2011	\$1,2785	150	10%	\$211	2011	\$0.4147	150	10%	\$68	20	11 \$10.00	\$120.00	150	423	35.46%	10%	\$47
2012	\$2.5678	164	7.5%	\$452	2012	\$1.2913	150	10%	\$213	2012	\$0.4147	150	10%	\$68	20	12 \$10.00	\$120.00	150	423	35.48%	10%	\$47
2013	\$2.5750	164	7.5%	\$453	2013	\$1.3042	150	10%	\$216	2013	\$0.4147	150	10%	\$68	20	13 \$10.00	\$120.00	150	423	35.46%	10%	\$47
2014	\$2.5823	164	7.5%	\$465	2014	\$1.3172	150	10%	\$217	2014	\$0.4147	150	10%	\$88	20	\$10.00	\$120.00	150	423	35.48%	10%	\$47
2015	\$2.5896	164	7.5%	\$456	2015	\$1.3304	150	10%	\$220	2015	\$0,4147	150	10%	\$68	20	15 \$10,00	\$120.00	150	423	35.46%	10%	\$47
2018	\$2.5968	164	7.5%	\$457	2016	\$1.3437	150	10%	\$222	2016	\$0,4147	150	10%	\$88	20	15 \$10.00	\$120.00	150	423	35,46%	10%	\$47
2017	\$2.6041	164	7.5%	\$468	2017	\$1.3571	150	10%	\$224	2017	\$0.4147	150	10%	\$68	20	7 \$10.00	\$120.00	150	423	35.48%	10%	\$47
2018	\$2.6113	164	7.5%	\$460	2018	\$1,3707	150	10%	\$226	2018	\$0,4147	150	10%	\$68	20	18 \$10.00	\$120.00	150	423	35.46%	10%	\$47
2019	\$2.6186	164	7.5%	\$461	2019	\$1.3844	150	10%	\$228	2019	\$0,4147	150	10%	\$68	20	19 \$10.00	\$120.00	150	423	35.46%	10%	\$47
2020	\$2.6259	164	7.5%	3462	2020	\$1,3983	150	10%	\$231	2020	\$0,4147	150	10%	\$88	20	20 \$10.00	\$120.00	150	423	35.46%	10%	\$47
2021	\$2.8331	164	7.5%	\$463	2021	\$1,4122	150	10%	\$233	2021	\$0,4147	150	10%	\$68	20	21 \$10,00	\$120.00	150	423	35.46%	10%	\$47
2022	\$2.6404	164	7.5%	3465	2022	\$1.4264	150	10%	\$235	2022	\$0.4147	150	10%	\$68	20		\$120.00	150	423	35.46%	10%	\$47
2023	\$2.6476	164	7.5%	\$466	2023	\$1.4406	150	10%	\$238	2023	\$0.4147	150	10%	\$68	20	•	\$120.00	150	423	35.48%	10%	\$47
2024	\$2.6549	164	7.5%	\$467	2024	\$1.4550	150	10%	\$240	2024	\$0.4147	150	10%	\$66	20		\$120.00	150	423	35,46%	10%	\$47
2025	\$2.6622	164	7.5%	\$469	2025	\$1,4696	150	10%	\$242	2025	\$0.4147	150	10%	\$68	20		\$120.00	150	423	35.46%	10%	847
2026	\$2,6694	164	7.5%	\$470	2026	\$1,4843	150	10%	\$245	2026	\$0.4147	150	10%	\$68	20		\$120.00	150	423	35.46%	10%	\$47
2027	\$2.6767	164	7.5%	8471	2027	\$1,4991	150	10%	\$247	2027	\$0.4147	150	10%	\$68	20		\$120.00	150	423	35.46%	10%	\$47
2027	\$2.6839	164	7.5%	\$472	2027	\$1.4691	150	10%	\$250	2027	\$0.4147	150	10%	\$68	20	******	\$120.00	150	423	35.46%	10%	\$47

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Heating System

			D							0				
			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$532	\$350	\$270	\$1,152	\$0	0	\$0	\$100	\$270	\$245	\$81	\$53	\$750
2010	2	\$533	0	\$273	\$806	0	0	0		\$273	\$248	\$81	\$53	\$655
2011	3	\$ 535	0	\$275	\$810	0	0	0		\$275	\$250	\$81	\$53	\$660
2012	4	\$536	0	\$278	\$815	0	0	0		\$278	\$253	\$81	\$53	\$665
2013	5	\$538	0	\$281	\$819	0	0	0		\$281	\$255	\$81	\$53	\$671
2014	6	\$539	0	\$284	\$823	0	0	0		\$284	\$258	\$81	\$53	\$676
2015	7	\$541	0	\$287	\$828	0	0	0		\$287	\$260	\$81	\$53	\$681
2016	8	\$542	0	\$289	\$832	0	0	0		\$289	\$263	\$81	\$53	\$687
2017	9	\$544	0	\$292	\$836	0	0	0		\$292	\$266	\$81	\$53	\$692
2018	10	\$545	0	\$295	\$841	0	0	0		\$295	\$268	\$81	\$5 3	\$698
2019	11	\$547	0	\$298	\$845	0	0	0		\$298	\$271	\$81	\$53	\$704
2020	12	\$548	0	\$301	\$850	0	0	0		\$301	\$274	\$81	\$53	\$709
2021	13	\$550	0	\$304	\$854	0	0	0		\$304	\$277	\$81	\$53	\$715
2022	14	\$552	0	\$307	\$869	0	0	0		\$307	\$279	\$81	\$53	\$721
2023	15	\$553	0	\$310	\$863	0	0	0		\$310	\$282	\$81	\$53	\$727
2024	16	\$555	0	\$313	\$868	0	0	0		\$313	\$285	\$81	\$53	\$733
2025	17	\$556	0	\$317	\$873	0	0	0		\$317	\$288	\$81	\$53	\$739
2026	18	\$558	350	\$320	\$1,227	2,882	(4,657)	1,775		\$320	\$291	\$81	\$53	\$745
2027	19	\$559	0	\$323	\$882	0	0	0		\$323	\$294	\$81	\$5 3	\$751
2028	20	\$561	0	\$326	\$887	0	0	0		\$326	\$296	\$81	\$53	\$757

Present Value \$8,585
of Benefits 6,846

Benefit/Cost 1.25
Ratio

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type	
Heating System	

Escalation Rates		LP Del/Margin Rate	0.0%
О&М Ехрепее	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Pro	pane Cost - Tal	bie 1			Natural G	as Supply C	ost - Table 2			Natural Gas	s Energy Cha	rge - Tabk	3			Natur	i Gas Custo	mer Charg	- Table 4		
Yes	r Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Them	Annual Therms	Tex Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tex Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	c	D	B*C*(1+D)	A	В	С	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	Α	8	c	D	E	D/E	G	C*(D/E)*(1+Z)
200	9 \$2.5460	194	7.5%	\$632	2009	\$1.2533	178	10%	\$245	2009	\$0.4147	178	10%	\$81	2009	\$10.00	\$120.00	178	443	40.18%	10%	\$53
201	0 \$2,5533	194	7.5%	\$633	2010	\$1.2658	178	10%	\$248	2010	\$0.4147	178	10%	\$81	2010	\$10.00	\$120.00	178	443	40.18%	10%	\$53
201	1 \$2.5605	194	7.5%	\$535	2011	\$1.2785	178	10%	\$250	2011	\$0.4147	178	10%	\$81	2011	\$10.00	\$120.00	178	443	40.18%	10%	\$53
201	2 \$2.5678	194	7.5%	\$536	2012	\$1,2913	178	10%	\$253	2012	\$0.4147	178	10%	\$81	2012	\$10.00	\$120.00	178	443	40.18%	10%	\$63
201	3 \$2.5750	194	7.5%	\$638	2013	\$1.3042	178	10%	\$255	2013	\$0.4147	178	10%	\$81	2013	\$10.00	\$120.00	178	443	40.18%	10%	\$63
201	4 \$2.5823	194	7.5%	\$539	2014	\$1.3172	178	10%	\$258	2014	\$0.4147	178	10%	\$81	2014	\$10.00	\$120.00	175	443	40.18%	10%	\$53
201	5 \$2,5896	194	7,5%	\$841	2015	\$1.3304	178	10%	\$260	2015	\$0.4147	178	10%	\$81	2015	\$10.00	\$120.00	179	443	40.18%	10%	\$53
201		194	7.5%	\$642	2016	\$1.3437	178	10%	\$263	2016	\$0.4147	178	10%	\$81	2016	\$10,00	\$120,00	178	443	40.18%	10%	\$53
201		194	7.5%	\$544	2017	\$1.3571	178	10%	\$266	2017	\$0.4147	178	10%	\$81	2017	\$10.00	\$120.00	178	443	40.18%	10%	\$63
201		194	7.5%	\$545	2018	\$1.3707	178	10%	\$268	2018	\$0,4147	178	10%	\$81	2017	\$10.00	\$120.00	178	443	40.18%	10%	\$53
201				\$547										• • • •								
		194	7.5%	, , , ,	2019	\$1.3844	178	10%	\$271	2019	\$0.4147	178	10%	\$81	2019	\$10.00	\$120.00	178	443	40.18%	10%	\$63
202	,	194	7.5%	\$548	2020	\$1,3983	178	10%	\$274	2020	\$0,4147	178	10%	\$81	2020	\$10.00	\$120.00	178	443	40.18%	10%	\$53
202		194	7.5%	\$550	2021	\$1.4122	178	10%	\$277	2021	\$0.4147	178	10%	\$81	2021	\$10.00	\$120.00	178	443	40.16%	10%	\$63
202	2 \$2.6404	194	7.5%	\$652	2022	\$1.4264	178	10%	\$279	2022	\$0.4147	178	10%	\$81	2022	\$10.00	\$120.00	178	443	40.18%	10%	\$53
202	3 \$2.6476	194	7.5%	\$563	2023	\$1.4406	178	10%	\$282	2023	\$0.4147	178	10%	\$81	2023	\$10.00	\$120.00	178	443	40.18%	10%	\$63
202	4 \$2.6549	194	7.5%	\$888	2024	\$1.4550	178	10%	\$285	2024	\$0,4147	178	10%	\$81	2024	\$10.00	\$120.00	178	443	40.18%	10%	\$53
202	5 \$2.6622	194	7.5%	\$550	2025	\$1.4696	178	10%	\$288	2025	\$0.4147	178	10%	\$81	2025	\$10.00	\$120.00	178	443	40.18%	10%	\$83
202	6 \$2.6694	194	7.5%	\$558	2026	\$1.4843	178	10%	\$291	2026	\$9.4147	176	10%	\$81	2026	\$10.00	\$120.00	178	443	40.18%	10%	\$53
202	7 \$2.6767	194	7.5%	\$669	2027	\$1.4991	178	10%	\$294	2027	\$0.4147	178	10%	\$81	2027	\$10.00	\$120.00	178	443	40.18%	10%	\$63
202	8 \$2.6839	194	7.5%	\$561	2028	\$1,5141	178	10%	\$296	2028	\$0.4147	178	10%	\$81	2028	\$10.00	\$120.00	178	443	40.18%	10%	\$53

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Cooking

			Benefits					*****		Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$134	\$100	\$60	\$294	\$0	\$0	\$0	\$100	\$60	\$62	\$21	\$13	\$256
2010	2	\$135	0	\$ 61	\$195	0	\$0	0		\$ 61	\$63	\$21	\$13	\$157
2011	3	\$135	0	\$61	\$196	0	\$0	0		\$61	\$63	\$21	\$13	\$158
2012	4	\$136	0	\$62	\$197	0	\$0	0		\$62	\$64	\$21	\$13	\$160
2013	5	\$136	0	\$62	\$198	0	\$0	0		\$62	\$65	\$21	\$13	\$161
2014	6	\$136	0	\$63	\$199	0	\$0	0		\$63	\$65	\$21	\$13	\$162
2015	7	\$137	0	\$64	\$200	0	\$0	0		\$64	\$66	\$21	\$13	\$163
2016	8	\$137	0	\$64	\$201	0	\$0	0		\$64	\$67	\$21	\$13	\$165
2017	9	\$138	0	\$65	\$202	0	\$0	0		\$65	\$67	\$21	\$13	\$166
2018	10	\$138	0	\$66	\$204	0	\$0	0		\$66	\$68	\$21	\$13	\$167
2019	11	\$138	0	\$66	\$205	0	\$0	0		\$6 6	\$69	\$21	\$13	\$169
2020	12	\$139	0	\$ 67	\$206	0	\$0	0		\$ 67	\$69	\$21	\$13	\$170
2021	13	\$139	0	\$68	\$207	0	\$0	0		\$68	\$70	\$21	\$13	\$171
2022	14	\$139	0	\$68	\$208	0	\$0	0		\$68	\$71	\$21	\$13	\$173
2023	15	\$140	100	\$69	\$309	637	(\$805)	167		\$69	\$71	\$21	\$ 13	\$174
2024	16	\$140	0	\$70	\$210	0	\$0	0		\$70	\$72	\$21	\$ 13	\$176
2025	17	\$141	0	\$70	\$211	0	\$0	0		\$70	\$73	\$21	\$13	\$177
2026	18	\$141	0	\$71	\$212	0	\$0	0		\$71	\$73	\$21	\$13	\$178
2027	19	\$141	0	\$72	\$213	0	\$0	0		\$72	\$74	\$21	\$ 13	\$180
2028	20	\$142	0	\$72	\$214	0	\$0	0		\$72	\$75	\$21	\$13	\$181

of Benefits \$2,103

Present Value of Costs \$1,713

Benefit/Cost 1.23
Ratio

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Cooking

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prot	ane Cost - Tab	de 1			Natural G	as Supply C	ost - Yable 2			Natural Gas	Energy Cha	roe - Table	. 3			Nati	iral Gas Cust	omer Chare	e - Table 4		
Year	Cost Per Gallon	Annual Gallon	Tax Rate	Propane Cost	Yea	Cout Day		Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms		NG Cost	Year	Monthly Gustomer Charge	Annual Customer Charge	Appliance Annual Thems		Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	c	D	B*C*(1+D)	A	B	С	Ð	B*C*(1+D)	A	В	С	D	B*C*(1+D)	A	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2,5460	49	7.5%	\$134	200	\$1.2533	45	10%	\$62	2009	\$0.4147	45	10%	\$21	2009	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2010	\$2.5533	49	7.5%	\$135	201	\$1,2658	45	10%	\$63	2010	\$0.4147	45	10%	\$21	2010	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2011	\$2.5605	49	7.5%	\$135	201	\$1.2785	45	10%	\$63	2011	\$0.4147	45	10%	\$21	2011	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2012	\$2,5678	49	7.5%	\$138	201	\$1,2913	45	10%	\$84	2012	\$0,4147	45	10%	\$21	2012	\$10.00	\$120,00	45	443	10,16%	10%	\$13
2013	\$2.5750	49	7.5%	\$136	201		45	10%	\$65	2013	\$0,4147	45	10%	\$21	2013	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2014	\$2,5823	49	7.5%	\$136	201		45	10%	\$65	2014	\$0,4147	45	10%	\$21	2014	\$10.00	\$120.00	45	443	10,16%	10%	\$13
											,					,	,					
2015	\$2,5896	49	7.5%	\$137	201		45	10%	\$68	2015	\$0.4147	45	10%	\$21	2015	\$10.00	\$120.00	45	443	10.18%	10%	\$13
2016	\$2.5968	49	7.5%	\$137	201	\$1.3437	45	10%	\$67	2016	\$0.4147	45	10%	\$21	2016	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2017	\$2,6041	49	7.5%	\$138	201	\$1,3571	45	10%	\$67	2017	\$0.4147	45	10%	\$21	2017	\$10.00	\$126.00	45	443	10.16%	10%	\$13
2018	\$2.6113	49	7.5%	\$138	201	\$1,3707	45	10%	\$88	2018	\$0.4147	45	10%	\$21	2018	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2019	\$2,6186	49	7.5%	\$138	201	\$1.3844	45	10%	\$69	2019	\$0.4147	45	10%	\$21	2019	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2020	\$2.6259	49	7.5%	\$139	202	\$1.3983	45	10%	\$69	2020	\$0.4147	45	10%	\$21	2020	\$10.00	\$120,00	45	443	10.16%	10%	\$13
2021	\$2.6331	49	7.5%	\$139	202	\$1.4122	45	10%	\$70	2021	\$0.4147	45	10%	\$21	2021	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2022	\$2.6404	49	7.5%	\$139	202	\$1,4264	45	10%	\$71	2022	\$0.4147	45	10%	\$21	2022	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2023	\$2.8476	49	7.5%	\$146	202	\$1,4406	45	10%	\$71	2023	\$0.4147	45	10%	\$21	2023	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2024	\$2,6549	49	7.5%	\$140	202		45	10%	\$72	2024	\$0.4147	45	10%	\$21	2024	\$10.00	\$120.00	45	443	10.16%	10%	\$13
2025	\$2.5622	49	7.5%	\$141	202		45	10%	\$73	2025	\$0.4147	45	10%	\$21	2025	\$10,00	\$120.00	45	443	10.16%	10%	\$13
2026	\$2.6694	49	7.5%	\$141	202			10%	\$73	1		45				\$10,00	\$120.00		443	10.16%		\$13
1						·	45			2026	\$0.4147		10%	\$21	2026	*		45			10%	
2027	\$2.8787	49	7.5%	\$141	202	·	45	10%	\$74	2027	\$0.4147	45	10%	\$21	2027	\$10.00	\$120.00	45	443	10.18%	10%	\$13
2028	\$2.6839	49	7.5%	\$142	202	\$1.5141	45	10%	\$78	2028	\$0.4147	45	10%	\$21	2026	\$10.00	\$120.00	45	443	10.16%	10%	\$13

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Clothes Drying

			Benefits						C	osts				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$149	\$100	\$60	\$309	\$0	\$0	\$0	\$100	\$60	\$69	\$23	\$1 5	\$267
2010	2	\$150	0	\$6 1	\$210	0	\$ 0	0		\$61	\$70	\$23	\$ 15	\$168
2011	3	\$150	0	\$ 61	\$211	0	\$ 0	0		\$61	\$70	\$23	\$ 15	\$169
2012	4	\$151	0	\$62	\$212	0	\$0	0		\$62	\$71	\$23	\$15	\$171
2013	5	\$151	0	\$62	\$214	0	\$ 0	0		\$62	\$72	\$23	\$15	\$172
2014	6	\$152	0	\$63	\$215	0	\$0	0		\$ 63	\$72	\$23	\$15	\$173
2015	7	\$152	0	\$64	\$216	0	\$0	0		\$64	\$73	\$23	\$15	\$175
2016	8	\$152	0	\$64	\$217	0	\$0	0		\$64	\$74	\$23	\$15	\$176
2017	9	\$153	0	\$ 65	\$218	0	\$0	0		\$65	\$ 75	\$23	\$15	\$177
2018	10	\$153	0	\$66	\$219	0	\$ 0	0		\$66	\$ 75	\$23	\$1 5	\$179
2019	11	\$154	0	\$66	\$220	0	\$0	0		\$66	\$ 76	\$23	\$15	\$180
2020	12	\$154	0	\$ 67	\$221	0	\$0	0		\$67	\$77	\$23	\$15	\$182
2021	13	\$154	100	\$68	\$322	533	(\$697)	164		\$68	\$ 78	\$23	\$15	\$183
2022	14	\$155	0	\$68	\$223	0	\$0	0		\$68	\$ 78	\$23	\$15	\$184
2023	15	\$155	0	\$69	\$224	0	\$0	0		\$69	\$ 79	\$23	\$15	\$188
2024	16	\$156	0	\$70	\$225	0	\$0	0		\$70	\$80	\$23	\$ 15	\$187
2025	17	\$156	0	\$70	\$227	0	\$0	0		\$70	\$81	\$23	\$15	\$189
2026	18	\$157	0	\$71	\$228	0	\$0	0		\$71	\$82	\$23	\$ 15	\$190
2027	19	\$157	0	\$72	\$229	0	\$0	0		\$72	\$82	\$23	\$15	\$192
2028	20	\$157	0	\$72	\$230	0	\$0	0		\$72	\$83	\$23	\$15	\$193

of Benefits \$2,258

Present Value of Costs \$1,823

Benefit/Cost 1.24
Ratio

Peoples Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Clothes Drying

1			
Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Coet	1.0%	NG Base Rates	0.0%

	Proj	pane Cost - Tab	le 1			Natural G	as Supply C	ost - Table 2			Natural Ga	s Energy Ch	arge - Table	3			Natur	al Gas Custo	mer Charge	e - Table 4		
Year	Cost Per Gallon	Annual Galions	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A		c	٥	B*C*(1+D)	Α_	В	С	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	Α	В	C	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	55	7.5%	\$149	2009	\$1,2533	50	10%	\$69	2009	\$0,4147	50	10%	\$23	2009	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2010	\$2.5533	55	7.5%	\$150	2010	\$1,2858	50	10%	\$70	2010	\$0.4147	50	10%	\$23	2010	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2011	\$2.5605	55	7.5%	\$150	2011	\$1.2785	50	10%	\$70	2011	\$0.4147	50	10%	\$23	2011	\$10,00	\$120.00	50	443	11.29%	10%	\$15
2012	\$2.5676	55	7.5%	\$151	2012	\$1.2913	50	10%	\$71	2012	\$0.4147	50	10%	\$23	2012	\$10.00	\$120.00	50	443	11.29%	10%	\$18
2013	\$2.5750	55	7.5%	\$151	2013	\$1.3042	50	10%	\$72	2013	\$0.4147	50	10%	\$23	2013	\$18.00	\$120.00	50	443	11.29%	10%	\$15
2014	\$2.5823	55	7.5%	\$162	2014	\$1.3172	50	10%	\$72	2014	\$0.4147	50	10%	\$23	2014	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2015	\$2.5896	55	7.5%	\$152	2015	\$1.3304	50	10%	\$73	2015	\$0.4147	50	10%	\$23	2015	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2016	\$2,5966	55	7.5%	\$152	2016	\$1.3437	50	10%	\$74	2016	\$0.4147	50	10%	\$23	2016	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2017	\$2,6041	55	7.5%	\$163	2017	\$1.3571	50	10%	\$76	2017	\$0.4147	50	10%	\$2 3	2017	\$10.00	\$120.00	50	443	11.29%	10%	\$18
2018	\$2.6113	55	7.5%	\$163	2016	\$1.3707	50	10%	\$75	2016	\$0.4147	50	10%	\$23	2016	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2019	\$2.6186	55	7.5%	\$154	2019	\$1.3844	50	10%	\$76	2019	\$0.4147	50	10%	\$2 3	2019	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2020	\$2.625 9	55	7.5%	\$154	2020	\$1.3963	50	10%	\$77	2020	\$0.4147	50	10%	\$23	2020	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2021	\$2,6331	55	7.5%	\$154	2021	\$1.4122	50	10%	\$76	2021	\$0.4147	50	10%	\$23	2021	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2022	\$2.6404	55	7.5%	\$155	2022	\$1.4264	50	10%	\$78	2022	\$0.4147	50	10%	\$23	2022	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2023	\$2.6476	55	7.5%	\$156	2023	\$1,4406	50	10%	\$79	2023	\$0.4147	50	10%	\$23	2023	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2024	\$2.6549	55	7.5%	\$156	2024	\$1,4550	50	10%	\$80	2024	\$0.4147	50	10%	\$23	2024	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2025	\$2.6622	55	7.5%	\$156	2025	\$1,4696	50	10%	\$81	2025	\$0.4147	50	10%	\$23	2025	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2026	\$2.6694	55	7.5%	\$167	2026	\$1,4843	50	10%	\$82	2026	\$0.4147	50	10%	\$23	2026	\$10.00	\$120.00	50	443	11.29%	10%	\$15
2027	\$2,6767	55	7.5%	\$167	2027	\$1,4991	50	10%	\$82	2027	\$0.4147	50	10%	\$23	2027	\$10,00	\$120.00	50	443	11.29%	10%	\$18
2028	\$2.6839	55	7.5%	\$157	2028	\$1,5141	50	10%	\$83	2028	\$0.4147	50	10%	\$23	2028	\$10.00	\$120.00	50	443	11.29%	10%	\$15

Attachment 2.6

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

Sebring Gas System Rate Impact Measurement Test Participants Test

Summary of RIM Test and Participants Test Results

	Proposed <u>Allowance</u>	Participants Test	RIM Test
Gas Storage Tank Water Heating	\$350	1.56	1.16
Gas Tankless Water Heating	\$450	1.56	1.11
Gas Heating	\$350	1.36	1.20
Gas Clothes Drying	\$100	1.34	1.18
Gas Cooking	\$100	1.33	1.17

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Storage Tank Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$87	\$147	\$55	\$289	\$147	\$46	\$11	\$352.37	\$557
2010	\$87	\$ 149	\$5 5	\$291	\$149	\$4 5	\$12	\$2.37	\$207
2011	\$87	\$150	\$55	\$2 92	\$150	\$43	\$12	\$2.37	\$207
2012	\$87	\$152	\$55	\$294	\$152	\$42	\$12	\$2.37	\$207
2013	\$87	\$153	\$5 5	\$295	\$153	\$41	\$12	\$2.37	\$208
2014	\$87	\$ 155	\$55	\$297	\$155	\$39	\$12	\$2.37	\$208
2015	\$87	\$156	\$55	\$298	\$156	\$38	\$12	\$2.37	\$209
2016	\$87	\$158	\$55	\$300	\$158	\$37	\$12	\$2.37	\$209
2017	\$87	\$159	\$55	\$302	\$159	\$36	\$12	\$2.37	\$210
2018	\$87	\$161	\$55	\$303	\$161	\$35	\$ 12	\$352.37	\$560
2019	\$87	\$ 163	\$55	\$305	\$163	\$34	\$13	\$2.37	\$211
2020	\$87	\$164	\$ 55	\$306	\$164	\$33	\$13	\$2.37	\$212
2021	\$87	\$166	\$55	\$308	\$166	\$32	\$13	\$2.37	\$213
2022	\$87	\$168	\$55	\$310	\$168	\$31	\$13	\$2.37	\$213
2023	\$87	\$169	\$55	\$311	\$169	\$30	\$13	\$2.37	\$214
2024	\$87	\$171	\$55	\$313	\$171	\$29	\$13	\$2.37	\$215
2025	\$87	\$173	\$5 5	\$315	\$173	\$28	\$13	\$2.37	\$216
2026	\$87	\$174	\$5 5	\$317	\$174	\$27	\$ 13	\$2.37	\$217
2027	\$87	\$176	\$ 55	\$318	\$ 176	\$26	\$13	\$2.37	\$218
2028	\$87	\$ 178	\$55	\$320	\$178	\$25	\$14	\$2.37	\$219

Present Value of Benefits

\$2,948

Present Value of Costs \$2,548

Benefit/Cost	
1	4 40
Ratio	1.16

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type Storage Tank Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.00%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Mater	4.00%

	Revenue - Energy Charge								
	2	3	2*3						
Year	Therms	Base Rate	Total Charge						
2009	170	\$0.5114	\$87						
2010	170	\$0.5114	\$87						
2011	170	\$0.5114	\$87						
2012	170	\$0,5114	\$87						
2013	170	\$0.5114	\$87						
2014	170	\$0.5114	\$87						
2015	170	\$0.5114	\$87						
2016	170	\$0.5114	\$87						
2017	170	\$0.5114	\$87						
2018	170	\$0.5114	\$87						
2019	170	\$0.5114	\$87						
2020	170	\$0.5114	\$87						
2021	170	\$0,5114	\$87						
2022	170	\$0.5114	\$87						
2023	170	\$0.5114	\$87						
2024	170	\$0.5114	\$87						
2025	170	\$0.5114	\$87						
2026	170	\$0.5114	\$67						
2027	170	\$0.5114	\$87						
2028	170	\$0.5114	\$87						

	Revenue - Co:	et of Cor	
1	2	4	2*3
Year	Thems	Fuel Rate	Total Charge
2009	170	\$0.8858	\$147
2010	170	\$0.6744	\$149
2011	170	\$0.8832	\$150
2012	170	\$0.8920	\$152
2013	170	\$0.9009	\$153
2014	170	\$0.9099	\$155
2015	170	\$0.9190	\$156
2018	170	\$0.9282	\$156
2017	170	\$0.9375	\$159
2018	170	\$0.0469	\$161
2019	170	\$0.9563	\$183
2020	170	\$0,9659	\$184
2021	170	\$0.9756	\$186
2022	170	\$0.9853	\$168
2023	170	\$0.0952	\$169
2024	170	\$1.0051	\$171
2025	170	\$1.0152	\$173
2026	170	\$1.0253	\$174
2027	170	\$1.0358	\$176
2028	170	\$1.0450	\$178

1	2	venue - Custom 3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annua
Year	Charge	Charge	Consumed 38 37%	Customer Charge \$55
2009	\$12.00	\$144.00		
2010	\$12.00	\$144.00	38.37%	\$55
2011	\$12.00	\$144.00	38.37%	\$55
2012	\$12.00	\$144.00	38.37%	\$55
2013	\$12.00	\$144.00	38.37%	\$55
2014	\$12.00	\$144.00	38.37%	\$65
2015	\$12.00	\$144.00	38.37%	\$55
2016	\$12.00	\$144.00	38.37%	\$55
2017	\$12.00	\$144,00	36.37%	\$55
2018	\$12.00	\$144.00	38.37%	\$55
2019	\$12.00	\$144.00	38.37%	\$55
2020	\$12.00	\$144.00	36.37%	855
2021	\$12.00	\$144.00	38.37%	\$55
2022	\$12.00	\$144.00	38.37%	355
2023	\$12.00	\$144.00	38.37%	\$55
2024	\$12.00	\$144.00	38.37%	\$55
2025	\$12.00	\$144.00	36.37%	\$55
2026	\$12.00	\$144.00	38.37%	\$55
2026	\$12.00	\$144.00	38.37%	\$55
				\$55
2028	\$12.00	\$144,00	38.37%	> 55

			Inve	stment Ca	rrying Costs			
1	2	3	4	5	6	7	8	6'7'8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Matri	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$400	\$185	\$1,185	10.12%	38,37%	\$46
2010	\$97	\$486	\$388	\$176	\$1,149	10,12%	38,37%	\$45
2011	\$94	\$47.2	\$376	\$171	\$1,113	10 12%	38.37%	\$43
2012	\$91	\$458	\$365	\$164	\$1,078	10.12%	38,37%	\$42
2013	\$88	\$445	\$354	\$157	\$1,044	10.12%	38.37%	\$41
2014	\$85	\$432	\$343	\$151	\$1,011	10.12%	38.37%	\$39
2015	\$83	\$419	\$333	\$145	\$990	10.12%	38.37%	\$38
2016	\$81	\$407	\$323	\$139	\$950	10.12%	35.37%	\$37
2017	\$79	\$395	\$313	\$133	\$920	10,12%	38.37%	\$36
2018	\$77	\$364	\$304	\$128	\$B93	10.12%	39 37%	\$35
2019	\$75	\$373	\$295	\$123	\$866	10.12%	38.37%	\$34
2020	\$73	\$362	\$268	\$118	\$839	10.12%	38.37%	\$33
2021	\$71	\$352	\$277	\$113	\$813	10,12%	38.37%	\$32
2022	\$69	\$342	\$269	\$108	\$788	10.12%	38,37%	\$31
2023	\$67	\$332	\$261	\$104	\$764	10.12%	38.37%	\$30
2024	\$65	\$322	\$253	\$100	\$740	10.12%	38.37%	\$29
2025	\$83	\$313	\$245	\$98	\$717	10.12%	38,37%	\$28
2026	\$61	\$304	\$238	\$92	\$695	10.12%	38.37%	\$27
2027	\$59	\$295	\$231	\$68	5673	10.12%	38.37%	\$26
2028	\$57	\$286	\$224	\$84	3651	10.12%	38.37%	\$25

			Incre	mental Custo	omer Costs	;		
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	OBM Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.70	\$20	38.37%	\$7.67	\$9.04	38.37%	\$3	\$11
2010	\$1.72	\$21	38.37%	\$8.06	\$9.13	38,37%	\$4	\$12
2011	\$1,73	\$21	39.37%	\$8.06	\$9.22	38.37%	\$4	\$12
2012	\$1,75	\$21	38.37%	\$8,06	\$9.31	38.37%	\$4	\$12
2013	\$1.77	\$21	38.37%	\$8.06	\$9.41	38.37%	\$4	\$12
2014	\$1.79	\$21	38.37%	\$8.06	\$9.50	38.37%	\$4	\$12
2015	\$1.80	\$22	38.37%	\$8.44	\$9.60	38.37%	\$4	\$12
2016	\$1,82	\$22	38.37%	\$8,44	\$9.59	38 37%	\$4	\$12
2017	\$1.84	\$22	38,37%	\$8.44	\$979	38.37%	\$4	\$12
2018	\$1.66	\$22	36 37%	\$8.44	\$9.89	38.37%	\$4	\$12
2019	\$1.88	\$23	39.37%	\$8.83	\$9.99	38.37%	\$4	\$13
2020	\$1,90	\$23	38.37%	\$8.83	\$10.09	38 37%	\$4	\$13
2021	\$1.02	\$23	38.37%	\$6.63	\$10.19	38.37%	\$4	\$13
2022	\$193	\$23	38.37%	\$8,83	\$10,29	38.37%	\$4	\$13
2023	\$1,95	\$23	38.37%	\$8.83	\$10,39	38.37%	\$4	\$13
2024	\$1.97	\$24	38.37%	\$9.21	\$10.50	38.37%	\$4	\$13
2025	\$1.99	524	38.37%	\$9.21	\$10.60	36.37%	\$4	\$13
2026	\$2.01	524	38.37%	\$9.21	\$10.71	38.37%	\$4	\$13
2027	\$2.03	\$24	38 37%	\$9.21	\$10.81	38.37%	\$4	\$13
2028	\$2.05	\$25	38.37%	\$9.59	\$10.92	38.37%	\$4	\$14

	Gas	: Costs	
1	2	3	2*3
	Therms	Gas Supply	Gas Supply
Year	_	Rate	Cost
2009	170	0.8656	\$147
2010	170	\$0.8744	\$149
2011	170	\$0.8832	\$150
2012	170	\$0.8920	\$152
2013	170	\$0,9009	\$153
2014	170	\$0.9099	\$155
2015	170	\$0.9190	\$156
2016	170	\$0,9282	\$158
2017	170	\$0.9375	\$159
2018	170	\$0,9469	\$161
2019	170	\$0.9563	\$163
2020	170	\$0.9859	\$164
2021	170	\$0,9756	\$166
2022	170	\$0.9853	\$168
2023	170	\$0.9952	\$169
2024	170	\$1.0051	\$171
2025	170	\$1,0152	\$173
2026	170	\$1.0253	\$174
2027	170	\$1,0356	\$176
202B	170	\$1.0459	\$178

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Tankless Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$77	\$130	\$51	\$258	\$130	\$43	\$10	\$452.37	\$635
2010	\$77	\$131	\$5 1	\$259	\$131	\$41	\$11	\$2.37	\$185
2011	\$77	\$132	\$ 51	\$260	\$132	\$40	\$11	\$2.37	\$185
2012	\$77	\$134	\$ 51	\$262	\$134	\$39	\$11	\$2.37	\$186
2013	\$77	\$135	\$51	\$263	\$135	\$37	\$11	\$2.37	\$186
2014	\$77	\$136	\$51	\$264	\$136	\$36	\$11	\$2.37	\$186
2015	\$77	\$138	\$ 51	\$266	\$138	\$35	\$11	\$2.37	\$187
2016	\$77	\$139	\$ 51	\$267	\$139	\$34	\$11	\$2.37	\$187
2017	\$77	\$141	\$ 51	\$268	\$141	\$33	\$11	\$2.37	\$187
2018	\$77	\$142	\$51	\$270	\$142	\$32	\$11	\$2.37	\$188
2019	\$77	\$143	\$51	\$271	\$143	\$31	\$12	\$2.37	\$189
2020	\$77	\$145	\$51	\$273	\$145	\$30	\$12	\$2.37	\$189
2021	\$77	\$146	\$51	\$274	\$146	\$29	\$12	\$2.37	\$190
2022	\$77	\$148	\$ 51	\$276	\$148	\$28	\$12	\$2.37	\$190
2023	\$77	\$149	\$51	\$277	\$149	\$27	\$12	\$2.37	\$191
2024	\$77	\$151	\$51	\$279	\$151	\$27	\$12	\$2.37	\$192
2025	\$77	\$152	\$51	\$280	\$152	\$26	\$12	\$2.37	\$193
2026	\$77	\$154	\$51	\$282	\$154	\$25	\$12	\$2.37	\$193
2027	\$77	\$155	\$ 51	\$283	\$155	\$24	\$12	\$2.37	\$194
2028	\$77	\$157	\$51	\$285	\$157	\$23	\$13	\$452.37	\$645

\$2,624

Present Value ____ of Benefits

Present Value of Costs

\$2,355

Benefit/Cost Ratio 1.11

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type
Tankless Water Heating

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Gas Energy Charge Escalator	O%	Depreciation Rate - Davelopment Mam	2.90%
Ges Customer Charga Escalator	0%	Depreciation Rate - Service Line	3.00%
O&M/Inflation Escalator	1.0%	Depreciation Rate - Meter	4.00%

K	evenue -	Energy Ch	arge
11	2	3	2*3
Year	Therms	Base Rate	Total Charge
2009	150	\$0.5114	\$77
2010	150	\$0.5114	\$77
2011	150	\$0.5114	\$77
2012	150	\$0.5114	\$77
2013	150	\$0.5114	\$77
2014	150	\$0.5114	\$77
2015	150	\$0.5114	\$77
2016	150	\$0.5114	\$77
2017	150	\$0.5114	\$77
2018	150	\$0.5114	\$77
2019	150	\$0.5114	\$77
2020	150	\$0.5114	\$77
2021	150	\$0.5114	\$77
2022	150	\$0.5114	\$77
2023	150	\$0.5114	\$77
2024	150	\$0.5114	\$77
2025	150	\$0.5114	\$77
2026	150	\$0.5114	577
2027	150	\$0.5114	\$77
2028	150	\$0.5114	577

	Revenue - Co	et of Gae	
1	2	4	2*3
Year	Therms	Fuel Rate	Total Charge
5008	150	\$0.8658	\$130
2010	150	\$0.8744	5131
2011	150	\$0.8832	\$132
2012	150	\$0.9920	5134
2013	150	\$0.9009	\$135
2014	150	\$0,0009	\$136
2015	150	\$0.9190	\$138
2018	150	\$0,9282	\$139
2017	150	\$0.9375	\$141
2018	150	\$0.9469	\$142
2019	150	\$0.9563	\$143
2020	150	\$0.9659	\$145
2021	150	\$0.9758	\$146
2022	150	\$0.9853	\$148
2023	150	\$0.9952	\$149
2024	150	\$1.0051	£151
2025	150	\$1.0152	\$152
2026	150	\$1.0253	\$154
2027	150	\$1,0356	\$155
2028	150	\$1.0459	\$157

	Revenue - Customer Charge									
_1	22	3	4	4*3						
	Monthly		Ratio Therms							
	Customer	Annual Customer	To Total	Prorated Annual						
Year	Charge	Charge	Consumed	Customer Charge						
2009	\$12.00	\$144.00	35.48%	\$51						
2010	\$12.00	\$144,00	35.46%	\$51						
2011	\$12.00	\$144.00	35,46%	\$51						
2012	\$12.00	\$144.00	35.46%	\$51						
2013	\$12.00	\$144.00	35.46%	\$51						
2014	\$12.00	\$144,00	35.46%	\$51						
2015	\$12.00	\$144.00	35.46%	\$51						
2016	\$12.00	\$144.00	35.48%	\$51						
2017	\$12.00	\$144.00	35.46%	\$51						
2018	\$12,00	\$144.00	35.48%	\$51						
2019	\$12.00	\$144 00	35.46%	\$51						
2020	\$12.00	\$144.00	35.46%	\$51						
2021	\$12.00	\$144.00	35.46%	\$51						
2022	\$12.00	\$144.00	35.48%	\$51						
2023	\$12.00	\$144.00	35.48%	\$51						
2024	\$12.00	\$144.00	35.46%	\$51						
2025	\$12.00	\$144.00	35 46%	\$51						
2028	\$12.00	\$144.00	35.46%	\$51						
2027	\$12.00	\$144 00	35 46%	\$51						
2028	\$12.00	\$144.00	35 48%	\$51						

Investment Carrying Costs								
1.	2	3	4	. 5	6	7	8	6*7*8
	Supply	Developmen	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$400	\$185	\$1,185	10.12%	35 46%	\$43
2010	\$97	\$466	\$38B	\$178	\$1,149	10.12%	35.48%	\$41
2011	\$94	\$472	\$378	\$171	\$1,113	10.12%	35.48%	\$40
2012	\$91	\$458	\$305	\$164	\$1.076	10.12%	35 46%	539
2013	\$68	\$445	\$354	\$157	\$1,044	10.12%	35.46%	\$37
2014	\$85	\$432	\$343	\$151	\$1.011	10.12%	35.48%	\$36
2015	\$83	\$419	\$333	\$145	\$980	10.12%	35 48%	\$35
2016	\$61	\$407	\$323	\$139	\$950	10.12%	35.48%	\$34
2017	\$79	\$395	\$313	\$133	\$920	10.12%	35.46%	\$33
2018	\$77	\$384	\$304	\$126	\$893	10.12%	35.48%	\$32
2019	\$75	\$373	\$295	\$123	\$666	10.12%	35 46%	\$31
2020	\$73	\$362	\$266	\$118	\$839	10.12%	35.46%	\$30
2021	\$71	\$352	\$277	\$113	\$613	10.12%	35.46%	\$29
2022	\$69	\$342	\$269	\$108	\$788	10.12%	35.48%	\$28
2023	\$67	\$332	\$261	\$104	\$784	10.12%	35.46%	\$27
2024	\$65	\$322	\$253	\$100	\$740	10.12%	35.46%	\$27
2025	\$63	\$313	\$245	\$98	\$717	10.12%	35 46%	\$26
2026	\$61	\$304	\$238	\$92	\$695	10.12%	35 46%	\$25
2027	\$59	\$295	\$231	\$86	\$873	10.12%	35 48%	\$24
2028	\$57	\$266	\$224	\$84	\$851	10.12%	35 46%	\$23

	Incremental Customer Costs							
1	2	3	4	5×3*4	- 6	7	8=6*7	5-8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cust	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	OSM Cost	Adm. & O&M Cost
2009	\$1.70	\$20	35.46%	\$7.09	\$9.04	35.46%	\$3	\$10
2010	\$1.72	\$21	35 48%	\$7.45	\$9.13	35.48%	\$3	\$11
2011	\$1.73	\$21	35.46%	\$7.45	\$9.22	35.46%	\$3	\$11
2012	\$1.75	\$21	35.46%	\$7.45	\$9.31	35.46%	\$3	\$11
2013	\$1.77	\$21	35.46%	\$7.45	\$9.41	35.46%	\$3	\$11
2014	\$1.79	\$21	35.46%	\$7.45	\$9 50	35.46%	\$3	311
2015	\$1.80	\$22	35.46%	\$7.80	\$9.80	35.48%	\$3	\$11
2016	\$1.82	\$22	35.48%	\$7.80	\$9.69	35.48%	\$3	\$11
2017	\$1.84	\$22	35.46%	\$7.80	59.79	35.46%	\$3	\$11
2018	\$1.86	\$22	35.46%	\$7,80	\$9,69	35.46%	\$4	\$11
2019	\$1.86	\$23	35 46%	\$8.16	\$9.90	35.48%	\$4	\$12
2020	\$1.90	\$23	35.48%	\$8.16	\$10.09	35 46%	\$4	\$12
2021	\$1.92	\$23	35 48%	\$6.16	\$10.19	35,48%	\$4	\$12
2022	\$1.93	\$23	35 46%	\$8,16	\$10.29	35.46%	\$4	\$12
2023	\$1,95	\$23	35.46%	\$8.16	\$10.39	35.46%	\$4	\$12
2024	\$1.97	\$24	35.46%	\$8.51	\$10.50	35.48%	\$4	\$12
2025	\$1.99	\$24	35.46%	\$8,51	\$10.60	35.46%	\$4	\$12
2026	\$2.01	\$24	35.46%	\$8.51	\$10.71	35,46%	\$4	\$12
2027	\$2.03	\$24	35.46%	\$8.51	\$10,81	35.48%	\$4	\$12
2028	\$2.05	\$25	35.46%	\$8.87	\$10,92	35 46%	\$4	\$13

	Gas C	osts	
1	2	3	2*3
	Thems	Per Therm	Gas Supply
Year		Supply Cost	Cost
2009	150	0.8658	\$130
2010	150	\$0.6744	\$131
2011	150	\$0.8832	\$132
2012	\$5O	\$0.8920	\$134
2013	15 C	\$0.9000	\$135
2014	150	\$0,9099	\$138
2015	150	\$0.9190	\$138
2016	150	\$0.9282	\$139
2017	150	\$0.9375	5141
2016	150	\$0,9469	\$142
2019	150	\$0.9563	\$143
2020	150	\$0,9659	\$145
2021	150	\$0.9758	\$145
2022	150	\$0.9853	\$148
2023	150	\$0.9952	\$149
2024	150	\$1.0051	\$151
2025	150	\$1 0152	\$152
2026	150	\$1,0253	\$154
2027	150	\$1 0358	\$155
2028	150	\$1 0459	\$157

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Heating System

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Totai
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$91	\$154	\$58	\$303	\$154	\$48	\$12	\$352.48	\$566
2010	\$91	\$156	\$ 58	\$305	\$156	\$47	\$12	\$2.48	\$217
2011	\$91	\$157	\$58	\$306	\$157	\$45	\$12	\$2.48	\$217
2012	\$ 91	\$159	\$58	\$308	\$159	\$44	\$12	\$2.48	\$217
2013	\$ 91	\$160	\$58	\$309	\$160	\$42	\$12	\$2.48	\$218
2014	\$ 91	\$162	\$58	\$311	\$162	\$41	\$12	\$2.48	\$218
2015	\$91	\$164	\$58	\$312	\$164	\$40	\$13	\$2.48	\$219
2016	\$91	\$165	\$58	\$314	\$165	\$39	\$13	\$2.48	\$219
2017	\$ 91	\$167	\$58	\$316	\$167	\$37	\$13	\$2.48	\$220
2018	\$ 91	\$169	\$58	\$317	\$169	\$36	\$13	\$2.48	\$220
2019	\$ 91	\$170	\$58	\$319	\$170	\$35	\$13	\$2.48	\$221
2020	\$ 91	\$172	\$58	\$321	\$172	\$34	\$13	\$2.48	\$222
2021	\$9 1	\$174	\$58	\$323	\$174	\$33	\$13	\$2.48	\$223
2022	\$91	\$175	\$ 58	\$324	\$175	\$32	\$13	\$2.48	\$223
2023	\$ 91	\$177	\$58	\$326	\$177	\$31	\$13	\$2.48	\$224
2024	\$91	\$179	\$58	\$328	\$179	\$30	\$14	\$2.48	\$225
2025	\$91	\$181	\$58	\$330	\$181	\$ 29	\$14	\$2.48	\$226
2026	\$91	\$183	\$58	\$331	\$183	\$28	\$14	\$352.48	\$577
2027	\$9 1	\$184	\$58	\$333	\$184	\$27	\$14	\$2.48	\$228
2028	\$91	\$186	\$58	\$335	\$186	\$26	\$14	\$2.48	\$230

Present Value of Benefits

\$3,087

Present Value of Costs

Benefit/Cost Ratio 1.20

\$2,570

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance	Туре
Heating Sy	rstem

Fuel Rate Escaletor	1.0%	Depreciation Rate - Supply Main	2.90%	ı
Ges Energy Charge Escalator	0%	Depraciation Rate - Development Main	2.90%	į
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.00%	į
O&M/Infletion Escalator	1.0%	Depreciation Rate - Melec	4.00%	Į

	Revenue -	Energy Chai	rge
1	2	3	2'3
Year	Therme	Base Rate	Total Charge
2009	178	\$0.5114	\$91
2010	178	\$0.5114	391
2011	179	\$0.5114	\$91
2012	178	\$0,5114	\$91
2013	178	\$0.5114	391
2014	178	\$0.5114	\$91
2015	178	\$0,5114	\$91
2016	178	\$0.5114	\$91
2017	178	\$0.5114	\$91
2018	178	\$0,5114	\$91
2019	178	\$0.5114	\$91
2020	178	\$0.5114	\$91
2021	178	\$0,5114	\$91
2022	178	\$9,5114	391
2023	178	\$0,5114	591
2024	178	\$0.5114	\$91
2025	178	\$0,5114	591
2026	178	\$0,5114	\$91
2027	178	\$0.5114	\$91
2028	178	\$0.5114	591

	Revenue - Cost of Gas							
11	5	4	2*3					
Year	Therms	Fuel Rate	Total Charge					
2009	178	\$0.8658	\$154					
2010	178	\$0.8744	\$156					
2011	178	\$0.8832	\$157					
2012	178	\$0.8920	\$159					
2013	178	\$0.9009	\$180					
2014	178	\$0.9099	\$162					
2015	178	\$0.9190	\$164					
2016	178	\$0,9282	\$165					
2017	178	\$0.9375	\$167					
2018	178	\$0.9469	\$189					
2019	178	\$0.9563	\$170					
2020	178	\$0.9659	\$172					
2021	178	\$0,9756	\$174					
2022	178	\$0.9853	\$175					
2023	178	\$0.9952	5177					
2024	178	\$1.0051	\$179					
2025	178	\$1.0152	\$181					
2026	178	\$1.0253	\$183					
2027	178	\$1,0356	\$184					
2028	178	\$1 0459	\$186					

Revenue - Customer Charge											
	5	3	4	4'3							
	Monthly		Ratio Therms								
	Customer	Annual Customer	To Total	Prorated Annual							
Year	Charge	Charge	Consumed	Customer Charge							
2009	\$12.00	\$144,00	40.18%	\$58							
2010	\$12.00	\$144.00	40.16%	\$58							
2011	\$12.00	\$144.00	40.18%	\$58							
2012	\$12.00	\$144.00	40.18%	\$58							
2013	\$12.00	\$144.00	40.18%	\$58							
2014	\$12.00	\$144.00	40.18%	\$58							
2015	\$12.00	\$144.00	40.18%	\$56							
2016	\$12.00	\$144.00	40.18%	\$58							
2017	\$12.00	\$144.00	40,18%	\$58							
2018	\$12.00	\$144,00	40.18%	\$58							
2019	\$12.00	\$144,00	40.18%	\$58							
2020	\$12.00	\$144.00	40.18%	\$58							
2021	\$12.00	\$144,00	40.18%	\$58							
2022	\$12.00	\$144.00	40.18%	\$56							
2023	\$12.00	\$144.00	40.18%	\$58							
2024	\$12.00	\$144.00	40.18%	\$58							
2025	\$12.00	\$144.00	40.18%	\$58							
2028	\$12,00	\$144.00	40.18%	\$58							
2027	\$12.00	\$144.00	40.18%	\$58							
2028	\$12.00	\$144.00	40.18%	\$58							

			inves	tment Car	rying Costs			
	2	3	4	- 5	- 6	7	8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$400	\$185	\$1.185	10.12%	40.18%	548
2010	597	\$486	\$388	\$178	51,149	10,12%	40,18%	\$47
2011	\$94	\$472	\$376	\$171	\$1,113	10.12%	40.18%	\$45
2012	\$91	\$458	\$365	\$164	\$1,078	10.12%	40.18%	\$44
2013	\$88	\$445	\$354	\$157	\$1,044	10,12%	40.18%	\$42
2014	\$85	\$432	\$343	\$151	\$1,011	10.12%	40.18%	541
2015	\$83	\$419	\$333	\$145	\$980	10.12%	40.18%	\$40
2016	\$81	\$407	\$323	\$139	\$950	10.12%	40 18%	\$39
2017	\$79	\$395	\$313	\$133	\$920	10.12%	40.18%	\$37
2019	\$77	\$384	\$304	\$128	\$893	10,12%	40.18%	\$36
2019	\$75	\$373	\$295	\$123	\$866	10.12%	40.18%	\$35
2020	\$73	\$362	\$286	\$1.18	\$839	10 12%	40.18%	\$34
2021	\$71	\$352	\$277	\$113	\$813	10.12%	40.18%	\$33
2022	\$89	\$342	\$260	\$108	\$788	10.12%	40 16%	\$32
2023	\$67	\$332	\$261	\$104	\$764	10 12%	40.18%	\$31
2024	\$65	\$322	\$253	\$100	\$740	10.12%	40.18%	\$30
2025	\$63	\$313	\$245	596	\$717	10.12%	40.18%	329
2026	\$61	\$304	\$238	\$92	\$895	10.12%	40.18%	\$28
2027	\$59	\$295	\$231	\$86	\$673	10.12%	40.18%	\$27
2028	\$57	\$286	\$224	584	\$651	10,12%	40.18%	\$26

			Inc	remental Cus	tomer Cost	is .		
1	2	3	4	5=3*4	8	77	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total incremental
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.70	\$20	40.18%	\$8.04	\$9.04	40.18%	\$4	\$12
2010	\$1.72	\$21	40.18%	\$8 44	\$9.13	40 18%	\$4	\$12
2011	\$1.73	\$21	40.18%	\$8 44	\$9,22	40 18%	\$4	\$12
2012	\$1.75	\$21	40.18%	\$8.44	\$9.31	40.18%	\$4	\$12
2013	\$1.77	\$21	40.18%	\$8.44	\$9.41	40.18%	\$4	\$12
2014	\$1.79	\$21	40.18%	\$8.44	\$9,50	40.15%	\$ 4	\$12
2015	\$1,60	\$22	40.18%	\$6.64	\$9.60	40,18%	\$4	\$13
2018	\$1.62	\$22	46.18%	\$8.84	\$9.69	40 16%	54	\$13
2017	\$1.84	\$22	40.18%	\$8.84	\$9.79	40.18%	\$4	\$13
2018	\$1.86	\$22	40.18%	\$8.84	\$9.89	40.18%	\$4	\$13
2019	\$1 88	\$23	40 18%	\$9.24	\$9.99	40.18%	\$4	\$13
2020	\$1.90	\$23	40.18%	\$9.24	\$10.09	40.18%	\$4	\$13
2021	\$1.92	\$23	40.18%	\$9.24	\$10.19	40.18%	\$4	\$13
2022	\$1,93	\$23	40.18%	\$9.24	\$10.29	40,18%	\$4	\$13
2023	\$1.95	\$23	40,18%	\$9.24	\$10.39	40.18%	\$4	\$13
2024	\$1.97	\$24	40.18%	\$9.84	\$10.50	40,18%	\$4	\$14
2025	\$1.99	\$24	40.18%	\$9.64	\$10.60	40.18%	\$4	\$14
2026	\$2.01	\$24	40.18%	\$9.64	\$10.71	40.18%	\$4	\$14
2027	\$2.03	\$24	40.18%	\$9.64	\$10.81	40.18%	\$4	\$14
2028	\$2.05	\$25	40.18%	\$10.05	\$10.92	40 18%	\$4	\$14

	Gas	Costs		
1	2	3	2.3	
	Therms	Per Therm	Gas Supply	
Year		Supply Cost	Cost	
2009	178	\$0,8658	\$154	
2010	178	\$0 8744	\$158	
2011	178	\$0 8832	\$157	
2012	178	\$0.8920	\$159	
2013	178	\$0.9009	\$160	
2014	178	\$0.9099	\$162	
2015	178	\$0.9190	\$184	
2016	178	\$0.9282	\$105	
2017	178	\$0.9375	\$167	
2018	178	\$0.9459	\$169	
2019	178	\$0.9563	\$176	
2020	178	\$0.9659	\$172	
2021	178	\$0.9756	\$174	
2022	178	\$0,9853	\$175	
2023	178	\$0.9952	\$177	
2024	178	\$1,0051	\$179	
2025	178	\$1,0152	\$181	
2026	178	\$1.0253	\$183	
2027	178	\$1.0350	\$184	
2028	178	\$1.0459	\$186	

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type	
Amalianaa Tiina	

Clothes Drying

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$26	\$43	\$16	\$85	\$43	\$14	\$3	\$100.70	\$161
2010	\$26	\$44	\$16	\$86	\$44	\$ 13	\$3	\$0.70	\$61
2011	\$26	\$44	\$16	\$86	\$44	\$13	\$3	\$0.70	\$61
2012	\$26	\$45	\$16	\$86	\$45	\$12	\$3	\$0.70	\$61
2013	\$26	\$45	\$16	\$87	\$45	\$12	\$3	\$0.70	\$61
2014	\$26	\$4 5	\$16	\$87	\$45	\$12	\$3	\$0.70	\$61
2015	\$26	\$46	\$16	\$88	\$46	\$11	\$4	\$0.70	\$61
2016	\$26	\$46	\$16	\$88	\$46	\$11	\$4	\$0.70	\$62
2017	\$26	\$47	\$16	\$89	\$47	\$11	\$4	\$0.70	\$62
2018	\$26	\$47	\$16	\$89	\$47	\$10	\$4	\$0.70	\$62
2019	\$26	\$48	\$16	\$90	\$4 8	\$10	\$4	\$0.70	\$62
2020	\$26	\$48	\$16	\$90	\$48	\$10	\$4	\$0.70	\$62
2021	\$26	\$49	\$16	\$91	\$49	\$9	\$4	\$100.70	\$163
2022	\$26	\$49	\$16	\$91	\$49	\$ 9	\$4	\$0.70	\$63
2023	\$26	\$50	\$16	\$92	\$50	\$9	\$4	\$0.70	\$63
2024	\$26	\$50	\$16	\$92	\$50	\$8	\$4	\$0.70	\$63
2025	\$26	\$ 51	\$16	\$93	\$51	\$8	\$4	\$0.70	\$64
2026	\$26	\$ 51	\$16	\$93	\$51	\$8	\$4	\$0.70	\$64
2027	\$26	\$ 52	\$1 6	\$94	\$52	\$8	\$4	\$0.70	\$64
2028	\$26	\$52	\$16	\$94	\$52	\$7	\$4	\$0.70	\$64

Present Value of Benefits \$867

Present Value of Costs \$736

Benefit/Cost
Ratio 1.18

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

Appliance Type Clothes Drying

Fuel Rate Escalator	1.0%	Depreciation Rete - Supply Main	2.90%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.00%
O&M/Inflation Escalator	1.0%	Depreciation Rets - Mater	4.00%

		nergy Cha	
	2	3	2.3
Year	Therms	Base Rate	Total Charge
2009	50	\$0.5114	\$26
2010	50	\$0.5114	\$26
2011	50	\$0.5114	\$26
2012	50	\$0.5114	\$26
2013	50	\$0.5114	\$26
2014	50	\$0.5114	\$26
2015	50	\$0.5114	\$26
2016	50	\$0.5114	\$26
2017	50	\$0.5114	\$26
2018	50	\$0.5114	\$26
2019	50	\$0.5114	526
2020	50	\$0.5114	\$26
2021	50	\$0.5114	526
2022	50	\$0.5114	\$26
2023	50	\$0.5114	\$26
2024	50	\$0.5114	\$26
2025	50	\$0.5114	\$26
2026	50	\$0.5114	\$26
2027	50	\$0.5114	\$26
2028	50	\$0.5114	626

Revenue - Cost of Gas										
1	22	4	2.3							
Year	Thems	Feet Rate	Total Charge							
2009	50	\$0.8658	\$43							
2010	50	\$0.8744	\$44							
2011	50	\$0.8832	\$44							
2012	50	\$0.8920	\$45							
2013	50	\$0.9009	\$45							
2014	50	\$0.9099	845							
2015	50	\$0.9190	\$48							
2016	50	\$0.9262	\$46							
2017	50	\$0.8375	\$47							
2018	50	\$0.9469	\$47							
2019	50	\$0.9583	\$48							
2020	50	\$0.9659	\$48							
2021	60	\$0.9756	\$49							
2022	50	\$0.9853	549							
2023	50	\$0.9952	\$50							
2024	50	\$1,0051	\$50							
2025	50	\$1.0152	\$51							
2026	50	\$1.0253	\$51							
2027	50	\$1 0356	\$52							
2026	50	\$1,0459	\$52							

		evenue - Custom		
	22	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$12.00	\$144.00	11.29%	\$16
2010	\$12.00	\$144,00	11.29%	\$16
2011	\$12.00	\$144.00	11,29%	\$16
2012	\$12.00	\$144.00	11.29%	\$16
2013	\$12.00	\$144.00	11.29%	\$16
2014	\$12.00	\$144.00	11.28%	\$16
2015	\$12.00	\$144.00	11.29%	516
2016	\$12.00	\$ (44.00	11.29%	\$16
2017	\$12.00	\$144.00	11.29%	\$16
201B	\$12.00	\$144,00	11.29%	\$16
2019	\$12.00	\$144.00	11.29%	\$16
2020	\$12.00	\$144,00	11.29%	\$16
2021	\$12.00	\$144.00	11.20%	\$16
2022	\$12.00	\$144.00	11.28%	\$16
2023	\$12.00	\$144.00	11.29%	\$16
2024	\$12.00	\$144.00	11.29%	\$16
2025	\$12.00	\$144,00	11.28%	\$16
2026	\$12.00	\$144.00	11.29%	\$16
2027	\$12.00	\$144.00	11.20%	\$16
2028	\$12.00	\$144.00	11.29%	\$16

			inve	stment Ca	rrying Costs			
1	2	3	4	5	6	7	8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	investmen
Year	Main	Main	Line	Meter	investment	of Debt	Consumed to Total	Carrying Co
2009	\$100	\$500	\$400	\$185	\$1,185	10.12%	11.29%	\$14
2010	\$97	\$486	\$388	\$178	\$1,149	10.12%	11.29%	\$13
2011	\$94	\$472	\$375	\$171	\$1,113	10.12%	11.29%	\$13
2012	\$91	\$458	\$365	\$164	\$1,078	10.12%	11.29%	\$12
2013	\$88	\$445	\$354	\$157	\$1,044	10.12%	11.29%	\$12
2014	\$85	\$432	\$343	\$151	\$1,011	10.12%	11.29%	\$12
2015	\$83	\$419	\$333	\$145	\$980	10.12%	11.29%	\$11
2016	\$81	\$407	\$323	\$139	\$950	10,12%	11.29%	\$11
2017	\$79	\$395	\$313	\$133	\$920	10.12%	11.29%	\$11
2018	\$77	\$364	\$304	\$128	\$893	10 12%	11.29%	\$10
2019	\$75	\$373	\$295	\$123	\$866	10.12%	11.29%	\$10
2020	\$73	\$362	\$286	\$118	\$839	10.12%	11.29%	\$10
2021	\$71	\$352	\$277	\$113	\$813	10.12%	11.29%	\$9
2022	\$69	\$342	\$269	\$108	\$768	10.12%	11.29%	\$9
2023	\$67	\$332	\$261	\$104	\$764	10.12%	11.29%	59
2024	\$65	\$322	\$253	\$100	\$740	10.12%	11.29%	\$8
2025	\$63	\$313	\$245	\$96	\$717	10.12%	11.29%	\$8
2026	\$61	\$304	\$238	\$92	\$695	10 12%	11.29%	38
2027	\$50	\$295	\$231	\$86	\$673	10.12%	11.29%	56
2028	\$57	\$286	\$224	\$84	\$651	10.12%	11.29%	\$7

			Incre	emental Custo	omer Casts			
_1	2	3	4	5×3*4	6	7	8=67	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Relio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.70	\$20	11.29%	\$2.26	\$9.04	11.29%	\$1	\$3
2010	\$1.72	521	11.28%	\$2.37	\$9.13	11.29%	\$1	\$3
2011	\$1.73	\$21	11.29%	\$2.37	\$9.22	11.29%	\$1	\$3
2012	\$1.75	\$21	11.29%	\$2.37	\$9.31	11.29%	\$1	\$ 3
2013	\$1.77	\$21	11,29%	\$2.37	\$9.41	11.29%	51	\$3
2014	\$1,79	\$21	11.29%	\$2.37	\$9.50	11.29%	\$1	\$3
2015	\$1.80	\$22	11.29%	\$2.48	\$9,60	11.29%	\$1	\$4
2018	\$1.82	\$22	11,29%	\$2.48	\$9.89	11.29%	\$ 1	84
2017	\$1.84	\$22	11,28%	\$2.48	\$9.79	11,29%	\$1	\$4
2018	\$1,86	\$22	11.29%	\$2.48	\$9.89	11.29%	\$1	\$4
2019	\$1.88	\$23	11,29%	\$2.60	\$9.99	11.29%	\$1	\$4
2020	\$1.80	\$23	11,29%	\$2.80	\$10.09	11.29%	\$ 1	\$4
2021	\$1.92	\$23	11,29%	\$2.60	\$10.19	11.29%	\$1	\$4
2022	\$1.93	\$23	11,29%	\$2.60	\$10.29	11,29%	\$1	\$4
2023	\$1.96	\$23	11.29%	\$2.60	\$10.39	11.29%	\$1	\$4
2024	\$1.97	\$24	11.29%	\$2.71	\$10.50	11.28%	\$1	54
2025	\$1.99	\$24	11,29%	\$2.71	\$10.80	11.29%	\$1	\$4
2028	\$2.01	\$24	11.29%	\$2.75	\$10.71	11.29%	\$1	\$4
2027	\$2.03	\$24	11.29%	\$2.71	\$10.81	11.29%	\$1	34
2028	\$2.05	\$25	11,29%	\$2.82	\$10.92	11,29%	\$1	\$4

	Gas	Costs	
_1	2	3	2.3
	Therms	Par Tharm	Gas Supply
Year		Supply Cost	Cost
200G	50	0.8658	\$43
2010	50	\$0.2744	\$44
2011	50	\$0.8832	\$44
2012	50	\$0.8920	\$45
2013	50	\$0.0009	\$45
2014	50	\$0.9099	\$45
2015	50	\$0.9190	\$46
2016	50	\$0.9282	\$46
2017	50	\$0.9375	\$47
2018	50	\$0.9469	847
201B	50	\$0.9563	\$48
2020	50	\$0.9659	\$46
2021	50	80 9755	\$49
2022	50	\$0.9853	\$49
2023	50	\$0.9952	\$50
2024	50	\$1.0051	\$50
2025	50	\$1.0152	\$51
2026	50	\$1.0253	\$51
2027	50	\$1.0356	\$52
2028	50	\$1,0459	\$52

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type

Cooking

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental	D	T-4-1
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$23	\$39	\$15	\$77	\$39	\$12	\$3	\$100.63	\$155
2010	\$23	\$39	\$15	\$77	\$39	\$12	\$3	\$0.63	\$55
2011	\$23	\$40	\$15	\$77	\$40	\$11	\$3	\$0.63	\$55
2012	\$23	\$40	\$15	\$78	\$40	\$11	\$ 3	\$0.63	\$55
2013	\$23	\$41	\$15	\$78	\$41	\$11	\$3	\$0.63	\$55
2014	\$23	\$41	\$15	\$79	\$41	\$10	\$3	\$0.63	\$55
2015	\$23	\$41	\$15	\$79	\$41	\$10	\$ 3	\$0.63	\$55
2016	\$23	\$42	\$15	\$79	\$42	\$10	\$ 3	\$0.63	\$55
2017	\$23	\$42	\$15	\$80	\$42	\$9	\$3	\$0.63	\$56
2018	\$23	\$43	\$15	\$80	\$4 3	\$9	\$3	\$0.63	\$56
2019	\$23	\$43	\$15	\$81	\$43	\$9	\$3	\$0.63	\$56
2020	\$23	\$43	\$15	\$81	\$4 3	\$9	\$3	\$0.63	\$56
2021	\$23	\$44	\$15	\$82	\$44	\$8	\$3	\$0.63	\$56
2022	\$23	\$44	\$15	\$82	\$44	\$8	\$3	\$0.63	\$56
2023	\$23	\$45	\$15	\$82	\$45	\$8	\$3	\$100.63	\$157
2024	\$23	\$45	\$15	\$83	\$45	\$8	\$4	\$0.63	\$57
2025	\$23	\$46	\$15	\$83	\$46	\$7	\$4	\$0.63	\$57
2026	\$23	\$46	\$15	\$84	\$46	\$7	\$4	\$0.63	\$57
2027	\$23	\$47	\$15	\$84	\$47	\$ 7	\$4	\$0.63	\$58
2028	\$23	\$47	\$15	\$85	\$47	\$7	\$4	\$0.63	\$58

Present Value of Benefits

\$780

Present Value of Costs

\$670

Benefit/Cost Ratio 1.17

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Calculated Data

1	Appliance Type
	Cooking

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	2.90%
Base Rate Escalator	0%	Depractation Rate - Development Mein	2.90%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.00%
O&M/Inflation Escalator	1.0%	Deprecation Rate - Meter	4.00%

	levenue - l	Energy Cha	rge
_1	2	3	2*3
Year	Thems	Base Rate	Total Charge
2009	45	\$0.5114	\$23
2010	45	\$0.5114	\$23
2011	45	\$9.5114	\$23
2012	45	\$0,5114	\$23
2013	45	\$0.5114	\$23
2014	45	\$0.5114	. \$23
2015	45	\$0.5114	\$23
2016	45	\$0.5114	\$23
2017	45	\$0.5114	\$23
2018	45	\$0.5114	\$23
2019	45	\$0.5114	\$23
2020	45	\$0.5114	\$23
2021	45	\$0.5114	\$23
2022	45	\$0.5114	\$23
2023	45	\$0.5114	\$23
2024	45	\$0.5114	\$23
2025	45	\$0.5114	523
2026	45	\$0.5114	\$23
2027	45	\$0.5114	\$23
2028	45	\$0.5114	\$23

	Revenue - Co	st of Gas	
11	2	4	5,3
Year	Therms	Fuel Bate	Total Charge
2009	45	\$0.8658	\$39
2010	45	\$0,8744	\$39
2011	45	\$0.6832	\$40
2012	45	\$0,8920	\$40
2013	45	\$0.0000	\$41
2014	45	\$0.9099	541
2015	45	\$0.9190	\$41
2016	45	\$0.9282	\$42
2017	45	\$0.9375	\$42
2016	45	\$0.9469	\$43
2019	45	\$0.9563	\$43
2020	45	\$0.9659	\$43
2021	45	\$0,9758	\$44
2022	45	\$0.9853	544
2023	45	\$0.9952	\$45
2024	45	\$1,0051	\$45
2025	45	\$1.0152	\$46
2026	45	\$1.0253	\$46
2027	45	\$1.0356	\$47
2020	4E	\$1.0460	647

		evenue - Custome		4*3
3	2	33	44	4.3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$12.00	\$144.00	10,16%	\$15
2010	\$12.00	\$144.00	10 16%	\$15
2011	\$12.00	\$144.00	10,16%	\$15
2012	\$12.00	\$144.00	10.16%	\$15
2013	\$12.00	\$144.00	10.16%	\$15
2014	\$12.00	\$144.00	10.15%	\$15
2015	\$12.00	\$144,00	10.16%	\$15
2016	\$12.00	\$144.00	10,18%	\$15
2017	\$12.00	\$144 00	10.16%	\$15
2016	\$12,00	\$144.00	10.16%	\$15
2019	\$12.00	\$144,00	10.16%	\$15
2020	\$12.00	\$144.00	10.16%	\$15
2021	\$12.00	\$144.00	10 16%	\$45
2022	\$12.00	\$144.00	10.16%	\$15
2023	\$12.00	\$144.00	10 16%	\$15
2024	\$12.00	\$144,00	10.16%	\$15
2025	\$12.00	\$144.00	10.16%	\$15
2026	\$12,00	\$144.00	10 16%	\$15
2027	\$12.00	\$144.00	10.16%	\$15
2028	\$12.00	\$144,00	10 16%	\$15

		~	inve	stment Ca	rrying Costs			
	2	33	4		6	1	8	8*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$400	\$185	\$1,185	10.12%	10 16%	\$12
2010	\$97	\$456	\$368	\$178	\$1,149	10.12%	10.16%	\$12
2011	59 4	\$472	\$376	\$171	\$1,113	10.12%	10.16%	511
2012	\$91	\$458	\$365	\$184	\$1,078	10.12%	10.18%	\$11
2013	\$88	\$445	\$354	\$157	\$1,044	10.12%	10.16%	511
2014	\$85	\$432	\$343	\$151	\$1,011	10.12%	10.16%	\$10
2015	\$83	\$419	\$333	\$145	\$960	10.12%	10.16%	\$10
2016	\$61	\$407	\$323	\$139	\$950	10.12%	10.16%	\$10
2017	\$70	\$395	\$313	\$133	\$920	10.12%	10.16%	\$9
2019	\$77	\$384	\$304	\$128	\$693	10.12%	10.16%	\$9
2019	\$75	\$373	\$295	\$123	\$866	10.12%	10 16%	25
2020	\$73	\$362	\$286	\$118	\$639	10.12%	10.16%	\$9
2021	\$71	\$352	\$277	\$113	\$813	10,12%	10.18%	\$8
2022	\$69	\$342	\$269	\$108	\$788	10.12%	10.18%	\$8
2023	\$67	\$332	\$261	\$104	\$704	10,12%	10.16%	\$8
2024	\$65	\$322	\$253	\$100	\$740	10.12%	10.16%	\$8
2025	\$63	\$313	\$245	\$96	\$717	10.12%	10.16%	\$7
2026	\$81	\$304	\$238	\$92	\$695	10.12%	10.16%	\$7
2027	\$59	\$295	\$231	\$68	\$673	10.12%	10.16%	\$7
2028	\$67	\$286	\$224	\$64	\$651	10 12%	10.18%	\$7

_			Incre	mental Custo	omer Costs			
1	2	3	4	5=3'4	6	7	6=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total increments
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm: & D&M Cos
2009	\$1.70	\$20	10.16%	\$2.03	\$9.04	10.16%	\$1	\$3
2010	\$1.72	\$21	10.18%	\$2,13	\$9.13	10.16%	\$.1	2.3
2017	\$1.73	\$21	10.15%	\$2.13	\$9,22	10.16%	\$1	\$3
2012	\$1.75	\$21	10.16%	\$2.13	\$9.31	10.10%	51	\$3
2013	\$1.77	\$21	10.16%	\$2.13	\$9.41	10.16%	51	\$3
2014	\$1,79	\$21	10.16%	\$2.13	\$9.50	10.16%	\$1	\$3
2015	\$1.80	\$22	10.16%	\$2.23	\$9.60	10.16%	\$1	\$3
2016	\$1,62	\$22	10.16%	\$2.23	\$9,69	10.16%	\$1	\$3
2017	\$1.64	\$22	10.16%	\$2.23	\$9.78	10.16%	\$1	\$3
2018	\$1.66	\$22	10.16%	\$2.23	\$9.89	10,16%	\$1	\$3
2019	\$1,88	\$23	10.16%	\$2.34	\$0.99	10.16%	\$1	\$3
2020	\$1,90	\$23	10.16%	\$2.34	\$10.09	10.16%	\$1	\$ 3
2021	\$1,92	\$23	10.16%	\$2.34	\$10.19	10.16%	\$1	\$3
2022	\$1.93	\$23	10.18%	\$2.34	\$10.29	10.16%	\$1	\$3
2023	\$1.95	\$23	10.16%	\$2.34	\$10.39	10.16%	\$1	\$3
2024	\$1,97	\$24	10,16%	\$2.44	\$10,50	10,16%	\$1	\$4
2025	\$1.99	\$24	10,16%	\$2.44	\$10,80	10.18%	\$1	\$4
2026	\$2.01	\$24	10.16%	\$2.44	\$10.71	10 16%	\$1	\$4
2027	\$2.03	\$24	10.16%	\$2.44	\$10.81	10,18%	51	\$4
2028	\$2.05	\$25	10.16%	\$2.54	\$10.92	10,16%	\$1	\$4

Fable 5			
	Gas	Costs	
- 1	2	3	5,3
	Thems	Commodily Gas	Gas Supply
Year		Supply Cost	Cost
2009	45	0.8658	\$39
2010	45	50.8744	\$39
2011	45	\$0.6832	\$40
2012	45	\$0.8920	\$40
2013	45	\$0,9009	\$41
2014	45	\$0.0090	\$41
2015	45	\$0,9190	\$41
2016	45	\$0.9282	542
2017	45	\$0 9375	\$42
2018	45	\$0,9469	\$43
2019	45	\$0.9563	\$43
2020	45	\$0.9659	\$43
2021	45	\$0.9756	544
2022	45	\$0.9853	544
2023	45	\$0,9952	\$45
2024	45	\$1,0051	\$45
2025	45	\$1,0152	\$45
2028	45	\$1,0253	\$46
2027	45	\$1,0358	\$47
2028	45	\$1,0459	\$47

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type
Storage Tank Water Heating

			Benefit	5						costs				Pil.
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$508	\$350	\$60	\$918	0	\$0	0	\$100	\$60	\$162	\$96	\$61	\$478
2010	2	\$509	0	\$61	\$570	0	\$0	0		\$61	\$164	\$96	\$61	\$381
2011	3	\$511	0	\$61	\$572	0	\$0	0		\$61	\$165	\$96	\$61	\$383
2012	4	\$ 512	0	\$62	\$574	0	\$0	0		\$62	\$167	\$96	\$61	\$385
2013	5	\$514	0	\$62	\$576	0	\$0	0		\$62	\$168	\$96	\$ 61	\$387
2014	6	\$515	0	\$63	\$578	0	\$0	0		\$63	\$170	\$96	\$61	\$390
2015	7	\$517	0	\$64	\$580	0	\$0	0		\$64	\$172	\$96	\$61	\$392
2016	8	\$518	0	\$64	\$582	0	\$0	0		\$64	\$174	\$96	\$61	\$394
2017	9	\$519	0	\$65	\$584	0	\$0	0		\$65	\$175	\$9 6	\$61	\$397
2018	10	\$521	350	\$66	\$937	421	(\$659)	239		\$66	\$177	\$96	\$61	\$399
2019	11	\$522	0	\$66	\$589	0	\$0	0		\$66	\$179	\$9 6	\$61	\$402
2020	12	\$524	0	\$67	\$591	0	\$0	0		\$ 67	\$181	\$96	\$61	\$404
2021	13	\$525	0	\$68	\$593	0	\$0	0		\$68	\$182	\$96	\$61	\$406
2022	14	\$527	0	\$68	\$595	0	\$0	0		\$68	\$184	\$96	\$61	\$409
2023	15	\$528	0	\$69	\$597	0	\$0	0		\$ 69	\$186	\$96	\$61	\$411
2024	16	\$530	0	\$70	\$599	0	\$0	0		\$70	\$188	\$96	\$61	\$414
2025	17	\$531	0	\$70	\$601	0	\$0	0		\$70	\$190	\$96	\$ 61	\$417
2026	18	\$533	0	\$7 1	\$604	0	\$0	0		\$71	\$192	\$96	\$61	\$419
2027	19	\$534	0	\$72	\$606	0	\$0	0		\$72	\$194	\$96	\$61	\$422
2028	20	\$535	0	\$72	\$608	0	\$0	0		\$72	\$196	\$96	\$61	\$425

Present Value of Benefits \$6,206

Present Value of Costs \$3,969

Benefit/Cost 1.56
Ratio

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Storage Tank Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	sane Cost - Tab	le 1			Natural Gas Su	pply Cost -	Table 2			Natural Gas	Energy Ch	arge - Tab	ile 3				Natural Gas C	Customer C	harge - Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annuai Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Thorms	Tax Rete	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charg
A	В	С	D	B*C*(1+D)	A	В	_ с	D	B*C*(1+D)	A	В	С	D	B*C*(1+D)	A_	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	186	7.5%	\$508	2009	\$0.8658	170	10%	\$162	2009	\$0.5114	170	10%	\$96	2009	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2010	\$2.5533	188	7.5%	\$50 9	2010	\$0.8744	170	10%	\$164	2010	\$0.5114	170	10%	\$96	2010	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2011	\$2.5605	186	7.5%	\$511	2011	\$0.8632	170	10%	\$168	2011	\$0.5114	170	10%	\$96	2011	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2012	\$2.5678	186	7.5%	\$612	2012	\$0.8920	170	10%	\$187	2012	\$0.5114	170	10%	\$96	2012	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2013	\$2,5750	186	7.5%	\$514	2013	\$0.9009	170	10%	\$188	2013	\$0.5114	170	10%	\$96	2013	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2014	\$2.5823	186	7.5%	\$515	2014	\$0.9099	170	10%	\$170	2014	\$0.5114	170	10%	\$96	2014	\$12.00	\$144.00	170	443	38.37%	10%	\$81
2015	\$2.5896	186	7.5%	\$517	2015	\$0.9190	170	10%	\$172	2015	\$0,5114	170	10%	t 86	2015	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2016	\$2.5968	186	7.5%	\$518	2016	\$0.9282	170	10%	\$174	2016	\$0.5114	170	10%	\$96	2018	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2017	\$2.6041	188	7.5%	\$519	2017	\$0.9375	170	10%	\$175	2017	\$0,5114	170	10%	\$96	2017	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2018	\$2.6113	186	7.5%	\$821	2016	\$0.9469	170	10%	\$177	2018	\$0.5114	170	10%	\$96	2018	\$12.00	\$144,00	170	443	38.37%	10%	\$61
2019	\$2.6186	186	7.5%	\$622	2019	\$0.9563	170	10%	\$179	2019	\$0.5114	170	10%	\$96	2019	\$12.00	\$144.00	170	443	38.37%	10%	\$41
2020	\$2.6259	186	7.5%	\$524	2020	\$0.9659	170	10%	\$181	2020	\$0.5114	170	10%	\$96	2020	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2021	\$2.6331	188	7.5%	\$825	2021	\$0.9756	170	10%	\$182	2021	\$0.5114	170	10%	\$96	2021	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2022	\$2.6404	186	7.5%	\$527	2022	\$0.9853	170	10%	\$184	2022	\$0.5114	170	10%	\$96	2022	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2023	\$2.6476	186	7.5%	\$528	2023	\$0.9952	170	10%	\$186	2023	\$0.5114	170	10%	\$96	2023	\$12.00	\$144.00	170	443	38.37%	10%	\$81
2024	\$2.6549	186	7.5%	\$630	2024	\$1.0051	170	10%	\$188	2024	\$0.5114	170	10%	\$96	2024	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2025	\$2.6622	186	7.5%	\$531	2025	\$1.0152	170	10%	\$190	2025	\$0.5114	170	10%	\$96	2025	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2026	\$2.8694	186	7.5%	\$833	2026	\$1.0253	170	10%	\$192	2026	\$0.5114	170	10%	\$96	2026	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2027	\$2.6767	188	7.5%	\$634	2027	\$1,0356	170	10%	\$194	2027	\$0.5114	170	10%	\$96	2027	\$12.00	\$144.00	170	443	38.37%	10%	\$61
2028	\$2.6839	186	7.5%	\$536	2028	\$1,0459	170	10%	\$196	2028	\$0.5114	170	10%	\$96	2028	\$12.00	\$144.00	170	443	38.37%	10%	\$61

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Tankless Water Heating

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$448	\$450	\$60	\$958	\$0	\$0	\$0	\$100	\$60	\$143	\$84	\$56	\$443
2010	2	\$449	0	\$6 1	\$510	0	\$0	0		\$61	\$144	\$84	\$56	\$345
2011	3	\$451	0	\$61	\$512	0	\$0	0		\$61	\$146	\$84	\$ 56	\$347
2012	4	\$452	0	\$62	\$514	0	\$0	0		\$62	\$147	\$84	\$56	\$350
2013	5	\$453	0	\$62	\$516	0	\$0	0		\$62	\$149	\$84	\$56	\$352
2014	6	\$455	0	\$63	\$516	0	\$0	0		\$63	\$150	\$84	\$56	\$354
2015	7	\$456	0	\$64	\$520	0	\$0	0		\$64	\$152	\$84	\$56	\$356
2016	8	\$457	0	\$64	\$521	0	\$0	0		\$64	\$153	\$84	\$56	\$358
2017	9	\$458	0	\$65	\$523	0	\$0	0		\$65	\$155	\$84	\$56	\$360
2018	10	\$460	0	\$66	\$525	0	\$0	0		\$66	\$156	\$84	\$56	\$382
2019	11	\$461	0	\$66	\$527	0	\$0	0		\$66	\$158	\$84	\$56	\$365
2020	12	\$462	0	\$67	\$529	0	\$0	0		\$67	\$159	\$84	\$56	\$367
2021	13	\$463	0	\$68	\$531	0	\$0	0		\$68	\$161	\$84	\$56	\$369
2022	14	\$465	0	\$68	\$533	0	\$0	0		\$68	\$163	\$84	\$56	\$371
2023	15	\$466	0	\$69	\$535	0	\$0	0		\$69	\$164	\$84	\$56	\$374
2024	16	\$467	0	\$70	\$537	0	\$0	0		\$70	\$166	\$84	\$56	\$376
2025	17	\$469	0	\$70	\$539	0	\$0	Ó		\$70	\$168	\$84	\$56	\$378
2026	18	\$470	0	\$71	\$541	0	\$0	0		\$71	\$169	\$84	\$56	\$381
2027	19	\$471	0	\$72	\$543	Ō	\$0	Ō		\$72	\$171	\$84	\$56	\$383
2028	20	\$472	450	\$72	\$995	1,219	(\$1,746)	527		\$72	\$173	\$84	\$56	\$386

Present Value of Benefits \$5,634

Present Value of Costs \$3,612

Benefit/Cost 1.56
Ratio

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Tankless Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Sase Rates	0.0%

	Prop	ine Cost - Ta	ble 1			Natuari G	s Supply Co	ost - Table 2			Natural Ga	s Energy Ct	arge - Tabl	le 3			Nati	ıral Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Yea	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Thems	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	С	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	A		С	D	B*C*(1+D)	A	В	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5480	164	7.5%	\$448	2009	\$0.8658	150	10%	\$143	2009	\$0.5114	150	10%	\$84	200	\$12.00	\$144.00	150	423	35.46%	10%	\$56
2010	\$2.5533	164	7.5%	\$449	2010	\$0.8744	150	10%	\$144	2010	\$0.5114	150	10%	\$84	201	\$12.00	\$144.00	150	423	35.46%	10%	\$56
2011	\$2.5805	164	7.5%	\$451	2011	\$0.8832	150	10%	\$148	2011	\$0.5114	150	10%	\$84	201	\$12.00	\$144.00	150	423	35.46%	10%	\$36
2012	\$2.5676	164	7.5%	\$452	2012	\$0.5920	150	10%	\$147	2012	\$0.5114	150	10%	\$84	201	\$12.00	\$144.00	150	423	35.46%	10%	156
2013	\$2.5750	164	7.5%	\$483	2013	\$0.9009	150	10%	\$149	2013	\$0.5114	150	10%	\$84	201	\$12.00	\$144.00	150	423	35.46%	10%	\$56
2014	\$2.5823	164	7.5%	\$455	2014	\$0.9099	150	10%	\$160	2014	\$0.5114	150	10%	\$84	201	\$12.00	\$144.00	150	423	35.46%	10%	\$56
2015	\$2.5896	164	7.5%	\$458	2015	\$0.9190	150	10%	\$162	2015	\$0.5114	150	10%	\$84	201	\$12.00	\$144.00	150	423	35,46%	10%	\$66
2016	\$2.5966	164	7.5%	\$457	2016	\$0.9282	150	10%	\$153	2016	\$0.5114	150	10%	\$84	201	\$ \$12.00	\$144.00	150	423	35.46%	10%	\$56
2017	\$2.6041	164	7.5%	\$458	2017	\$0.9375	150	10%	\$155	2017	\$0.5114	150	10%	\$84	201	7 \$12.00	\$144.00	150	423	35.46%	10%	\$66
2018	\$2.6113	164	7.5%	\$460	2018	\$0.9469	150	10%	\$156	2018	\$0.5114	150	10%	\$84	201	8 \$12.00	\$144.00	150	423	35.46%	10%	\$66
2019	\$2.6186	164	7.5%	\$481	2019	\$0.9563	150	10%	\$188	2019	\$0.5114	150	10%	\$84	201	\$12.00	\$144.00	150	423	35,46%	10%	\$56
2020	\$2.6259	164	7.5%	\$462	2020	\$0.9659	150	10%	\$169	2020	\$0.5114	150	10%	\$84	202	\$12.00	\$144.00	150	423	35.46%	10%	\$66
2021	\$2.6331	164	7.5%	\$463	2021	\$0.9756	150	10%	\$161	2021	\$0.5114	150	10%	\$84	202	1 \$12.00	\$144,00	150	423	35.46%	10%	\$66
2022	\$2.6404	164	7.5%	\$465	2022	\$0.9853	150	10%	\$163	2022	\$0.5114	150	10%	\$84	202		\$144,00	150	423	35.48%	10%	\$66
2023	\$2,8476	184	7.5%	\$486	2023	\$0.9952	150	10%	\$164	2023	\$0.5114	150	10%	\$84	202		\$144.00	150	423	35.46%	10%	\$96
2024	\$2,6549	164	7.5%	\$487	2024	\$1.0051	150	10%	\$168	2024	\$0.5114	150	10%	884	202		\$144.00	150	423	35.46%	10%	\$56
2025	\$2.6622	164	7.5%	\$469	2025	\$1.0152	150	10%	\$168	2025	• • • • • • • • • • • • • • • • • • • •	150	10%	\$84	202		\$144.00	150	423	35.46%	10%	\$56
2026	\$2.8694	164	7.5%	\$470	2026	\$1.0253	150	10%	\$169	2026	\$0.5114	150	10%	\$84	202		\$144.00	150	423	35.46%	10%	\$56
2027	\$2.6767	164	7.5%	\$471	2027	\$1.0356	150	10%	\$171	2020	\$0.5114	150	10%	\$84	202	,	\$144.00	150	423	35.46%	10%	\$56
2028	\$2.6839	164	7.5%	\$472	2027	\$1.0459	150	10%	\$173	2027	•	150	10%	\$84	202	•	\$144.00	150	423	35.46%	10%	\$56

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Heating System

			Benefits							Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$532	\$350	\$270	\$1,152	\$0	0	\$0	\$100	\$270	\$170	\$100	\$64	\$703
2010	2	\$533	0	\$273	\$806	0	0	0		\$273	\$171	\$100	\$64	\$608
2011	3	\$ 535	0	\$275	\$810	0	0	0		\$275	\$173	\$100	\$64	\$612
2012	4	\$536	0	\$278	\$815	0	0	0		\$278	\$175	\$100	\$64	\$617
2013	5	\$538	0	\$281	\$819	0	0	0		\$281	\$176	\$100	\$64	\$821
2014	6	\$539	0	\$284	\$823	0	0	0		\$284	\$178	\$100	\$64	\$626
2015	7	\$541	0	\$287	\$828	0	0	0		\$287	\$180	\$100	\$64	\$630
2016	8	\$542	0	\$289	\$832	0	0	0		\$289	\$182	\$100	\$ 64	\$635
2017	9	\$544	0	\$292	\$836	0	0	0		\$292	\$184	\$100	\$64	\$640
2018	10	\$54 5	0	\$295	\$841	0	0	0		\$295	\$185	\$100	\$64	\$844
2019	11	\$547	0	\$298	\$845	0	0	0		\$298	\$187	\$100	\$64	\$649
2020	12	\$ 548	0	\$301	\$850	0	0	0		\$301	\$189	\$100	\$64	\$654
2021	13	\$550	0	\$304	\$854	0	0	0		\$304	\$191	\$100	\$64	\$659
2022	14	\$ 552	0	\$307	\$859	0	0	0		\$307	\$193	\$100	\$ 64	\$664
2023	15	\$553	0	\$310	\$863	0	0	0		\$310	\$19 5	\$100	\$64	\$669
2024	16	\$555	0	\$313	\$868	0	0	0		\$313	\$197	\$100	\$64	\$674
2025	17	\$ 556	0	\$3 17	\$873	0	0	0		\$317	\$199	\$100	\$64	\$679
2026	18	\$558	350	\$320	\$1,227	2,882	(4,657)	1,775		\$320	\$201	\$100	\$64	\$684
2027	19	\$559	0	\$323	\$882	0	0	0		\$323	\$203	\$100	\$64	\$690
2028	20	\$561	0	\$326	\$887	0	0	0		\$326	\$205	\$100	\$64	\$695

Present Value \$8,585 of Benefits Present Value \$6,336 of Costs

Benefit/Cost 1.36
Ratio

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance T	уре
Heating Syst	em

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1,0%	NG Base Rates	0.0%

	Prop	eane Cost - Tab	ile 1			Natural G	as Supply C	ost - Table 2			Natural Ga	s Energy Cha	arge - Tabk	e 3			Natus	ral Gas Custo	omer Charg	e - Tabis 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propens Cost	Year	Cost Per Thorm	Annual Therms	Yax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	С	D	B*C*(1+D)	A	В	С	D	8"C"(1+D)	A	8	С	D	B*C*(1+D)	A	В	С	D	Ε	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	194	7.5%	\$532	2009	\$0.8658	178	10%	\$170	2009	\$0.5114	178	10%	\$100	2009	\$12.00	\$144.00	178	443	40.18%	10%	\$84
2010	\$2.5533	194	7.5%	\$533	2010	\$0.8744	178	10%	\$171	2010	\$0.5114	178	10%	\$100	2010	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2011	\$2.5605	194	7.5%	\$635	2011	\$0.8832	178	10%	\$173	2011	\$0.5114	178	10%	\$100	2011	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2012	\$2.5678	194	7,5%	\$636	2012	\$0.8920	178	10%	\$178	2012	\$0.5114	178	10%	\$100	2012	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2013	\$2,5750	194	7.5%	\$538	2013	\$0.9009	178	10%	\$178	2013	\$0.5114	176	10%	\$100	2013	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2014	\$2.5823	194	7.5%	\$639	2014	\$0.9099	178	10%	\$178	2014	\$0.5114	178	10%	\$190	2014	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2015	\$2.5896	194	7.5%	\$541	2015	\$0.9190	178	10%	\$180	2015		178	10%	\$190	2015	\$12.00	\$144,90	178	443	40.18%	10%	\$64
2016	\$2.5968	194	7.5%	\$542	2016	\$0,9282	178	10%	\$182	2018		178	10%	\$100	2016	\$12.00	\$144,00	178	443	40.18%	10%	\$84
2017	\$2.6041	194	7.5%	5644	2017	\$0.9375	178	10%	\$184	2017		178	10%	\$100	2017	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2018	\$2,6113	194	7.5%	\$545	2018	\$0,9489	178	10%	\$185	2018	•	178	10%	\$190	2018	\$12.00	\$144.00	178	443	40.16%	10%	\$64
2019	\$2.6186	194	7.5%	\$647	2019	\$0.9563	178	10%	\$187	2019		178	10%	\$100	2019	\$12.00	\$144.00	178	443	40.16%	10%	
2020	\$2,6259	194	7.5%	3548												•						\$64
2021				****	2020	\$0.9659	178	10%	\$189	2020		178	10%	\$100	2020	\$12.00	\$144.00	178	443	40.18%	10%	\$64
	\$2.6331	194	7.5%	\$550	2021	\$0.9756	178	10%	\$181	2021	\$0.5114	178	10%	\$100	2021	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2022	\$2.6404	194	7.5%	\$552	2022	\$0.9853	178	10%	\$193	2022		178	10%	\$100	2022	\$12.00	\$144,00	178	443	40.18%	10%	\$64
2023	\$2.8478	194	7.5%	\$563	2023	\$0. 995 2	178	10%	\$195	2023	\$0.5114	178	10%	\$100	2023	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2024	\$2.6549	194	7.5%	\$555	2024	\$1.0051	178	10%	\$197	2024	\$0,5114	178	10%	\$100	2024	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2025	\$2.6622	194	7.5%	\$556	2025	\$1.0152	178	10%	\$199	2025	\$0.5114	178	10%	\$100	2025	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2026	\$2.8894	194	7.5%	\$558	2026	\$1.0253	178	10%	\$201	2026	\$0.5114	178	10%	\$180	2026	\$12.00	\$144.00	178	443	40.18%	10%	\$64
2027	\$2.6767	194	7.5%	\$559	2027	\$1,0356	178	10%	\$203	2027	\$0.5114	178	10%	\$100	2027	\$12.00	\$144.00	175	443	40.18%	10%	\$64
2028	\$2.6839	194	7.5%	\$561	2028	\$1,0459	178	10%	\$295	2028	\$0.5114	178	10%	\$100	2028	\$12.00	\$144.00	176	443	40.18%	10%	\$64

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Clothes Drying

			Benefits						C	osts				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1 ,	\$149	\$100	\$60	\$309	\$0	\$0	\$0	\$100	\$60	\$48	\$28	\$18	\$254
2010	2	\$150	0	\$81	\$210	0	\$0	0		\$ 61	\$48	\$28	\$ 18	\$155
2011	3	\$150	0	\$61	\$211	0	\$0	0		\$61	\$ 49	\$28	\$18	\$156
2012	4	\$151	0	\$62	\$212	0	\$0	0		\$62	\$ 49	\$28	\$18	\$157
2013	5	\$151	0	\$62	\$214	0	\$0	0		\$62	\$50	\$28	\$18	\$158
2014	6	\$152	0	\$63	\$215	0	\$0	0		\$63	\$50	\$28	\$18	\$159
2015	7	\$152	0	\$64	\$216	0	\$0	0		\$64	\$51	\$28	\$18	\$160
2016	8	\$152	0	\$64	\$217	0	\$0	0		\$64	\$ 51	\$28	\$18	\$161
2017	9	\$153	0	\$ 65	\$218	0	\$0	0		\$6 5	\$52	\$28	\$18	\$163
2018	10	\$153	0	\$66	\$219	0	\$0	0		\$66	\$52	\$28	\$18	\$164
2019	11	\$154	0	\$66	\$220	0	\$0	0		\$66	\$ 53	\$28	\$18	\$165
2020	12	\$154	0	\$67	\$221	0	\$0	0		\$67	\$53	\$28	\$18	\$166
2021	13	\$154	100	\$68	\$322	533	(\$697)	164		\$68	\$54	\$28	\$18	\$167
2022	14	\$155	0	\$68	\$223	0	\$0	0		\$6 8	\$54	\$28	\$18	\$168
2023	15	\$155	0	\$69	\$224	0	\$0	0		\$69	\$55	\$28	\$18	\$170
2024	16	\$156	0	\$70	\$225	0	\$0	0		\$70	\$55	\$28	\$18	\$171
2025	17	\$156	0	\$70	\$227	0	\$0	0		\$70	\$56	\$28	\$18	\$172
2026	18	\$157	0	\$71	\$228	0	\$0	0		\$71	\$56	\$28	\$18	\$173
2027	19	\$157	0	\$72	\$229	0	\$0	0		\$72	\$57	\$28	\$ 18	\$175
2028	20	\$157	0	\$72	\$230	0	\$0	0		\$72	\$58	\$28	\$18	\$176

of Benefits \$2,258

Present Value of Costs \$1,679

Benefit/Cost 1.34
Ratio

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type
Clothes Drying

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tab	le 1			Natural Ga	as Supply Co	ost - Table 2			Natural Ge	s Energy Cha	arge Table	2 3			Natur	at Gas Custo	mer Charge	- Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rete	Propane Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tex Rate	NG Cost	Year	Monthly Customer Charge	Annusi Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α	В	С	D	B*C*(1+D)	Α	В	ç	D	B*C*(1+D)	_A	В	С	D	B*C*(1+D)	Α	В	c	a	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	55	7.5%	\$149	2009	\$0.8658	50	10%	\$49	2009	\$0.5114	50	10%	\$28	2009	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2010	\$2.5533	55	7.5%	\$150	2010	\$0,8744	50	10%	\$49	2010	\$0.5114	50	10%	\$28	2010	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2011	\$2.5605	55	7.5%	\$150	2011	\$0.8832	50	10%	\$49	2011	\$0.5114	50	10%	\$28	2011	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2012	\$2.5676	55	7.5%	\$151	2012	\$0.8920	50	10%	\$49	2012	\$0.5114	50	10%	\$28	2012	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2013	\$2.5750	55	7.5%	\$151	2013	\$0.9009	50	10%	\$80	2013	\$0.5114	50	10%	\$28	2013	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2014	\$2.5823	55	7.5%	\$182	2014	\$0.9099	50	10%	\$50	2014	\$0.5114	50	10%	\$28	2014	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2015	\$2.5896	55	7,5%	\$152	2015	\$0.9190	50	10%	\$81	2015	\$0.5114	50	10%	\$28	2015	\$12.00	\$144,00	50	443	11.29%	10%	\$18
2016	\$2.5968	55	7.5%	\$152	2016	\$0.9282	50	10%	\$81	2016	\$0,5114	50	10%	\$28	2016	\$12.00	\$144.00	50	443	11,29%	10%	\$18
2017	\$2.6041	55	7.5%	\$163	2017	\$0,9375	50	10%	\$82	2017	\$0.5114	50	10%	\$28	2017	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2018	\$2,6113	55	7.5%	\$153	2018	\$0.9469	50	10%	\$62	2018	\$0.5114	50	10%	\$28	2018	\$12,00	\$144.00	50	443	11,29%	10%	\$18
2019	\$2.6186	55	7.5%	\$154	2019	\$0.9563	50	10%	\$63	2019	\$0.5114	50	10%	\$28	2019	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2020	\$2.6259	55	7.5%	\$164		\$0.9659												50	443	11.29%	10%	\$18
2021	\$2.6239	55			2020		50	10%	\$53	2020	\$0.5114	50	10%	\$28	2020	\$12.00	\$144.00					
			7.5%	\$154	2021	\$0.9756	50	10%	\$54	2021	\$0.5114	50	10%	\$28	2021	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2022	\$2.8404	55	7.5%	\$155	2022	\$0.9853	50	10%	\$64	2022	\$0.5114	50	10%	\$28	2022	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2023	\$2.6476	55	7.5%	\$155	2023	\$0.9952	50	10%	\$85	2023	\$0.5114	50	10%	\$28	2023	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2024	\$2.6549	55	7.5%	\$156	2024	\$1.0051	50	10%	\$66	2024	\$0.5114	50	10%	\$28	2024	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2025	\$2.6622	55	7.5%	\$166	2025	\$1.0152	50	10%	\$86	2025	\$0.5114	50	10%	\$28	2025	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2026	\$2.6694	55	7.5%	\$157	2026	\$1.0253	50	10%	\$56	2026	\$0.5114	50	10%	\$28	2025	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2027	\$2.6787	55	7.5%	\$157	2027	\$1.0356	50	10%	\$67	2027	\$0.5114	50	10%	\$28	2027	\$12.00	\$144.00	50	443	11.29%	10%	\$18
2028	\$2.6839	55	7.5%	\$157	2026	\$1.0459	50	10%	\$58	2028	\$0.5114	50	10%	\$28	2028	\$12.00	\$144.00	50	443	11.29%	10%	\$18

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Cost Effective Results

Appliance Type

Cooking

			Benefits					***************************************	****	Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	. 5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$134	\$100	\$60	\$294	\$0	\$0	\$0	\$100	\$60	\$43	\$25	\$16	\$244
2010	2	\$135	0	\$61	\$195	0	\$0	0		\$61	\$43	\$25	\$16	\$145
2011	3	\$135	0	\$6 1	\$196	0	\$0	0		\$61	\$44	\$25	\$16	\$146
2012	4	\$136	0	\$62	\$197	0	\$0	0		\$62	\$44	\$25	\$16	\$147
2013	5	\$136	0	\$62	\$198	0	\$0	0		\$62	\$45	\$25	\$ 16	\$148
2014	6	\$136	0	\$63	\$199	0	\$0	0		\$ 63	\$45	\$25	\$16	\$150
2015	7	\$137	0	\$64	\$200	0	\$0	0		\$64	\$45	\$25	\$16	\$151
2016	8	\$137	0	\$64	\$201	0	\$0	0		\$64	\$46	\$25	\$ 16	\$152
2017	9	\$138	0	\$65	\$202	0	\$0	0		\$65	\$46	\$25	\$ 16	\$153
2018	10	\$138	0	\$66	\$204	0	\$0	0		\$66	\$47	\$25	\$16	\$154
2019	11	\$138	0	\$66	\$205	0	\$0	0		\$66	\$47	\$25	\$16	\$155
2020	12	\$139	0	\$67	\$206	0	\$0	0		\$67	\$48	\$25	\$ 16	\$156
2021	13	\$139	0	\$68	\$207	0	\$0	0		\$68	\$48	\$25	\$16	\$157
2022	14	\$139	0	\$68	\$208	0	\$0	0		\$68	\$49	\$25	\$16	\$158
2023	15	\$140	100	\$69	\$309	637	(\$805)	167		\$69	\$49	\$25	\$ 18	\$160
2024	16	\$140	0	\$70	\$210	0	\$0	0		\$70	\$50	\$25	\$16	\$161
2025	17	\$141	0	\$70	\$211	0	\$0	0		\$70	\$50	\$25	\$16	\$162
2026	18	\$141	0	\$71	\$212	0	\$0	0		\$71	\$51	\$25	\$ 16	\$163
2027	19	\$141	0	\$72	\$213	0	\$0	0		\$72	\$51	\$25	\$16	\$164
2028	20	\$142	0	\$72	\$214	0	\$0	0		\$72	\$52	\$25	\$16	\$166

Present Value of Benefits \$2,103

Present Value of Costs \$1,584

Benefit/Cost 1.33
Ratio

Sebring Gas System - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program Participants Test - Data

Appliance Type Cooking

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Propane Cost - Table 1					Natural Ga	s Supply Co	st - Table 2			Natural Gas	Energy Cha	rge - Table 3				Natu	ral Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gallon	Annual Gallon	Tax Rate	Propene Cost	Year	Cost Per Therm	Annual Themas	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate NG	G Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annuai Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	С	D	B*C*(1+D)	A	В	С	D	B°C°(1+D)	Α	В	С	D B*C	C*(1+D)	А	В	С .	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	49	7.5%	\$134	2009	\$0.8658	45	10%	\$43	2009	\$0.5114	45	10% 1	\$25	2009	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2010	\$2.5533	49	7.5%	\$135	2010	\$0.8744	45	10%	\$43	2010	\$0.5114	45	10%	\$28	2010	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2011	\$2,5605	49	7.5%	\$135	2011	\$0.8832	45	10%	\$44	2011	\$0.5114	45	10% 4	\$25	2011	\$12.00	\$144.00	45	443	10,16%	10%	\$16
2012	\$2.5678	49	7.5%	\$138	2012	\$0.8920	45	10%	\$44	2012	\$0,5114	45	10%	\$25	2012	\$12.00	\$144.00	45	443	10.18%	10%	\$16
2013	\$2.5750	49	7.5%	\$136	2013	\$0.9009	45	10%	\$48	2013	\$0.5114	45	10% 1	\$25	2013	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2014	\$2.5823	49	7.5%	\$136	2014	\$0.9099	45	10%	345	2014	\$0.5114	45		\$25	2014	\$12,00	\$144.00	45	443	10,16%	10%	\$16
2015	\$2.5896	49	7.5%	\$137	2015	\$0.9190	45	10%	\$45	2015	\$0,5114	45	10%	\$26	2015	\$12,00	\$144.00	45	443	10.16%	10%	516
2016	\$2,5966	49	7.5%	\$137	2016	\$0.9282	45	10%	\$46	2016	\$0.5114	45		\$25	2016	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2017	\$2,6041	49	7.5%	\$138	2017	\$0,9375	45	10%	\$48	2017	\$0.5114	45		\$25	2017	\$12,00	5144.00	45	443	10.16%	10%	\$16
2016	\$2.6113	49	7.5%	\$138	2018	\$0,9469	45	10%	\$47	2018	\$0.5114	45		\$25	2018	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2019	\$2.6186	49	7,5%	\$138	2019	\$0.9563	45	10%	\$47	2019	\$0.5114	45		\$26	2019	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2020	\$2,6259	49	7.5%	\$139	2020	\$0.9659	45	10%	\$45	2020	\$0.5114	45		\$25	2020	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2021	\$2.6331	49	7.5%	\$139	2020	\$0.9756	45	10%	\$48	2020	\$0.5114	45		\$26	2020	\$12.00	\$144.00	45 45	443	10.16%	10%	\$16
2022	\$2.6404	49	7.5%	\$139	2021	\$0.9853	45	10%	1						2021	\$12.00	\$144.00	45 45		10.16%	10%	
2023	\$2.6476	49	7.5%	\$140	2022	\$0,9853			\$49	2022	\$0.5114	45		\$26		•	******		443			\$16
2024						******	45	10%	\$49	2023	\$0.5114	45		\$25	2023	\$12.00	\$144.00	45	443	10.16%	10%	\$16
	\$2.8549	49	7.5%	\$140	2024	\$1.0051	45	10%	\$60	2024	\$0.5114	45		\$25	2024	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2025	\$2.6622	49	7.5%	\$141	2025	\$1.0152	45	10%	\$60	2025	\$0.5114	45		\$25	2025	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2026	\$2,6694	49	7.5%	\$141	2026	\$1.0253	45	10%	\$51	2026	\$0.5114	45		\$28	2026	\$12.00	\$144.00	45	443	10,16%	10%	\$16
2027	\$2.6767	49	7.5%	\$141	2027	\$1.0356	45	10%	\$81	2027	\$0.5114	45	10%	\$25	2027	\$12.00	\$144.00	45	443	10.16%	10%	\$16
2028	\$2.6839	49	7.5%	\$142	2026	\$1.0459	45	10%	\$52	2028	\$0.5114	45	10% 3	\$25	2028	\$12.00	\$144.00	45	443	10.16%	10%	\$16

Attachment 2.7

Associated Gas Distributors of Florida Energy Conservation Program Petition Residential Propane Distribution System Conversion Program March, 2009

St. Joe Natural Gas Company Rate Impact Measurement Test Participants Test

Summary of RIM Test and Participants Test Results

	Proposed Allowance	Participants Test	RIM Test
Gas Storage Tank Water Heating	\$350	1.36	1.46
Gas Tankless Water Heating	\$450	1.36	1.41
Gas Heating	\$350	1.24	1.49
Gas Clothes Drying	\$100	1.22	1.47
Gas Cooking	\$100	1.21	1.41

St. Joe Natural Gas - AGDF Energy Conservation Filing 2009 Residential Propane Distribution System Conversion Program RIM Test - Results

Appliance Type
Storage Tank Water Heating

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
Energy Charg		Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$117	\$152	\$74	\$343	\$152	\$22	\$10	\$350.00	\$535
2010	\$117	\$154	\$74	\$344	\$154	\$21	\$11	\$0.00	\$186
2011	\$117	\$155	\$74	\$346	\$155	\$21	\$11	\$0.00	\$186
2012	\$117	\$157	\$74	\$347	\$157	\$20	\$11	\$0.00	\$187
2013	\$117	\$158	\$74	\$349	\$158	\$19	\$11	\$0.00	\$189
2014	\$117	\$160	\$74	\$350	\$160	\$19	\$11	\$0.00	\$190
2015	\$117	\$162	\$74	\$352	\$162	\$18	\$11	\$0.00	\$191
2016	\$117	\$163	\$74	\$354	\$163	\$17	\$11	\$0.00	\$192
2017	\$117	\$165	\$74	\$355	\$165	\$17	\$11	\$0.00	\$193
2018	\$117	\$167	\$74	\$357	\$167	\$16	\$11	\$350.00	\$544
2019	\$117	\$168	\$74	\$359	\$168	\$16	\$11	\$0.00	\$195
2020	\$117	\$170	\$74	\$360	\$170	\$15	\$12	\$0.00	\$197
2021	\$117	\$172	\$74	\$362	\$172	\$15	\$12	\$0.00	\$198
2022	\$117	\$173	\$74	\$364	\$173	\$14	\$12	\$0.00	\$199
2023	\$117	\$175	\$74	\$365	\$175	\$14	\$12	\$0.00	\$201
2024	\$117	\$177	\$74	\$367	\$177	\$13	\$12	\$0.00	\$202
2025	\$117	\$179	\$74	\$369	\$179	\$13	\$12	\$0.00	\$203
2026	\$117	\$180	\$74	\$371	\$180	\$12	\$12	\$0.00	\$205
2027	\$117	\$182	\$74	\$373	\$182	\$12	\$13	\$0.00	\$207
2028	\$117	\$184	\$74	\$374	\$184	\$11	\$13	\$0.00	\$208

Present Value of Benefits \$3,475

Present Value of Costs \$2,375

Benefit/Cost	***************************************
Ratio	1.46

Appliance Type
Storage Tank Water Heating

Fuel Rete Escalsion	1.0%		.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Mein 3.	30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line 3.	.30%
O&M/Infletion Escalator	1.0%	Depreciation Rats - Mater 4.	.00%

Table 1							
Revenue - Energy Charge							
11	2	3	2*3				
Year	Therms	Base Flato	Total Charge				
2009	170	\$0.6863	\$117				
2010	170	\$0.6863	\$117				
2011	170	\$0,6863	\$117				
2012	170	\$0.8863	\$117				
2013	170	\$0.6863	\$117				
2014	170	\$0.8863	\$117				
2015	170	\$0.6863	\$117				
2016	170	\$0.8863	\$117				
2017	170	\$0.6863	\$117				
2018	170	\$0.6863	\$117				
2019	170	\$0.6983	\$117				
2020	170	\$0.6863	\$117				
2021	170	\$0.8883	\$117				
2022	170	\$0.6863	\$117				
2023	170	\$0,6963	\$117				
2024	170	\$0.6863	\$117				
2025	170	\$0.8863	5117				
2028	170	\$0.6863	\$117				
2027	170	\$0.6883	\$117				
2028	170	\$0,6863	\$117				

	Revenue - Co	st of Gas	
11	3	4	2*3
	_		
Year	Therms	Fuel Rate	
2009	170	\$0.8960	\$152
2010	170	\$0,9049	\$154
2011	170	\$0.9140	\$155
2012	170	\$0.9231	\$157
2013	170	\$0.9323	\$158
2014	170	\$0.9417	\$160
2015	170	\$0.9511	\$182
2016	170	\$0.9606	\$163
2017	170	\$0.9702	\$165
2018	170	\$0.9799	\$167
2019	170	\$0,9897	\$168
2020	170	\$0.9996	\$170
2021	170	\$1,0096	\$172
2022	170	\$1,9197	\$173
2023	170	\$1,0299	\$175
2024	170	\$1,0402	\$177
2025	170	\$1,0506	\$179
2026	170	\$1,0811	5180
2027	170	\$1.0717	S182
2028	170	\$1.0824	\$184

	Revenue - Customer Charge							
1	2	3	4	4*3				
	Monthly		Ratio Therms					
	Customer	Annual Customer	To Total	Prorated Annual				
Year	Charge	Charge	Consumed	Customer Charge				
2009	\$16.00	\$192.00	36.37%	\$74				
2010	\$16.00	\$192.00	38.37%	\$74				
2011	\$16.00	\$192.00	38.37%	\$74				
2012	\$16.00	\$192.00	38.37%	\$74				
2013	\$16.00	\$192.00	38.37%	\$74				
2014	\$16,00	\$192.00	38.37%	\$74				
2015	\$16.00	\$192,00	38.37%	\$74				
2016	\$16.00	\$192.00	38.37%	\$74				
2017	\$10.00	\$192.00	38.37%	\$74				
2018	\$16,00	\$192.00	38.37%	\$74				
2019	\$16.00	\$192.00	36.37%	\$74				
2020	\$16.00	\$192.00	38.37%	\$74				
2021	\$16.00	\$192 00	36.37%	574				
2022	\$16.00	\$192.00	38.37%	\$74				
2023	\$16.00	\$192.00	38.37%	\$74				
2024	\$16.00	\$192.00	38.37%	\$74				
2025	\$18.00	\$192.00	38.37%	\$74				
2026	\$16,00	\$192.00	38.37%	\$74				
2027	\$16.00	\$192.00	38.37%	\$74				
2028	\$18.00	\$192.00	38.37%	\$74				

Investment Carrying Costs								
1	2	3	4	5	6	7	8	6"7"B
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cost
2009	\$100	\$500	\$257	\$130	\$987	5.79%	38.37%	\$22
2010	\$97	\$484	\$249	\$125	\$955	5.79%	38.37%	\$21
2011	\$94	\$46B	\$241	\$120	\$923	5.70%	39.37%	\$21
2012	\$91	\$453	\$233	\$115	\$892	5,79%	38.37%	\$20
2013	\$88	\$438	\$225	\$110	\$861	5.70%	38.37%	\$19
2014	\$85	3424	\$218	\$106	\$833	5.78%	38.37%	\$19
2015	\$82	\$410	\$211	\$102	\$805	5.79%	38.37%	\$18
2018	\$79	\$396	\$204	\$98	\$777	5.79%	38.37%	\$17
2017	\$76	\$383	\$197	\$94	\$750	5.79%	38.37%	\$17
2018	\$73	\$370	\$190	\$90	\$723	5.79%	38.37%	\$16
2019	\$71	\$356	\$184	\$86	\$698	5.79%	38.37%	\$18
2020	\$89	\$348	\$178	\$83	\$676	5.79%	38.37%	\$15
2021	\$87	\$335	\$172	\$80	\$654	5.79%	36.37%	\$15
2022	\$65	\$324	\$166	\$77	\$632	5.79%	38.37%	\$14
2023	\$63	\$313	\$181	574	\$611	5.79%	38.37%	\$14
2024	\$61	\$303	\$156	\$71	\$591	5.70%	38.37%	\$13
2025	\$59	\$293	\$151	\$88	\$571	5.79%	38.37%	\$13
2026	\$57	\$283	\$146	\$65	\$551	5.79%	38.37%	\$12
2027	\$55	\$274	\$141	\$62	\$532	5.79%	38.37%	\$12
2028	\$53	\$266	\$136	\$60	\$514	5.79%	38.37%	\$11

Incremental Customer Costs								
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	D&M Cost	Adm. & O&M Cost
2009	\$1.09	\$13	36.37%	\$4.99	\$14.25	38.37%	\$5	\$10
2010	\$1.10	\$13	38.37%	\$4.99	\$14,39	38.37%	\$8	\$11
2011	\$1.11	\$13	38.37%	\$4.99	\$14.54	38.37%	\$6	\$11
2012	\$1.12	\$13	38.37%	\$4,99	\$14.68	38.37%	\$8	\$11
2013	\$1,13	\$14	36,37%	\$5.37	\$14.63	38.37%	\$6	\$11
2014	\$1.15	\$14	38.37%	\$5,37	\$14.98	38.37%	\$6	\$11
2015	\$1.18	\$14	38.37%	\$5.37	\$15,13	38.37%	\$6	\$11
2016	\$1.17	\$14	38.37%	\$5.37	\$15.28	36.37%	\$6	\$11
2017	\$1.18	514	38.37%	\$5.37	\$15.43	38.37%	\$6	\$11
2018	\$1.19	\$14	38,37%	\$5.37	\$15,59	38.37%	56	\$11
2019	\$1.20	\$14	38.37%	\$5.37	\$15.74	38.37%	\$6	\$11
2020	\$1.22	\$15	38,37%	\$5.76	\$15.90	38.37%	\$6	\$12
2021	\$1,23	\$15	38.37%	\$5.78	\$18.00	38.37%	\$6	\$12
2022	\$1.24	\$15	38.37%	\$5.76	\$16.22	38.37%	\$6	\$12
2023	\$1.25	\$15	38.37%	\$5,76	\$18,38	38.37%	\$8	\$12
2024	\$1.27	\$15	38.37%	\$5,76	\$16.54	38.37%	\$6	\$12
2025	\$1,28	\$15	38,37%	\$5.78	\$16,71	36.37%	26	\$12
2026	\$1.29	\$15	36.37%	\$5,76	\$16.88	38.37%	\$6	\$12
2027	\$1.30	\$16	38.37%	\$6,14	\$17.05	38.37%	\$7	\$13
2028	\$1,32	\$18	38,37%	\$6,14	\$17.22	38.37%	\$7	\$13

Gas Costs							
1	2	3	2*3				
	Therms	Gas Supply	Gas Supply				
Year		Rate	Cost				
2009	170	D 8960	\$152				
2010	170	\$0.9049	\$154				
2011	170	\$0 9140	\$155				
2012	170	\$0 9231	\$157				
2013	170	\$0,9323	\$158				
2014	170	\$0.9417	\$160				
2015	170	\$0.9511	\$162				
2016	170	\$0.9606	\$163				
2017	170	\$0,9702	\$165				
2018	170	\$0.9769	\$167				
2019	170	\$0.9897	\$168				
2020	170	\$0,9996	\$170				
2021	170	\$1.0096	\$172				
2022	170	\$1.0197	\$173				
2023	170	\$1.0299	\$175				
2024	170	\$1.0402	\$177				
2025	170	\$1.0506	\$179				
2026	170	\$1.0611	\$180				
2027	170	\$1.0717	\$182				
2028	170	\$1.0824	\$184				

Appliance Type

Tankless Water Heating

	Incremental	Incremental	Incremental	Total	Gas	investment	Incremental			
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total	
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs	
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4			
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9	
2009	\$103	\$134	\$68	\$305	\$134	\$20	\$10	\$450.00	\$614	
2010	\$103	\$136	\$68	\$307	\$136	\$20	\$10	\$0.00	\$165	
2011	\$103	\$137	\$68	\$308	\$137	\$19	\$10	\$0.00	\$166	
2012	\$103	\$138	\$68	\$309	\$138	\$18	\$ 10	\$0.00	\$167	
2013	\$103	\$140	\$68	\$311	\$140	\$18	\$ 10	\$0.00	\$168	
2014	\$103	\$141	\$68	\$312	\$141	\$17	\$10	\$0.00	\$169	
2015	\$103	\$ 143	\$68	\$314	\$143	\$17	\$10	\$0.00	\$170	
2016	\$103	\$144	\$68	\$315	\$144	\$ 16	\$10	\$0.00	\$170	
2017	\$103	\$146	\$68	\$317	\$146	\$ 15	\$10	\$0,00	\$171	
2018	\$103	\$147	\$68	\$318	\$147	\$ 15	\$10	\$0.00	\$172	
2019	\$103	\$148	\$68	\$319	\$148	\$14	\$11	\$0.00	\$173	
2020	\$103	\$150	\$68	\$321	\$150	\$14	\$11	\$0.00	\$175	
2021	\$103	\$151	\$68	\$322	\$151	\$13	\$11	\$0.00	\$176	
2022	\$103	\$153	\$68	\$324	\$153	\$13	\$11	\$0,00	\$177	
2023	\$103	\$154	\$68	\$326	\$154	\$13	\$11	\$0.00	\$178	
2024	\$103	\$156	\$68	\$327	\$156	\$12	\$11	\$0.00	\$179	
2025	\$103	\$158	\$68	\$329	\$158	\$12	\$11	\$0.00	\$181	
2026	\$103	\$159	\$68	\$330	\$159	\$11	\$11	\$0.00	\$182	
2027	\$103	\$161	\$68	\$332	\$161	\$11	\$12	\$0.00	\$183	
2028	\$103	\$162	\$68	\$333	\$162	\$11	\$12	\$450.00	\$635	

Present Value of Benefits \$3,097

Present Value of Costs \$2,192

Benefit/Cost Ratio 1.41

Appliance Type
Tankless Water Heating

Fuel Rate Escalator	1.0%	Dispreciation Rate - Supply Mem	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	3.30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.30%
CRASSES Ecolules	4.02	Departmentum Pate Meter	4 2004

Revenue - Energy Charge							
			2*3				
	2	3	2'3				
Year	Therms	Base Rate	Total Charge				
2009	150	\$0.6863	\$103				
2010	150	\$0.6863	\$103				
2011	150	\$0.6663	\$103				
2012	150	\$0.6663	\$163				
2013	150	\$0.6883	\$103				
2014	150	\$0.6863	\$103				
2015	150	\$0.6863	5103				
2018	150	\$0.6863	\$103				
2017	150	\$0.6863	\$193				
2018	150	\$0.6863	\$103				
2019	150	\$0,6863	\$103				
2020	150	\$0.6863	\$103				
2021	150	\$0.6863	\$103				
2022	150	\$0.6863	\$103				
2023	150	\$0.6863	\$103				
2024	150	\$0.5863	\$103				
2025	160	to 8800	\$402				

	Revenue - Co	st of Gas	
	ż	4	2*3
Year	Thems	Fuel Rate	Total Charge
2009	150	\$0 8960	\$134
2010	150	\$0.9049	\$136
2011	150	\$0.9140	\$137
2012	150	\$0.9231	\$138
2013	150	\$0.9323	\$140
2014	150	\$0.9417	\$141
2015	150	\$0.9511	\$143
2016	150	\$0.9606	\$144
2017	150	\$0.9702	\$146
2018	150	\$0,9799	\$147
2019	150	\$0.9897	\$146
2020	159	\$0.9998	\$150
2021	150	\$1.0098	\$151
2022	150	\$1.0197	\$153
2023	150	\$1,0299	\$154
2024	150	\$1.0402	\$156
2025	150	\$1.0506	\$158
2028	150	\$1.0611	\$159
2027	150	\$1.0717	\$161
2028	150	\$1.0824	\$162

		venue - Custame		
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Proreted Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$16.00	\$192.00	35.46%	\$68
2010	\$16.00	\$192.00	35 46%	\$68
2011	\$16.00	\$192.00	35.46%	\$68
2012	\$16.00	\$192.00	35.46%	\$68
2013	\$16.00	\$192.00	35.46%	\$68
2014	\$16.00	\$192.00	35.46%	\$68
2015	\$16.00	\$192.00	35.48%	\$68
2016	\$16.00	\$192.00	35.46%	\$68
2017	\$16.00	\$192.00	35,46%	\$68
2016	\$16.00	\$192.00	35.46%	\$68
2019	\$16.00	\$192.00	35.46%	\$68
2020	\$18.00	\$192.00	35.46%	\$6B
2021	\$16.00	\$192.00	35.46%	\$68
2022	\$16.00	\$192.00	35.46%	Seg
2023	\$16.00	\$192.00	35,46%	268
2024	\$16.00	\$192.00	35.46%	\$68
2025	\$16.00	\$192.00	35.46%	\$68
2026	\$16.00	\$192.00	35.46%	\$68
2027	\$16.00	\$192.00	35.48%	\$58
2026	\$16.00	\$192.00	35.46%	\$68

			inv	estment Ca	rrying Costs			
1	2	3	4	- 6	6	7	8	6*7*8
	Supply	nemqoleveC	Sarvice		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Mater	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$257	\$130	\$987	5.79%	35,45%	\$20
2010	\$97	\$484	\$249	\$125	\$955	5.79%	35.46%	\$20
2011	\$94	\$468	\$241	\$120	\$923	5.79%	35.48%	\$19
2012	\$91	\$453	\$233	\$115	\$892	5.79%	35.48%	\$18
2013	\$88	\$438	\$225	\$110	\$861	5.79%	35.46%	\$18
2014	\$85	\$424	\$218	\$106	\$833	5 79%	35.46%	\$17
2015	\$82	\$410	\$211	\$102	\$805	5.79%	35.46%	\$17
2016	\$79	\$396	\$204	\$96	\$777	5.79%	35.46%	\$18
2017	\$78	\$383	\$197	\$94	\$750	5.79%	35.46%	\$15
2018	\$73	\$370	\$190	\$90	\$723	5.79%	35.48%	\$15
2019	\$71	\$358	\$184	\$86	\$689	5.79%	35.46%	\$14
2020	\$69	\$346	\$178	\$83	\$676	5.78%	35.48%	\$14
2021	\$87	\$335	\$172	\$80	\$654	5.79%	35.48%	\$13
2022	\$85	\$324	\$168	\$77	\$632	5.79%	35,46%	\$13
2023	\$63	\$313	\$161	\$74	\$611	5.79%	35.46%	\$13
2024	\$81	\$303	\$156	\$71	\$591	5.79%	35.46%	\$12
2025	\$59	\$293	\$151	\$86	\$571	5.79%	35.48%	\$12
2026	\$57	\$283	\$148	\$85	\$551	5.79%	35.46%	\$11
2027	\$55	\$274	\$141	\$62	\$532	5 79%	35.46%	\$11
2028	\$53	\$265	\$136	\$60	\$614	5.79%	35.46%	\$11

			in over	nental Custo	mar Canta			
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total incremente
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	Q&M Cost	Adm. & O&M Cost
2009	\$1.09	\$13	35.46%	\$4.61	\$14.25	35.46%	\$5	\$10
2010	\$1.10	\$13	35.46%	\$4.81	\$14.39	35.46%	\$5	\$10
2011	\$1.11	\$13	35.46%	\$4.81	\$14.54	35.46%	\$5	\$10
2012	\$1.12	513	35,40%	\$4.61	\$14.68	35.46%	\$5	\$10
2013	\$1.13	514	35.46%	\$4.96	\$14.83	35,46%	\$5	\$10
2014	\$1.15	\$14	35.46%	\$4.98	\$14.98	35.46%	\$5	\$10
2015	\$1.18	\$14	35.46%	\$4.96	\$15.13	35.48%	\$5	\$18
2016	\$1.17	\$14	35.46%	\$4.06	\$15.28	35.46%	\$5	\$10
2017	\$1.18	\$14	35.46%	\$4.96	\$15.43	35.46%	\$5	\$10
2018	\$1,19	\$14	35.46%	\$4.96	\$15.59	35.46%	se	\$10
2019	\$1.20	\$14	35.46%	\$4.96	\$15.74	35.45%	\$6	\$11
2020	\$1.22	\$15	35.48%	\$5.32	\$15.90	35.46%	\$6	\$11
2021	\$1.23	\$15	35.46%	\$5.32	\$16.06	35.46%	\$6	\$11
2022	\$1.24	\$15	35.46%	\$5.32	\$16.22	35.46%	\$6	\$11
2023	\$1.25	\$15	35 40%	\$5.32	\$10.36	35.46%	\$6	\$11
2024	\$1.27	\$15	35.46%	\$5.32	\$18.54	35.46%	\$8	\$11
2025	\$1.26	\$15	35.46%	\$5.32	\$10.71	35.46%	\$8	\$11
2026	\$1.29	5 15	35.48%	\$5.32	\$10.68	35.46%	\$6	\$11
2027	\$1.30	\$16	35.46%	\$5.67	\$17.05	35.46%	\$6	\$12
2028	\$1.32	\$16	35.46%	\$5.67	\$17.22	35.46%	56	\$12

	Gas C	osts	
11	2	3	2*3
	Therms	Per Therm	Gas Supply
Year		Supply Cost	Cost
2009	150	0.8960	\$134
2010	150	\$0.9049	\$136
2011	150	\$0,9140	\$137
2012	150	\$0.9231	\$138
2013	150	\$0.9323	\$140
2014	150	\$0.9417	3141
2015	150	\$0.9511	\$143
2016	150	\$0.9606	\$144
2017	150	\$0.9702	\$146
201B	150	\$0.9799	\$147
2019	150	\$0.9897	\$148
2020	150	\$0,9995	\$150
2021	150	\$1,0096	\$151
2022	150	\$1.0197	\$153
2023	150	\$1.0299	\$154
2024	150	\$1.0402	\$156
2025	150	\$1.0596	\$156
2026	150	\$1.0811	\$159
2027	150	\$1 0717	\$161
2028	150	\$1.0824	\$162

Appliance Type

Heating System

	Incremental	Incremental	incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$122	\$15 9	\$77	\$359	\$159	\$23	\$11	\$350.00	\$543
2010	\$122	\$161	\$77	\$360	\$161	\$22	\$11	\$0.00	\$194
2011	\$122	\$163	\$77	\$362	\$163	\$21	\$11	\$0.00	\$195
2012	\$122	\$164	\$77	\$364	\$164	\$21	\$11	\$0.00	\$196
2013	\$122	\$166	\$77	\$365	\$166	\$20	\$12	\$0.00	\$198
2014	\$122	\$168	\$77	\$367	\$168	\$19	\$12	\$0.00	\$199
2015	\$122	\$169	\$77	\$369	\$169	\$19	\$12	\$0.00	\$200
2016	\$122	\$171	\$77	\$370	\$171	\$18	\$12	\$0.00	\$201
2017	\$122	\$173	\$77	\$372	\$173	\$17	\$12	\$0.00	\$202
2018	\$122	\$174	\$77	\$374	\$174	\$17	\$12	\$0.00	\$203
2019	\$122	\$176	\$77	\$375	\$176	\$16	\$12	\$0.00	\$204
2020	\$122	\$178	\$77	\$377	\$178	\$16	\$12	\$0.00	\$206
2021	\$122	\$180	\$77	\$379	\$180	\$15	\$12	\$0.00	\$207
2022	\$122	\$182	\$77	\$381	\$182	\$1 5	\$13	\$0.00	\$209
2023	\$122	\$183	\$77	\$383	\$183	\$14	\$13	\$0.00	\$210
2024	\$122	\$185	\$77	\$384	\$185	\$14	\$13	\$0.00	\$212
2025	\$122	\$187	\$77	\$386	\$187	\$13	\$13	\$0.00	\$213
2026	\$122	\$189	\$77	\$388	\$189	\$13	\$13	\$350.00	\$565
2027	\$122	\$191	\$77	\$390	\$191	\$12	\$13	\$0.00	\$216
2028	\$122	\$193	\$77	\$392	\$193	\$12	\$13	\$0.00	\$218

Present Value of Benefits

\$3,639

Present Value of Costs

\$2,389

Benefit/Cost Ratio

1.52

	Appliance Type	
	Heating System	

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Mein	3.30%
Ges Energy Charge Escalator	0%	Depreciation Rate - Development Main	3.30%
Gas Customer Charge Escalator	0%	Depreciellon Rate - Service Line	3.30%
O&M/Inflation Escalator	1.0%	Depreciation Reta - Meter	4.00%

	Kevenue -	Energy Char	
	22	33	2'3
		B B	* 4 .
Year	Therms 178	\$0.6963	Total Charge \$122
2009			
2010	178	\$0,8983	5122
2011	178	\$0.6963	\$122
2012	176	\$0.6863	\$122
2013	178	\$0.6863	\$122
2014	178	\$0.6863	\$122
2015	178	\$0.6863	\$122
2016	178	\$0.6883	\$122
2017	176	\$0.6863	\$122
2016	178	\$0.6863	\$122
2019	178	\$0.6863	\$122
2020	178	\$0.6863	\$122
2021	178	\$0.6863	\$122
2022	178	\$0.8863	\$122
2023	178	\$0.6663	\$122
2024	178	\$0.6863	\$122
2025	178	\$0.6663	\$122
2026	178	\$0.6863	\$122
2027	178	\$0,6863	5122
2028	178	\$0.6863	\$122

Yable ta									
Revenue - Cost of Gas									
	2	4	2.3						
Year	Therms	Fuel Rate	Total Charge						
2009	178	\$0.8960	\$159						
2010	178	\$0.9049	\$161						
2011	178	\$0.9140	\$163						
2012	178	\$0.9231	\$164						
2013	178	\$0.9323	\$166						
2014	178	\$0.9417	\$168						
2015	178	\$0.9511	\$189						
2016	178	\$0.9608	\$171						
2017	178	\$0.9702	5173						
2018	178	\$0.9799	\$174						
2019	178	\$0.9897	\$176						
2020	178	\$0.9996	\$178						
2021	178	\$1,0096	\$180						
2022	178	\$1.0197	\$182						
2023	178	\$1.0298	\$183						
2024	178	\$1.0402	\$185						
2025	178	\$1.0506	\$187						
2026	178	\$1.0611	\$189						
2027	178	\$1,0717	\$191						
2028	178	\$1.0824	\$193						

Revenue - Customer Charge								
1	2	3	4	4*3				
	Monthly		Reto Therms					
	Customer	Annual Customer	To Total	Prorated Annual				
Year	Charge	Charge	Consumed	Gustomer Charge				
2009	\$16.00	\$192.00	40.18%	\$77				
2010	\$16,00	\$192.00	40.18%	\$77				
2011	\$18.00	\$192,00	40.18%	\$77				
2012	\$16.00	\$192.00	40:18%	\$77				
2013	\$18,00	\$192.00	40.18%	\$77				
2014	\$16.00	\$192.00	40.18%	\$77				
2015	\$16.00	\$192.00	40.16%	\$77				
2016	\$16.00	\$192.00	40.16%	\$77				
2017	\$16.00	\$192.00	40.16%	\$77				
2018	\$16.00	\$102.00	40.16%	\$77				
2019	\$16.00	\$192.00	40.18%	\$77				
2020	\$18.00	\$192.00	40.18%	\$77				
2021	\$16.00	\$192.00	40.18%	\$77				
2022	\$16.00	\$192.00	40.18%	\$77				
2023	\$16,00	\$ 192.00	40.16%	\$77				
2024	\$16.00	\$192.00	40.18%	\$77				
2025	\$16.00	\$192.00	40.18%	\$77				
2026	\$16.00	\$192.00	40 18%	\$77				
2027	\$16.00	\$192.00	40.18%	577				
2028	\$16.00	\$192.00	40 18%	\$77				

			Inves	tment Car	rying Costs			
1	2	3	4	3	- 6	7	8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$257	\$130	\$987	6.79%	40.18%	\$23
2010	597	\$484	5249	\$125	\$955	5.79%	40.18%	\$22
2011	\$94	\$468	\$241	\$120	\$923	5.79%	40.18%	\$21
2012	\$91	\$453	\$233	\$115	\$692	5.70%	40.18%	\$21
2013	\$88	\$438	\$225	\$110	\$861	5.79%	40.18%	\$20
2014	\$85	\$424	\$218	\$106	\$633	5.79%	40.18%	\$18
2015	\$82	\$410	\$211	\$102	\$805	5.79%	40.18%	\$18
2015	\$79	\$396	\$204	\$98	\$777	5.78%	40,18%	\$18
2017	\$76	\$363	\$197	594	\$750	5.79%	40.18%	\$17
2018	\$73	\$370	\$190	\$90	\$723	5.79%	40.18%	\$17
2019	\$71	\$358	\$184	\$86	\$699	5.79%	40 18%	\$16
2020	\$69	\$346	\$178	\$83	\$676	5.79%	40.18%	\$16
2021	\$67	\$335	\$172	\$60	\$654	5.79%	40.18%	\$15
2022	\$65	\$324	\$166	\$77	\$832	5.79%	40.18%	\$15
2023	\$63	\$313	\$181	\$74	\$611	5.79%	40.18%	\$14
2024	\$61	\$303	\$156	\$71	\$591	5.79%	40.18%	\$14
2025	\$59	\$293	\$151	\$68	\$571	5.79%	40.18%	\$13
2026	\$57	\$283	\$146	\$65	\$551	5.79%	40.18%	\$13
2027	\$55	\$274	\$141	\$62	\$532	5.79%	40.18%	\$12
2029	852	\$265	\$136	\$60	8514	5.79%	40.18%	512

			inc	remental Cus	tomer Cost	·s		
1	2	3	44	5=3*4	- 6		8=6"7	5+8
	Monthly	Annual	Ratio Thems To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.09	\$13	40.18%	\$5.22	\$14.25	40.18%	\$8	\$11
2010	\$1.10	\$13	40.18%	\$5.22	\$14.39	40.16%	\$6	\$11
2011	\$1.11	\$13	40.18%	\$5.22	\$14,54	40.16%	\$6	511
2012	\$1.12	\$13	40.18%	\$5.22	\$14.66	40,18%	\$6	\$11
2013	\$1.13	\$14	40.18%	\$5.63	\$14.83	49.18%	\$6	\$12
2014	\$1.15	\$14	40.18%	\$5.63	\$14.98	40.18%	\$6	\$12
2015	\$1.16	\$14	40.18%	\$5.63	\$15 13	40.18%	\$6	\$12
2016	\$1 17	\$14	40 18%	\$5.63	\$15.28	40.18%	\$6	\$12
2017	\$1.19	\$14	40.18%	\$5.63	\$15,43	40.18%	\$8	\$12
2018	\$1.19	514	40.18%	\$5.63	\$15.59	40.18%	\$6	\$12
2019	\$1.20	\$14	40.18%	\$5.63	\$15.74	40.18%	\$6	\$12
2020	\$1.22	\$15	40.18%	\$6.03	\$15.90	40.18%	\$6	\$12
2021	\$1.23	\$15	40.18%	\$6.03	\$16.06	40.18%	\$6	\$12
2022	\$1.24	\$15	40.16%	\$6.03	\$16.22	40 16%	\$7	\$13
2023	\$1.25	\$15	40.18%	\$6.03	\$16.38	40.18%	\$7	\$13
2024	\$1.27	\$15	40 18%	\$6.03	\$16.54	40,18%	\$7	\$13
2025	\$1.28	\$15	40.18%	\$6.03	\$16.71	40.18%	\$7	\$13
2026	\$1,29	\$15	40.18%	\$6 03	\$16.88	40,16%	\$7	\$13
2027	\$1.30	\$16	40.18%	\$6.43	\$17.05	40.18%	\$7	\$13
2026	\$1.32	\$16	40.18%	\$6.43	\$17.22	40.18%	\$7	\$13

	Gas	Costs	
1	2	3	2*3
	Therms	Per Therm	Gas Supply
Year	_	Supply Cast	Cost
2009	178	\$0,8960	\$159
2010	178	\$0,9049	\$181
2011	178	\$0.9140	\$163
2012	178	\$0.9231	\$154
2013	178	\$0,9323	\$166
2014	178	\$0.9417	\$166
2015	178	50.9511	\$169
2016	178	\$0.9806	\$171
2017	176	\$0.9702	\$173
2018	178	\$0.9799	\$174
2019	178	\$0.9897	\$176
2020	178	\$0.9996	\$178
2021	178	\$1.0096	\$180
2022	178	\$1.0197	\$182
2023	178	\$1.0299	\$183
2024	178	\$1.0402	\$165
2025	17 e	\$1.0506	\$187
2026	178	\$1.0611	\$189
2027	178	\$1.0717	\$191
2028	178	\$1.0824	\$193

Appliance Type	A	pp	liar	ice	Ty	/pe
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Clothes Drying

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$34	\$45	\$22	\$101	\$45	\$ 6	\$ 3	\$100.00	\$154
2010	\$34	\$4 5	\$22	\$101	\$4 5	\$6	\$3	\$0.00	\$55
2011	\$34	\$46	\$22	\$102	\$4 6	\$ 6	\$3	\$0.00	\$55
2012	\$34	\$ 46	\$22	\$102	\$4 6	\$6	\$3	\$0.00	\$55
2013	\$34	\$47	\$22	\$103	\$47	\$ 6	\$3	\$0.00	\$55
2014	\$34	\$4 7	\$22	\$103	\$47	\$ 5	\$3	\$0.00	\$56
2015	\$34	\$48	\$22	\$104	\$48	\$ 5	\$3	\$0.00	\$56
2016	\$34	\$48	\$22	\$104	\$48	\$5	\$3	\$0.00	\$56
2017	\$34	\$49	\$22	\$104	\$49	\$ 5	\$3	\$0.00	\$57
2018	\$34	\$49	\$22	\$105	\$49	\$5	\$3	\$0.00	\$57
2019	\$34	\$49	\$22	\$105	\$49	\$5	\$3	\$0.00	\$57
2020	\$34	\$50	\$22	\$106	\$50	\$4	\$ 3	\$0.00	\$58
2021	\$34	\$50	\$22	\$106	\$50	\$4	\$4	\$100.00	\$158
2022	\$34	\$ 51	\$22	\$107	\$ 51	\$4	\$4	\$0.00	\$59
2023	\$34	\$51	\$22	\$107	\$51	\$4	\$4	\$0.00	\$59
2024	\$34	\$ 52	\$22	\$108	\$52	\$4	\$4	\$0.00	\$59
2025	\$34	\$53	\$22	\$109	\$53	\$4	\$4	\$0.00	\$60
2026	\$34	\$ 53	\$22	\$109	\$53	\$4	\$4	\$0.00	\$60
2027	\$34	\$54	\$22	\$110	\$54	\$3	\$4	\$0.00	\$61
2028	\$34	\$54	\$22	\$110	\$54	\$3	\$4	\$0.00	\$61

Present Value 51,022

Present Value of Costs \$685

Benefit/Cost Ratio 1.49

Appliance Type Clothes Drying

Fuel Rate Escalator	1.0%	Depreciation Rate - Supply Main	3.30%
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main	3.30%
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.30%
O&M/inflation Escalator	1.0%	Depreciation Rate - Mater	4.00%

R	evenue - E	nergy Cha	rge
1	2	3	2'3
Year	Therms	Base Rate	Total Charge
2009	50	\$0.6863	\$34
2010	50	\$0.6863	\$34
2011	50	\$0,6883	\$34
2012	50	\$0.6863	\$34
2013	50	\$0,0863	\$34
2014	50	\$0,8883	\$34
2015	50	\$0.6863	\$34
2016	50	\$0.8963	\$34
2017	50	\$0,6863	534
2018	50	\$0.6863	\$34
2019	50	\$0.0863	\$34
2020	50	\$0.6863	\$34
2021	50	\$0,6883	534
2022	50	\$0,6863	\$34
2023	50	\$0.6863	\$34
2024	50	\$0.8863	\$34
2025	50	\$0.5563	\$34
2026	50	\$0.6863	\$34
2027	50	\$0.6863	\$34
2026	50	\$0.8863	\$34

Table 1a			
	Revenue - Co	ost of Gas	
1	2	4	2*3
Year	Therms	Fuel Rate	Total Charge
2009	50	\$0.3960	\$45
2010	50	\$0.9049	\$45
2011	50	\$0.9140	\$48
2012	50	\$0.9231	548
2013	50	\$0,9323	\$47
2014	50	\$0.9417	\$47
2015	50	\$0.9511	\$48
2018	50	\$0.9606	\$48
2017	50	\$0.9702	\$49
2018	50	\$0.9798	\$49
2019	50	\$0.9897	\$49
2020	50	\$0.9996	\$50
2021	50	\$1.0098	\$50
2022	50	\$1,0197	\$51
2023	50	\$1,0299	\$51
2024	50	\$1.0402	\$52
2025	50	\$1,0506	\$53
2026	50	\$1.0611	\$53
2027	50	\$1.0717	\$54
2028	50	\$1.0824	\$54

		evenue - Custom		
1	2	3	4	4*3
	Monthly		Ralio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2009	\$16.00	\$192.00	11.20%	\$22
2010	\$16,00	\$192.00	11.29%	\$22
2011	\$16.00	\$192.00	11.29%	\$22
2012	\$16.00	\$192.00	11.29%	\$22
2013	\$16.00	\$192.00	11.29%	\$22
2014	\$16 00	\$192.00	11.29%	\$22
2015	\$16.00	\$192.00	11.29%	\$22
2016	\$16.00	\$192.00	11.20%	\$22
2017	\$16.00	\$192.00	11.29%	\$22
2018	\$16.00	\$192.00	11.29%	\$22
2019	\$16.00	\$192.00	11.20%	\$22
2020	\$16.00	\$192.00	11.29%	\$22
2021	\$18.00	\$192.00	11.28%	\$22
2022	\$16.00	\$192.00	11.20%	\$22
2023	\$16.00	\$192.00	11.29%	\$22
2024	\$16,00	\$192.00	11.29%	\$22
2025	\$16.00	\$192.00	11.29%	\$22
2026	\$16 00	\$192.00	11.29%	\$22
2027	\$16.00	\$192.00	11.29%	\$22
2028	\$16.00	\$192.00	11.29%	\$22

			Inve	stment Ca	rrying Costs			
1	2	3	4	5	6	7	8	6"7"8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Metar	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$257	\$130	\$987	5.79%	11.29%	\$6
2010	\$97	\$484	\$249	\$125	\$955	5.79%	11.29%	\$6
2011	504	\$468	\$241	\$120	\$923	5.70%	11.29%	\$6
2012	\$91	\$453	\$233	\$115	\$892	5.79%	11.29%	\$6
2013	\$88	\$438	\$225	\$110	\$861	5.79%	11.29%	\$6
2014	\$85	\$424	\$218	\$106	\$833	5.78%	11.29%	\$5
2015	\$82	\$410	\$211	\$102	\$805	5.79%	11.29%	\$5
2016	376	\$398	\$204	\$98	\$777	5.79%	11.29%	\$5
2017	\$76	\$383	\$197	\$94	\$750	5.79%	15.29%	55
2018	\$73	\$370	\$190	260	\$723	5.79%	11.29%	\$5
2019	\$71	\$358	\$184	\$86	\$699	5.79%	11.29%	85
2020	\$69	\$346	\$178	\$83	\$676	5.79%	11.26%	\$4
2021	\$67	\$335	\$172	\$80	\$654	5.79%	11,29%	54
2022	\$65	\$324	\$166	\$77	\$632	5.79%	11.29%	\$4
2023	\$63	\$313	\$161	\$74	\$611	5.70%	11.29%	\$4
2024	\$61	\$303	\$156	\$71	\$591	5.79%	11,29%	54
2025	\$59	\$293	\$151	\$66	\$571	5.79%	11.29%	\$4
2026	\$57	\$283	\$146	\$65	\$551	5.79%	11.29%	\$4
2027	\$55	\$274	\$141	\$62	\$532	5.79%	11.29%	\$3
2028	\$53	\$265	\$136	\$60	\$514	5.79%	11 29%	\$ 3

			incre	mental Custo	omer Costs			
1	2	3	4	5=3*4	6	7	8=6"7	5+8
	Monthly	Annual	Ratio Therms To	Annuel Ratio	Annual	Ratio Therms To	Annual Ratio	Total Incrementa
Year	Adm. Cast	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2009	\$1.00	\$13	11.29%	\$1.47	\$14.25	11.29%	\$2	\$3
2010	\$1.10	\$13	11.29%	\$1.47	\$14,39	11.29%	\$2	53
2011	\$1,11	\$13	11.20%	\$1,47	\$14.54	11.29%	5 2	\$3
2012	\$1.12	\$13	11.29%	\$1.47	\$14.68	11.29%	\$2	\$3
2013	\$1.13	\$14	11.29%	\$1.50	\$14,83	11.29%	\$2	\$3
2014	\$1.15	\$14	11.29%	\$1,58	\$14.98	11.29%	\$2	\$3
2015	\$1,18	\$14	11.29%	\$1.58	\$15.13	11 29%	\$2	\$3
2016	\$1.17	\$14	11.29%	\$1.56	\$15.28	11.29%	\$2	\$3
2017	\$1.16	\$14	11.29%	\$1.58	\$15.43	11.29%	\$2	\$3
2018	\$1.19	\$14	11.29%	\$1.58	\$15.59	11.29%	\$2	\$3
2019	\$1,20	\$14	11.29%	\$1.58	\$15.74	11.29%	\$2	\$3
2020	\$1.22	\$15	11.29%	\$1.69	\$15.00	11.29%	\$2	\$3
2021	\$1.23	\$15	11.29%	\$1,89	\$18.06	11.29%	\$2	\$4
2022	\$1,24	\$15	11.29%	\$1.69	\$16,22	11.29%	\$2	\$4
2023	\$1.25	\$15	11.29%	\$1.69	\$16,38	11.29%	\$2	\$4
2024	\$1.27	\$15	11.29%	\$1.59	\$15.54	11.29%	\$2	\$4
2025	\$1.28	\$15	11.29%	\$1.89	\$16,71	11.29%	\$2	\$4
2026	\$1.29	\$15	11.29%	\$1.69	\$16.86	11.29%	\$2	S4
2027	\$1,30	\$16	11.29%	\$1.81	\$17.05	11.29%	52	54
2028	\$1.32	\$16	11.29%	\$1.81	\$17.22	11.29%	\$2	\$4

	Gas	Costs	
1	2	3	2*3
	Therms	Per Therm	Gas Supply
Year		Supply Cost	Cost
2009	50	0.8960	\$45
2010	50	\$0.9049	\$45
2011	50	\$0.9140	\$46
2012	50	\$0.9231	\$46
2013	50	\$0,9323	\$47
2014	50	\$0.9417	\$47
2015	50	\$0.9511	\$48
2016	50	\$0.9808	\$48
2017	50	\$0.9702	\$49
2018	50	\$0.9769	\$49
2019	50	\$0.9897	\$49
2020	50	\$0.9996	\$50
2021	50	\$1.0096	\$50
2022	50	\$1.0197	\$51
2023	50	\$1.0299	\$51
2024	50	\$1.0402	\$52
2025	50	\$1.0506	\$53
2026	50	\$1.0811	\$53
2027	50	\$1.0717	\$54
2028	50	\$1,0824	\$54

Appliance Type

Cooking

	Incremental	Incremental	Incremental	Total	Gas	Investment	Incremental		
	Revenue	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
	Energy Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1	Table 1A	Table 2		Table 5	Table 3	Table 4		
1	2	3	4	2 thru 4	6	7	8	9	6 thru 9
2009	\$31	\$40	\$20	\$91	\$40	\$6	\$ 3	\$100.00	\$149
2010	\$31	\$41	\$20	\$91	\$41	\$ 6	\$3	\$0.00	\$49
2011	\$31	\$41	\$20	\$92	\$41	\$ 5	\$3	\$0.00	\$49
2012	\$31	\$42	\$20	\$92	\$42	\$ 5	\$ 3	\$0.00	\$50
2013	\$31	\$42	\$20	\$92	\$42	\$ 5	\$ 3	\$0.00	\$50
2014	\$31	\$42	\$20	\$93	\$42	\$ 5	\$ 3	\$0.00	\$50
2015	\$31	\$43	\$20	\$93	\$43	\$ 5	\$3	\$0.00	\$50
2016	\$31	\$43	\$20	\$94	\$43	\$ 5	\$3	\$0.00	\$51
2017	\$31	\$44	\$20	\$94	\$44	\$4	\$3	\$0.00	\$51
2018	\$31	\$44	\$20	\$94	\$44	\$4	\$3	\$0.00	\$51
2019	\$31	\$4 5	\$20	\$95	\$45	\$4	\$3	\$0.00	\$52
2020	\$31	\$4 5	\$20	\$95	\$45	\$4	\$3	\$0.00	\$52
2021	\$31	\$45	\$20	\$96	\$4 5	\$4	\$3	\$0.00	\$52
2022	\$31	\$46	\$20	\$96	\$46	\$4	\$3	\$0.00	\$53
2023	\$31	\$46	\$20	\$97	\$46	\$4	\$ 3	\$100.00	\$153
2024	\$31	\$47	\$20	\$97	\$47	\$ 3	\$3	\$0.00	\$53
2025	\$31	\$47	\$20	\$98	\$47	\$ 3	\$3	\$0.00	\$54
2026	\$31	\$48	\$20	\$98	\$48	\$ 3	\$3	\$0.00	\$54
2027	\$31	\$48	\$20	\$99	\$48	\$ 3	\$3	\$0,00	\$ 55
2028	\$31	\$49	\$20	\$99	\$ 49	\$3	\$3	\$0.00	\$55

\$920

Present Value _____ of Benefits

Present Value of Costs \$624

Benefit/Cost Ratio 1.47

Appliance Type
Cooking

Fual Rate Escaletor	1,0%	Depreciation Rate - Supply Main	3.30%
Base Rato Escalator	0%	Depreciation Rate - Development Main	3.30%
Ges Customer Charge Escalator	0%	Depreciation Rate - Service Line	3.30%
O&M/inflation Escalator	1.0%	Depreciation Rate - Meter	4.00%

F	evenue - l	Energy Cha	
.1	2	3	2*3
Year	Therms	Basa Rate	Total Charge
2000	45	\$0.6863	\$31
2010	45	\$0.6863	\$31
2011	45	\$0.6863	\$31
2012	45	\$0,6863	\$31
2013	45	\$0.8863	\$31
2014	45	\$0.6863	\$31
2015	45	\$0.6863	\$31
2016	45	\$0.6863	\$31
2017	45	\$0.6863	\$31
2016	45	\$0.6863	\$31
2019	45	\$0.6863	\$31
2020	45	\$0,6863	\$31
2021	45	\$0.6863	\$31
2022	45	\$0.6863	\$31
2023	45	\$0.6863	\$31
2024	45	\$0.6863	\$31
2025	45	\$0.6863	\$31
2028	45	\$0.6863	\$31
2027	45	\$0,6863	\$31
2020	45	\$0.6863	\$31

	Revenue - Cos	st of Gas	
1	2	44	2.3
Year	Thems	Fuel Rate	Total Charge
2009	45	\$0.8960	\$40
2010	45	\$0.9049	\$41
2011	45	\$0.9140	\$41
2012	45	\$0.9231	\$42
2013	45	\$0.9323	\$42
2014	45	\$0.9417	\$42
2015	45	\$0.9511	\$43
2016	45	\$0,9606	\$43
2017	45	\$0.9702	\$44
2016	45	\$0.9799	\$44
2019	45	\$0.9897	\$45
2020	45	\$0.9996	\$45
2021	45	\$1.0096	\$45
2022	45	\$1.0197	\$46
2023	45	\$1.0299	\$46
2024	45	\$1.0402	\$47
2025	45	\$1.0506	\$47
2028	45	\$1.0611	\$48
2027	45	\$1.0717	\$46
2028	45	\$1.0824	\$49

Table 4

		venue - Custome	r Charge	
	22	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2008	\$16.00	\$192.00	10 18%	\$20
2010	\$16.00	\$192.00	10.16%	520
2011	\$16.00	\$192.00	10.16%	320
2012	\$18.00	\$192.00	10.16%	\$20
2013	\$16.00	\$192.00	10.16%	\$20
2014	\$16.00	\$192.00	10.16%	\$20
2015	\$16.00	\$192.00	10.16%	\$20
2016	\$16.00	\$192.00	10.16%	\$20
2017	\$16,00	\$192.00	10.16%	\$20
2018	\$16.00	\$192.00	10.16%	\$26
2019	\$16,00	\$192.00	10.16%	\$20
2020	\$16.00	\$192.00	10.16%	\$20
2021	\$16.00	\$192.00	10.16%	\$20
2022	\$16,00	\$192.00	10.16%	\$20
2023	\$16,00	\$192.00	10.16%	\$20
2024	\$16.00	\$192.00	10 16%	\$26
2025	\$16,00	\$192.00	10.16%	\$20
2026	\$ 18.00	\$192.00	10.16%	\$20
2027	\$16,00	\$192.00	10.16%	\$20
2028	\$16.00	\$192.00	10.16%	\$20

			inve	stment Ca	rrying Costs			
1	2	3	4	5	6	7	8	6*7*8
	Supply	Development	Service		Total	Cost	Ratio of Therms	Investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2009	\$100	\$500	\$257	\$130	\$987	5.79%	10.16%	\$6
2010	\$97	\$484	\$249	\$125	\$955	5.79%	10.16%	\$6
2011	\$94	\$466	\$241	\$120	\$923	5.79%	10.18%	\$5
2012	\$91	\$453	\$233	\$115	\$892	5.76%	10.18%	\$5
2013	\$88	\$436	\$225	\$110	\$661	5.79%	10.16%	\$5
2014	\$85	\$424	\$218	\$196	\$633	5.79%	10.16%	\$5
2015	\$82	\$410	\$211	\$102	\$805	5.79%	10.16%	\$5
2016	\$79	\$396	\$204	596	\$777	5.70%	10.16%	\$5
2017	\$78	\$383	\$197	\$94	\$750	5.79%	10.16%	\$4
2018	\$73	\$370	\$190	\$90	\$723	5.79%	10.16%	54
2019	\$71	\$358	\$184	\$86	2699	5.79%	10.16%	\$4
2020	\$69	\$346	\$178	\$83	\$676	5.70%	10.16%	54
2021	\$67	\$335	\$172	\$80	\$654	5.79%	10.16%	\$4
2022	\$65	\$324	\$186	\$77	\$632	5.79%	10.16%	\$4
2023	\$63	\$313	\$161	\$74	\$611	6.79%	10.16%	\$4
2024	\$81	\$303	\$156	\$71	\$591	5.79%	10.16%	\$3
2025	\$59	\$293	\$151	\$68	\$571	5.79%	10 10%	\$3
2026	\$57	\$283	\$146	\$65	\$551	5.70%	10.16%	\$3
2027	\$55	\$274	\$141	\$62	\$532	5.78%	10.16%	\$3
2028	\$53	\$265	\$136	\$60	\$514	5.79%	10.16%	\$3

.1	2	3	4	5=3'4		7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms To	Annual Ratio	Total Increm
Year	Adm. Cost	Adm, Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M
2009	\$1.09	\$13	10.18%	\$1.32	\$14.25	10.18%	51	\$3
2010	\$1.10	513	10.16%	\$1.32	\$14.39	10.16%	\$1	\$3
2011	\$1,11	\$13	10.16%	\$1 32	\$14.54	10.16%	\$1	\$3
2012	\$1.12	\$13	10.16%	\$1.32	\$14.58	10.16%	\$1	23
2013	\$1.13	\$14	10.16%	\$1.42	\$14,63	10.18%	\$2	\$3
2014	\$1.15	\$14	10.16%	\$1,42	\$14.98	10.18%	\$2	\$3
2015	\$1,18	\$14	10.18%	\$1.42	\$15.13	10,16%	\$2	\$3
2016	\$1,17	\$14	10,16%	\$1.42	\$15.28	10.16%	\$2	\$3
2017	\$1.18	\$14	10.16%	\$1.42	\$15.43	10.16%	\$2	\$3
2018	\$1.19	\$14	10.16%	\$1.42	\$15.59	10,16%	\$2	\$3
2019	\$1.20	\$14	10.16%	\$1,42	\$15.74	10.16%	\$2	\$3
2020	\$1.22	\$15	10 16%	\$1.52	\$15.90	10 16%	\$2	\$3
2021	\$1.23	\$15	10.16%	\$1.52	\$16.06	10.18%	\$2	\$3
2022	\$1.24	\$15	10.18%	\$1.52	\$18.22	10 16%	\$2	\$3
2023	\$1.25	\$15	10,16%	\$1.52	\$18.38	10.16%	\$2	\$3
2024	\$1.27	\$15	10.16%	\$1.52	\$16.54	10.16%	\$2	\$3
2025	\$1.28	\$15	10.16%	\$1.52	\$16.71	10.16%	\$2	\$3
2028	\$1.29	\$15	10.16%	\$1.52	\$16.68	10.16%	\$2	\$3
2027	\$1,30	\$16	10.16%	\$1.63	\$17.05	10.16%	\$2	\$3
2028	\$1.32	\$16	10.16%	\$1.63	\$17.22	10 16%	\$2	\$3

Gas	Costs	
2	3	2*3
Therms	Commodity Gas	Gas Supply
	Supply Cost	Cost
45	0.8950	\$40
45	\$0,9049	\$41
45	\$0,9140	541
45	\$0.9231	\$42
45	\$0.9323	142
45	\$0 9417	\$42
45	\$0.9511	\$43
45	\$0.9606	\$43
45	\$0.9702	\$44
45	50 9799	\$44
45	\$0.9897	\$45
45	\$0 9996	\$45
45	\$T 0096	\$45
45	\$1.0197	\$46
45	\$1 0299	\$46
45	\$1.0402	\$47
45	\$1,0506	\$47
45	\$1.0611	\$48
45	\$3.0717	\$48
45	\$1.0824	\$49
	2 Therms 45 45 45 45 45 45 45 45 45 45 45 45 45	Therms Commodify Gas Supply Coal 45 0 8805 45 30 9344 45 50 9423 45 50 9423 45 50 9423 45 50 9423 45 50 9423 45 50 9423 45 50 9423 45 50 9966 45 50 9966 45 51 1096

Appliance Type

Storage Tank Water Heating

			Benefit	8					(Costs				
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9	-	10	11	12	13	7 thru 13
2009	1	\$508	\$350	\$60	\$918	0	\$0	0	\$100	\$60	\$168	\$128	\$81	\$537
2010	2	\$509	0	\$61	\$570	0	\$0	0		\$61	\$169	\$128	\$81	\$439
2011	3	\$ 511	0	\$61	\$572	0	\$0	0		\$61	\$171	\$128	\$81	\$442
2012	4	\$512	0	\$62	\$574	0	\$0	0		\$62	\$173	\$128	\$81	\$444
2013	5	\$514	0	\$62	\$576	0	\$0	0		\$62	\$174	\$128	\$81	\$446
2014	6	\$515	0	\$63	\$578	0	\$ 0	0		\$63	\$176	\$128	\$81	\$449
2015	7	\$517	0	\$64	\$580	0	\$0	0		\$64	\$178	\$128	\$81	\$451
2016	8	\$518	0	\$64	\$582	0	\$0	0		\$64	\$180	\$128	\$81	\$453
2017	9	\$519	0	. \$65	\$584	0	\$0	0		\$ 65	\$161	\$128	\$81	\$456
2018	10	\$521	350	\$66	\$937	421	(\$659)	239		\$66	\$183	\$128	\$81	\$458
2019	11	\$522	0	\$66	\$589	0	\$0	0		\$66	\$185	\$128	\$81	\$461
2020	12	\$524	0	\$67	\$59 1	0	\$0	0		\$67	\$187	\$128	\$81	\$463
2021	13	\$525	0	\$68	\$593	0	\$0	0		\$68	\$189	\$128	\$81	\$466
2022	14	\$527	0	\$68	\$595	0	\$0	0		\$68	\$191	\$128	\$81	\$466
2023	15	\$528	0	\$69	\$597	0	\$0	0		\$69	\$193	\$128	\$81	\$471
2024	16	\$530	0	\$70	\$599	0	\$0	0		\$70	\$195	\$128	\$81	\$474
2025	17	\$531	0	\$70	\$601	0	\$0	0		\$70	\$196	\$128	\$81	\$476
2026	18	\$533	0	\$71	\$604	0	\$0	0		\$71	\$198	\$128	\$81	\$479
2027	19	\$534	0	\$72	\$606	0	\$0	0		\$72	\$200	\$128	\$81	\$462
2028	20	\$535	0	\$72	\$608	0	\$0	0		\$72	\$202	\$128	\$81	\$484

Present Value of Benefits \$6,206 Present Value of Costs \$4,548

Benefit/Cost 1.36
Ratio

Appliance Type Storage Tank Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Proc	ane Cost - Tab			Natural Gas Su	oply Cost	- Table 2			Natural Gas	Energy Ch	narge - Tal	ble 3				Natural Gas (Customer Cl	narge - Table 4	ble 4						
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost	Year	Cost Per Therm	Annual		e NG Cost	Year	Rate Per Therm	Annual Therms	_	e NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge				
Α	В	С	D	B*C*(1+D)	Α.	В	. с	D	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	A	В	С	D	E	D/E	G	C*(D/E)*(1+Z)				
2009	\$2.5480	186	7.5%	\$508	2009	\$0.8980	170	10%	\$168	2009	\$0.6863	170	10%	\$128	2009	\$16.00	\$192,00	170	443	38.37%	10%	\$81				
2010	\$2.5533	186	7.5%	\$508	2010	\$0.9049	170	10%	\$169	2010	\$0.6863	170	10%	\$128	2010	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2011	\$2.5605	186	7.5%	\$511	2011	\$0.9140	170	10%	\$171	2011	\$0,6863	170	10%	\$128	2011	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2012	\$2.5678	186	7.5%	\$512	2012	\$0.9231	170	10%	\$173	2012	\$0.6863	170	10%	\$128	2012	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2013	\$2.5750	186	7.5%	\$514	2013	\$0.9323	170	10%	\$174	2013	\$0.6863	170	10%	\$128	2013	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2014	\$2.5823	186	7,5%	\$515	2014	\$0.9417	170	10%	\$176	2014	\$0.6863	170	10%	\$128	2014	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2015	\$2.5896	186	7.5%	\$517	2015	\$0.9511	170	10%	\$178	2015	\$0.6863	170	10%	\$128	2015	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2016	\$2.5968	186	7.5%	\$518	2016	\$0.9606	170	10%	\$180	2016	\$0.6863	170	10%	\$128	2016	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2017	\$2.6041	186	7.5%	\$519	2017	\$0.9702	170	10%	\$181	2017	\$0.6863	170	10%	\$128	2017	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2018	\$2.6113	186	7.5%	\$521	2016	\$0.9799	170	10%	\$183	2018	\$0.6863	170	10%	\$128	2018	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2019	\$2.6186	186	7.5%	\$522	2019	\$0.9897	170	10%	\$185	2019	\$0.6863	170	10%	\$128	2019	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2020	\$2.6259	186	7.5%	\$524	2020	\$0.9996	170	10%	\$187	2020	\$0.6863	170	10%	\$128	2020	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2021	\$2.6331	186	7.5%	\$525	2021	\$1,0096	170	10%	\$189	2021	\$0.6863	170	10%	\$128	2021	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2022	\$2.6404	186	7.5%	\$527	2022	\$1.0197	170	10%	\$191	2022	\$0,6863	170	10%	\$128	2022	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2023	\$2.6476	186	7.5%	\$528	2023	\$1.0299	170	10%	\$193	2023	\$0.6863	170	10%	\$128	2023	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2024	\$2.6549	186	7.5%	\$530	2024	\$1.0402	170	10%	\$195	2024	\$0.6863	170	10%	\$128	2024	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2025	\$2.8622	186	7.5%	\$531	2025	\$1.0506	170	10%	\$196	2025	\$0.6863	170	10%	\$128	2025	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2026	\$2.6694	186	7.5%	\$533	2026	\$1.0611	170	10%	\$198	2026	\$0.6863	170	10%	\$128	2026	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2027	\$2,6767	186	7.5%	\$534	2027	\$1.0717	170	10%	\$200	2027	\$0.6863	170	10%	\$128	2027	\$16.00	\$192.00	170	443	38.37%	10%	\$81				
2028	\$2.6839	186	7.5%	\$636	2028	\$1.0824	170	10%	\$202	2028	\$0.6863	170	10%	\$128	2028	\$16.00	\$192.00	170	443	38.37%	10%	\$81				

Appliance Type

Tankless Water Heating

			Benefits	3						Costs		_		
Year	Yaar Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$448	\$450	\$60	\$958	\$0	\$0	\$0	\$100	\$60	\$148	\$113	\$75	\$496
2010	2	\$44 9	0	\$61	\$510	0	\$0	0		\$61	\$149	\$113	\$75	\$398
2011	3	\$451	0	\$61	\$512	. 0	\$0	0		\$61	\$151	\$113	\$75	\$400
2012	4	\$452	0	\$62	\$514	0	\$0	0		\$62	\$152	\$113	\$75	\$402
2013	5	\$453	0	\$62	\$516	0	\$0	0		\$62	\$154	\$113	\$75	\$404
2014	6	\$455	0	\$6 3	\$518	0	\$0	0		\$ 63	\$155	\$113	\$75	\$407
2015	7	\$456	0	\$64	\$520	0	\$0	0		\$64	\$157	\$113	\$75	\$409
2016	8	\$457	0	\$64	\$521	0	\$0	0		\$64	\$158	\$113	\$ 75	\$411
2017	9	\$458	C	\$65	\$523	0	\$0	0		\$65	\$160	\$113	\$ 75	\$413
2018	10	\$460	0	\$66	\$525	0	\$0	0		\$66	\$162	\$113	\$ 75	\$415
2019	11	\$461	0	\$66	\$527	0	\$0	0		\$66	\$163	\$113	\$ 75	\$418
2020	12	\$462	0	\$67	\$529	0	\$0	0		\$67	\$ 165	\$113	\$ 75	\$420
2021	13	\$463	0	\$68	\$531	0	\$0	0		\$68	\$167	\$113	\$ 75	\$422
2022	14	\$465	0	\$68	\$533	0	\$0	0		\$68	\$168	\$113	\$ 75	\$425
2023	15	\$466	0	\$69	\$535	0	\$0	0		\$69	\$170	\$113	\$ 75	\$427
2024	16	\$467	0	\$70	\$537	0	\$0	0		\$70	\$172	\$113	\$75	\$429
2025	17	\$469	0	\$70	\$539	0	\$0	0		\$70	\$173	\$113	\$75	\$432
2026	18	\$470	0	\$71	\$541	0	\$0	0		\$71	\$ 175	\$113	\$75	\$434
2027	19	\$471	0	\$72	\$543	0	\$0	0		\$72	\$177	\$113	\$75	\$437
2028	20	\$472	450	\$72	\$995	1,219	(\$1,746)	527		\$72	\$179	\$113	\$75	\$439

Present Value \$5,634

Present Value of Costs \$4,132

Benefit/Cost 1.36 Ratio

Appliance Type Tankless Water Heating

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Ta	ble 1			Natuari Ga	s Supply Co	ost - Table 2			Natural Ga	ss Energy C	harge - Tabl	e 3			Natu	ral Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propene Cost	Year	Cost Per Therm	Armual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tux Rate	Pro-Rated Customer Charge
Α	8	С	0	B*C*(1+D)	Α	В	С	D	B*C*(1+D)	А		c	٥	B*C*(1+D)	A	8	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	164	7.5%	\$448	2009	\$0.8960	150	10%	\$148	2009	\$0.6863	150	10%	\$113	2009	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2010	\$2,5533	164	7.5%	\$449	2010	\$0.9049	150	10%	\$149	2010	\$0.6863	150	10%	\$113	2010	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2011	\$2.5605	164	7.5%	\$451	2011	\$0.9140	150	10%	\$151	2011	\$0.6863	150	10%	\$113	2011	\$16,00	\$192,00	150	423	35.46%	10%	\$75
2012	\$2.5678	164	7.5%	\$452	2012	\$0.9231	150	10%	\$152	2012	\$0.6863	150	10%	\$113	2012	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2013	\$2.5750	164	7.5%	\$463	2013	\$0.9323	150	10%	\$154	2013	\$0.6563	150	10%	\$113	2013	\$16.00	\$192,00	150	423	35.46%	10%	\$75
2014	\$2,5823	164	7.5%	\$455	2014	\$0.9417	150	10%	\$155	2014	\$0.6863	150	10%	\$113	2014	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2015	\$2,5896	164	7.5%	\$456	2015	\$0.9511	150	10%	\$157	2015	\$0.6863	150	10%	\$113	2015	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2016	\$2,5968	184	7.5%	\$457	2016	\$0,9606	150	10%	\$158	2016	\$0,6863	150	10%	\$113	2016	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2017	\$2,6041	164	7.5%	\$488	2017	\$0.9702	150	10%	\$160	2017	\$0.6863	150	10%	\$113	2017	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2018	\$2,6113	164	7.5%	\$460	2016	\$0.9799	150	10%	\$162	2018	\$0.6863	150	10%	\$113	2016	\$16,00	\$192.00	150	423	35.46%	10%	\$75
2019	\$2.6186	184	7.5%	\$461	2019	\$0,9697	150	10%	\$163	2019	\$0,6663	150	10%	\$113	2019	\$16.00	\$192.00	150	423	35,46%	10%	\$75
	\$2.6259	164	7.5%	\$462	2020	\$0,9996	150	10%	\$165	2020	\$0.6863	150	10%	\$113	2020	\$16.00	\$192.00	150	423	35,46%	10%	\$75
2020	•					•			•	'												
2021	\$2.6331	164	7.5%	\$483	2021	\$1.0096	150	10%	\$167	2021	\$0.6863	150	10%	\$113	2021	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2022	\$2,6404	164	7.5%	\$465	2022	\$1.0197	150	10%	\$168	2022	\$0.6863	150	10%	\$113	2022	\$16.00	\$192.00	150	423	35.46%	10%	\$76
2023	\$2.6476	164	7. 5%	\$466	2023	\$1.02 99	150	10%	\$170	2023	\$0.6863	150	10%	\$113	2023	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2024	\$2,6549	164	7.5%	\$467	2024	\$1.0402	150	10%	\$172	2024	\$0.6863	150	10%	\$113	2024	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2025	\$2.6622	164	7.5%	\$466	2025	\$1,0506	150	10%	\$173	2025	\$0.6863	150	10%	\$113	2025	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2026	\$2.6694	164	7.5%	\$470	2026	\$1.0611	150	10%	\$175	2026	\$0.8863	150	10%	\$113	2026	\$16.00	\$192.00	150	423	35.46%	10%	\$75
2027	\$2,6767	164	7.5%	\$471	2027	\$1.0717	150	10%	\$177	2027	\$0.6863	150	10%	\$113	2027	\$16.00	\$192.00	150	423	35.48%	10%	\$75
2028	\$2.6839	164	7.5%	\$472	2028	\$1.0824	150	10%	\$179	2028	\$0.6863	150	10%	\$113	2028	\$16.00	\$192.00	150	423	35.46%	10%	\$75

Appliance Type

Heating System

			Benefits			-				Costs			***************************************	
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1							333333		Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$532	\$350	\$270	\$1,152	\$0	0	\$0	\$100	\$270	\$175	\$134	\$85	\$765
2010	2	\$533	0	\$273	\$806	0	0	0		\$273	\$177	\$134	\$85	\$669
2011	3	\$535	0	\$275	\$810	0	0	0		\$275	\$179	\$134	\$85	\$674
2012	4	\$536	0	\$278	\$815	0	0	0		\$278	\$181	\$134	\$85	\$678
2013	5	\$538	0	\$281	\$819	0	0	0		\$281	\$183	\$134	\$85	\$683
2014	6	\$539	0	\$284	\$823	0	0	0		\$284	\$184	\$134	\$85	\$687
2015	7	\$541	0	\$287	\$828	0	0	0		\$287	\$186	\$134	\$85	\$692
2016	8	\$542	0	\$289	\$832	0	0	0		\$289	\$188	\$134	\$85	\$697
2017	9	\$544	0	\$292	\$836	0	0	0		\$292	\$190	\$134	\$85	\$702
2018	10	\$545	0	\$295	\$841	0	0	0		\$295	\$192	\$134	\$85	\$706
2019	11	\$547	0	\$298	\$845	0	0	0		\$298	\$194	\$134	\$85	\$711
2020	12	\$548	0	\$301	\$850	0	0	0		\$301	\$196	\$134	\$85	\$716
2021	13	\$550	0	\$304	\$854	0	0	0		\$304	\$198	\$134	\$85	\$721
2022	14	\$552	0	\$307	\$859	0	0	0		\$307	\$200	\$134	\$85	\$726
2023	15	\$553	0	\$310	\$863	0	0	0		\$310	\$202	\$134	\$85	\$731
2024	16	\$5 55	0	\$313	\$868	0	0	0		\$313	\$204	\$134	\$85	\$736
2025	17	\$556	0	\$317	\$873	0	0	0		\$317	\$20 6	\$134	\$85	\$742
2026	18	\$558	350	\$320	\$1,227	2,882	(4,657)	1,775		\$320	\$208	\$134	\$85	\$747
2027	19	\$559	0	\$323	\$882	0	0	0		\$323	\$210	\$134	\$85	\$752
2028	20	\$561	0	\$326	\$887	0	0	0		\$326	\$212	\$134	\$85	\$757

Present Value \$8,585

Present Value \$6,943 of Costs

Benefit/Cost 1.24
Ratio

Appliance Type
Heating System

Escalation Rates		LP DeVMargin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
t.P Fuei Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tab	ile 1			Natural G	es Supply Co	ost - Table 2			Natural Gas	Energy Cha	rge - Table	e 3			Natu	ral Gas Custo	oner Charg	e - Table 4		
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propens Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Yea	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Relect Customer Charge
A	B	С	D	B*C*(1+O)	A	В	С	D	B*C*(1+D)	A	₽	c	٥	B*C*(1+D)	А	8	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2,5460	194	7.5%	\$532	2009	\$0.8960	178	10%	\$178	2009	\$0.6853	178	10%	\$134	200	\$18.00	\$192.00	178	443	40.15%	10%	\$85
2010	\$2.5533	194	7.5%	\$539	2010	\$0.9049	178	10%	\$177	2010	\$0.6863	178	10%	\$134	2010	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2011	\$2.5605	194	7.5%	\$538	2011	\$0.9140	178	10%	\$179	2011	\$0.6863	178	10%	\$134	201	\$18.00	\$192.00	178	443	40.18%	10%	\$85
2012	\$2.5678	194	7.5%	\$536	2012	\$0,9231	178	10%	\$181	2012	\$0.6863	178	10%	\$134	2012	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2013	\$2.5750	194	7.5%	\$638	2013	\$0.9323	178	10%	\$163	2013	\$0.6863	178	10%	\$134	201	\$16.00	\$192.00	176	443	40.16%	10%	\$85
2014	\$2.5823	194	7.5%	\$539	2014	\$0.9417	178	10%	\$184	2014	\$0.6863	178	10%	\$134	2014	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2015	\$2.5896	194	7.5%	\$841	2015	\$0.9511	178	10%	\$186	2015	\$0.6863	178	10%	\$134	2011	\$16.00	\$192.00	178	443	40,18%	10%	\$85
2016	\$2.5968	194	7.5%	\$542	2016	\$0,9606	178	10%	\$186	2016	\$0,6863	178	10%	\$134	2016	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2017	\$2.6041	194	7.5%	\$544	2017	\$0,9702	176	10%	\$190	2017	\$0.6863	178	10%	\$134	201	•	\$192,00	178	443	40.18%	10%	\$85
	\$2.6113	194	7.5%	5548	2018	\$0.9799	176	10%	\$192	2018	\$0.6863	178	10%	\$134	2010	•	\$192.00	178	443	40.18%	10%	\$85
2018				\$547		\$0.9697		10%	\$184			178		\$134			\$192.00	178				•
2019	\$2.8186	194	7.5%	,	2019	•	178			2019	\$0.6863		10%	·	2011				443	40,18%	10%	\$85
2020	\$2.6259	194	7.5%	\$648	2020	\$0,9996	178	10%	\$196	2020	\$0.6863	178	10%	\$134	2020		\$192.00	178	443	40.18%	10%	\$85
2021	\$2,8331	194	7.5%	\$850	2021	\$1.0096	176	10%	\$198	2021	\$0.6863	178	10%	\$134	202	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2022	\$2.6404	194	7.5%	\$562	2022	\$1.0197	176	10%	\$200	2022	\$0.8863	178	10%	\$134	202	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2023	\$2.6476	194	7.5%	\$653	2023	\$1.0299	178	10%	\$202	2023	\$0.6863	178	10%	\$134	202	\$16.00	\$192.00	176	443	40,16%	10%	\$85
2024	\$2.6549	194	7.5%	\$555	2024	\$1.0402	176	10%	\$204	2024	\$0.6863	178	10%	\$134	202	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2025	\$2.6622	194	7.5%	\$556	2025	\$1,0506	176	10%	\$206	2025	\$0.6863	178	10%	\$134	202	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2028	\$2,8694	194	7.5%	\$656	2026	\$1.0611	176	10%	\$208	2026	\$0.6863	178	10%	\$134	2020	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2027	\$2.6767	194	7.5%	\$689	2027	\$1.0717	178	10%	\$210	2027	\$0.6863	176	10%	\$134	202	\$16.00	\$192.00	178	443	40.18%	10%	\$85
2028	\$2.6839	194	7.5%	\$561	2028	\$1.0824	176	10%	\$212	2028	\$0.6863	178	10%	\$134	202	\$15.00	\$192.00	178	443	40.18%	10%	\$85

Appliance Type

Clothes Drying

			Benefits	<u>. </u>				-	C	Costs	_			
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7_	8	9		10	11	12	13	7 thru 13
2009	1	\$149	\$100	\$60	\$309	\$0	\$0	\$0	\$100	\$60	\$49	\$38	\$24	\$271
2010	2	\$150	0	\$61	\$210	0	\$0	0		\$61	\$50	\$38	\$24	\$172
2011	3	\$150	0	\$61	\$211	0	\$0	0		\$ 61	\$50	\$38	\$24	\$173
2012	4	\$151	0	\$62	\$212	0	\$0	0		\$62	\$51	\$38	\$24	\$174
2013	5	\$151	0	\$ 62	\$214	0	\$0	0		\$62	\$51	\$38	\$24	\$175
2014	6	\$152	0	\$63	\$215	0	\$0	0		\$63	\$52	\$38	\$24	\$176
2015	7	\$152	0	\$64	\$216	0	\$0	0		\$64	\$52	\$38	\$24	\$178
2016	8	\$152	0	\$64	\$217	0	\$0	0		\$64	\$53	\$38	\$24	\$179
2017	9	\$153	0	\$6 5	\$218	0	\$0	0		\$65	\$53	\$38	\$24	\$180
2018	10	\$153	0	\$66	\$219	0	\$0	0		\$66	\$54	\$38	\$24	\$181
2019	11	\$154	0	\$66	\$220	0	\$0	0		\$66	\$54	\$38	\$24	\$182
2020	12	\$154	0	\$67	\$221	0	\$0	0		\$67	\$55	\$38	\$24	\$184
2021	13	\$154	100	\$68	\$322	533	(\$697)	164		\$68	\$56	\$38	\$24	\$185
2022	14	\$155	0	\$68	\$223	0	\$0	0		\$68	\$56	\$38	\$24	\$186
2023	15	\$155	0	\$69	\$224	0	\$0	0		\$69	\$57	\$38	\$24	\$187
2024	16	\$156	0	\$70	\$225	0	\$0	0		\$7 0	\$57	\$38	\$24	\$188
2025	17	\$156	0	\$70	\$227	0	\$0	0		\$70	\$58	\$38	\$24	\$190
2026	18	\$157	0	\$71	\$228	0	\$0	0		\$71	\$58	\$38	\$24	\$191
2027	19	\$157	0	\$72	\$229	0	\$ 0	0		\$72	\$59	\$38	\$24	\$192
2028	20	\$157	0	\$72	\$230	0	\$0	0		\$72	\$60	\$38	\$24	\$194

of Benefits \$2,258

Present Value of Costs \$1,850

Benefit/Cost	1.22
Ratio	

Appliance Type
Clothes Drying

,	Escalation Rates		LP Del/Margin Rate	0.0%
	O&M Expense	1.0%	NG Fuel Rate	1.0%
	LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tabi	e 1	
Year	Cost Per Gallon	Annual Gallons	Tax Rate	Propane Cost
Α	В	С	D	B*C*(1+D)
2009	\$2,5460	55	7.5%	\$149
2010	\$2.5533	55	7.5%	\$150
2011	\$2.5605	55	7.5%	\$150
2012	\$2,5678	55	7.5%	\$161
2013	\$2.5750	55	7.5%	\$161
2014	\$2.5823	55	7.5%	\$152
2015	\$2,5896	55	7.5%	\$152
2016	\$2,5960	55	7.5%	\$182
2017	\$2.6041	55	7.5%	\$153
2018	\$2.6113	55	7.5%	\$153
2019	\$2.6186	55	7.5%	\$154
2020	\$2,6259	55	7.5%	\$154
2021	\$2.6331	55	7.5%	\$154
2022	\$2.6404	55	7.5%	\$188
2023	\$2.6476	55	7.5%	\$155
2024	\$2.6549	55	7.5%	\$156
2025	\$2,6622	55	7.5%	\$158
2026	\$2.8694	55	7.5%	\$157
2027	\$2.6767	55	7.5%	\$167
2028	\$2,6839	55	7,5%	\$157

	Natural Ga	s Supply C	ost - Table 2			Natural Ga	s Energy Ch	arge - Table	3		***************************************	Natur	al Gas Custo	mer Charge	- Table 4		
Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Applience to Total	Tax Rate	Pro-Reted Customer Charge
Α	8	С	D	B*C*(1+D)	A	6	С	5	B*C*(1+D)	A	8	c_	D	ε	D/E	G	C*(D/E)*(1+Z)
2009	\$0.8960	50	10%	\$49	2009	\$0.6863	50	10%	\$38	2009	\$18.00	\$192.00	50	443	11.29%	10%	\$24
2010	\$0.9049	50	10%	\$50	2010	\$0.6863	50	10%	\$38	2010	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2011	\$0.9140	50	10%	\$50	2011	\$0.6863	50	10%	\$38	2011	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2012	\$0.9231	50	10%	\$51	2012	\$0.6863	50	10%	\$38	2012	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2013	\$0.9323	50	10%	\$51	2013	\$0.6863	50	10%	\$38	2013	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2014	\$0.9417	50	10%	\$52	2014	\$0.6863	50	10%	\$38	2014	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2015	\$0.9511	50	10%	\$52	2015	\$0.6863	50	10%	\$38	2015	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2016	\$0.9606	50	10%	\$53	2016	\$0,8863	50	10%	\$38	2016	\$18.00	\$192.00	50	443	11.29%	10%	\$24
2017	\$0.9702	50	10%	\$53	2017	\$0,6863	50	10%	\$38	2017	\$18.00	\$192.00	50	443	11.29%	10%	\$24
2018	\$0.9799	50	10%	\$54	2018	\$0.6863	50	10%	\$38	2018	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2019	\$0.9897	50	10%	\$54	2019	\$0,6863	50	10%	\$38	2019	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2026	\$0.9996	50	10%	\$58	2020	\$0.6863	50	10%	\$38	2020	\$18.00	\$192.00	50	443	11.29%	10%	\$24
2021	\$1.0096	50	10%	\$56	2021	\$0.6863	50	10%	\$38	2021	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2022	\$1.0197	50	10%	\$56	2022	\$0.6863	50	10%	\$38	2022	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2023	\$1.0299	50	10%	\$57	2023	\$0.6663	50	10%	\$38	2023	\$16,00	\$192.00	50	443	11.29%	10%	\$24
2024	\$1.0402	50	10%	\$.57	2024	\$0.6863	50	10%	\$38	2024	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2025	\$1.0506	50	10%	\$68	2025	\$0.6863	50	10%	\$38	2025	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2028	\$1.0611	50	10%	\$58	2026	\$0.8863	50	10%	\$38	2026	\$16.00	\$192,00	50	443	11,29%	10%	\$24
2027	\$1.0717	50	10%	\$69	2027	\$0.5863	50	10%	\$38	2027	\$16.00	\$192.00	50	443	11.29%	10%	\$24
2028	\$1,0824	50	10%	\$60	2028	\$0.6863	50	10%	\$38	2028	\$16.00	\$192.00	50	443	11.29%	10%	\$24

Appliance Type

Cooking

			Benefits	·						Costs		_		
Year	Year Number	Avoided Propane Cost	NG Rebate	Avoided Propane Appliance O&M	TOTAL BENEFITS	NG Equipment Cost	Propane Equipment & Installation Cost	NG Installation Cost	NG Conversion Cost	NG Appliance O & M	NG Supply Cost	NG Energy Charge	NG Customer Charge	TOTAL COSTS
		Table 1									Table 2	Table 3	Table 4	
1	2	3	4	5	3 thru 6	7	8	9		10	11	12	13	7 thru 13
2009	1	\$134	\$100	\$60	\$294	\$0	\$0	\$0	\$100	\$60	\$44	\$34	\$21	\$260
2010	2	\$135	0	\$61	\$195	0	\$ 0	0		\$61	\$4 5	\$34	\$21	\$161
2011	3	\$135	0	\$61	\$196	0	\$0	0		\$61	\$45	\$34	\$21	\$162
2012	4	\$136	0	\$62	\$197	0	\$ 0	0		\$62	\$46	\$34	\$21	\$163
2013	5	\$136	0	\$62	\$198	0	\$0	0		\$62	\$46	\$34	\$21	\$164
2014	6	\$136	0	\$6 3	\$199	0	\$0	0		\$6 3	\$47	\$ 34	\$21	\$165
2015	7	\$137	0	\$64	\$200	0	\$0	0		\$64	\$47	\$34	\$21	\$166
2016	8	\$137	0	\$64	\$201	0	\$0	0		\$64	\$48	\$34	\$21	\$167
2017	9	\$138	0	\$65	\$202	0	\$0	0		\$65	\$48	\$34	\$21	\$168
2018	10	\$138	0	\$66	\$204	0	\$0	0		\$66	\$49	\$34	\$21	\$170
2019	11	\$138	0	\$ 66	\$205	0	\$ 0	0		\$6 6	\$49	\$34	\$21	\$171
2020	12	\$139	0	\$67	\$206	0	\$0	0		\$67	\$49	\$34	\$21	\$172
2021	13	\$139	0	\$68	\$207	0	\$0	0		\$68	\$50	\$34	\$21	\$173
2022	14	\$139	0	\$68	\$208	0	\$0	0		\$68	\$50	\$34	\$21	\$174
2023	15	\$140	100	\$69	\$309	637	(\$805)	167		\$69	\$ 51	\$34	\$21	\$175
2024	16	\$140	0	\$70	\$210	0	\$0	0		\$70	\$51	\$34	\$21	\$177
2025	17	\$141	0	\$70	\$211	0	\$0	0		\$70	\$52	\$34	\$21	\$178
2026	18	\$141	0	\$71	\$212	0	\$0	0		\$71	\$53	\$34	\$2 1	\$179
2027	19	\$141	0	\$72	\$213	0	\$0	0		\$72	\$53	\$34	\$21	\$180
2028	20	\$142	0	\$72	\$214	,o	\$0	0		\$72	\$54	\$34	\$21	\$181

of Benefits \$2,103

Present Value of Costs \$1,737

Benefit/Cost 1.21

Appliance Type
Cooking

Escalation Rates		LP Del/Margin Rate	0.0%
O&M Expense	1.0%	NG Fuel Rate	1.0%
LP Fuel Cost	1.0%	NG Base Rates	0.0%

	Prop	ane Cost - Tab	le 1			Natural Ga	s Supply Co	st - Table 2			Natural Gas	Energy Cha	irge - Tabl	e 3			Natu	ıral Gas Cust	omer Charg	e - Table 4		
Year	Cost Per Gallon	Annual Gallon	Tax Rate	Propene Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	NG Cost	Year	Rate Per Therm	Annual Thoma	Tax Rate	NG Cost	Yes	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	8	С	D	B*C*(1+D)	Α	8	С	D	B*C*(1+D)	A	8	С	D	B*C*(1+D)	A	8	С	D	E	D/E	G	C*(D/E)*(1+Z)
2009	\$2.5460	49	7.5%	\$134	2009	\$0.8960	45	10%	\$44	2009	\$0.6863	45	10%	\$34	200	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2010	\$2.5533	49	7.5%	\$135	2010	\$0.9049	45	10%	\$45	2010	\$0.6863	45	10%	\$34	201	\$18.00	\$192.00	45	443	10.16%	10%	\$21
2011	\$2.5605	49	7.5%	\$135	2011	\$0.9140	45	10%	\$45	2011	\$0.6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2012	\$2.5678	49	7.5%	\$136	2012	\$0,9231	45	10%	\$46	2012	\$0.6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2013	\$2.5750	49	7.5%	\$136	2013	\$0.9323	45	10%	\$46	2013	\$0.6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2014	\$2.5823	49	7.5%	\$138	2014	\$0.9417	45	10%	\$47	2014	\$0.6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2015	\$2.5696	49	7.5%	\$137	2015	\$0.9511	45	10%	\$47	2015	\$0.6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2016	\$2.5968	49	7.5%	\$137	2016	\$0.9606	45	10%	\$46	2016	\$0,6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2017	\$2,6041	49	7.5%	\$138	2017	\$0.9702	45	10%	\$46	2017	\$0.6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2018	\$2.6113	49	7.5%	\$136	2016	\$0.9799	45	10%	\$49	2018	\$0.6863	45	10%	\$34	201	\$ \$16,00	\$192.00	45	443	10,16%	10%	\$21
2019	\$2.6186	49	7.5%	\$138	2019	\$0.9897	45	10%	\$49	2019	\$0.6863	45	10%	\$34	201	\$16.00	\$192.00	45	443	10.16%	10%	\$21
2020	\$2.6259	49	7.5%	\$139	2020	\$0.9996	45	10%	\$49	2020	\$0.6863	45	10%	\$34	202	1 \$ 16. 0 0	\$192.00	45	443	10,16%	10%	\$21
2021	\$2,6331	49	7.5%	\$139	2021	\$1.0096	45	10%	\$50	2021	\$0,8863	45	10%	\$34	202	\$16,00	\$192,00	45	443	10.16%	10%	\$21
2022	\$2.6404	49	7.5%	\$139	2022	\$1.0197	45	10%	\$50	2022	\$0.6863	45	10%	\$34	202		\$192.00	45	443	10.16%	10%	\$21
2023	\$2,8476	49	7.5%	\$140	2023	\$1,0299	45	10%	\$51	2023	\$0.6863	45	10%	\$34	202	•	\$192.00	45	443	10.16%	10%	\$21
2024	\$2,6549	49	7.5%	\$140	2024	\$1,0402	45	10%	\$81	2024	\$0.6863	45	10%	\$34	202		\$192.00	45	443	10.16%	10%	\$21
2025	\$2,6622	49	7.5%	\$141	2025	\$1.0506	45	10%	\$52	2025	\$0.8863	45	10%	\$34	202		\$192.00	45	443	10.16%	10%	\$21
	\$2,6694	49	7.5%	\$141	2028	\$1.0506	45	10%	\$63	2025	\$0.6863	45 45	10%	\$34	202		\$192.00	45 45		10.16%	10%	\$21
2026	*******				`						,					•			443			
2027	\$2.6767	49	7.5%	\$141	2027	\$1.0717	45	10%	\$53	2027	\$0.6863	45	10%	\$34	202		\$192.00	45	443	10.16%	10%	\$21
2028	\$2.6839	49	7.5%	\$142	2028	\$1,0824	45	10%	\$84	2026	\$0.6863	45	10%	\$34	202	\$16.00	\$192.00	45	443	10.16%	10%	\$21

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that true and correct copies of the foregoing have been served by Hand Delivery this 12th day of March, 2009 upon the following:

Katherine Fleming, Esq. Office of General Counsel Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

NORMAN H. HORTOŇ, JR