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November 29, 2006

#### VIA HAND DELIVERY

Blanca S. Bayó, Director Division of Commission Clerk and Administrative Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

RECEIVED-FPSC 06 NOV 29 PM 1: 42

Re: Petition for Approval of Modifications to Approved Energy Conservation Programs by Chesapeake Utilities Corporation Florida Division

Dear Ms. Bayó:

Enclosed for filing, please find an original and 15 copies of Chesapeake's Petition for Approval of Modifications to Approved Energy Conservation Programs.

Please acknowledge your receipt of the enclosed filing, as well as the date of receipt, on the enclosed copy of this letter.

Your assistance in this matter is greatly appreciated. If you have any questions, please do not hesitate to contact me.

Sincerely,

Kalin

Beth Keating AKERMAN SENTERFITT 106 East College Avenue, Suite 1200 Tallahassee, FL 32302-1877 Phone: (850) 224-9634 Fax: (850) 222-0103

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Enclosures

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ORIGINAL

#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

Petition for approval of () modifications to approved energy () conservation programs, by Chesapeake) Utilities Corporation Florida Division ()

Docket No. 060772-EG

Filed: November 29, 2006

#### PETITION OF CHESAPEAKE UTILITIES CORPORATION FLORIDA DIVISION FOR APPROVAL OF MODIFICATIONS TO APPROVED ENERGY CONSERVATION PROGRAMS

Chesapeake Utilities Corporation Florida Division ("Chesapeake" or the

"Company"), by its undersigned attorneys, files this petition for approval of modifications

to its energy conservation programs, and in support of its petition states:

1. The name, address and telephone number of the petitioner are:

Chesapeake Utilities Corporation Florida Division P. O. Box 960 Winter Haven, Florida 33882 (863) 293-2125

2. The name, address and telephone and fax numbers of the person to whom

notices, orders and correspondence regarding this petition are to be sent is:

Beth Keating Of Counsel Akerman Senterfitt 106 East College Avenue, Suite 1200 Tallahassee, FL 32301 (850) 224-9634 (telephone) (850) 222-0103 (fax)

Attorneys for Petitioner The Florida Division of Chesapeake Utilities Corporation

3. Chesapeake is a natural gas local distribution company ("LDC") providing natural gas transportation service in thirteen counties in the State of Florida, and is a

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FPSC-COMMISSION CLERK

public utility subject to the Commission's regulatory jurisdiction under Chapter 366, *Florida Statutes*. The Company currently provides seven Commission approved energy conservation programs pursuant to Section 366.82, Florida Statutes and Rule 25-17.015, Florida Administrative Code, and its substantial interests will be affected by the Commission's determination on the merits of this petition.

#### BACKGROUND

- 4. Chesapeake's initial energy conservation programs were approved by the Commission in the early 1980's. Chesapeake's conservation programs were last approved as cost effective by the Commission's Order No. PSC-98-1079-FOF-GU, issued in Docket No. 980427 on August 10, 1998.
- 5. Chesapeake's existing approved programs are described below:

(a) <u>Residential Home Builder Program</u>. Chesapeake's Residential Home Builder Program increases the overall penetration of natural gas in the residential single and multi-family new construction market throughout Chesapeake's service area. The overall objectives are to reduce the growth rates of electric consumption, increase the conservation of energy resources and minimize ratepayers' total energy cost. The program is designed to increase the overall energy efficiency in the new home construction market through the installation of efficient gas appliances. The incentives offered to home builders are designed to assist in defraying the cost of gas piping, venting, appliance installation and other costs associated with residential gas service. Participation in this program is open to any home builder or developer of homes who installs energy efficient natural gas heating, water heating, cooking and provides piping stub-outs for clothes drying.

(b) <u>Residential Appliance Replacement Program</u>. Chesapeake's Residential Appliance Replacement Program is designed to encourage the replacement of inefficient non-natural gas appliances with efficient natural gas appliances. The program seeks to reduce the growth rates of electric consumption and optimize the use of existing natural gas facilities by encouraging the replacement of non-natural gas (primarily electric resistance appliances) in the residential market. Participation in the program is open to current residential customers or potential customers (where the Company can feasibly extend service) who replace their non-natural gas water heating, central heating, cooking, clothes drying or space heating with energy efficient natural gas appliances. Cash allowances are offered to reduce the homeowner's cost of piping, venting and appliance installation.

(c) <u>Residential Propane Distribution Program.</u> Chesapeake's Residential Propane Distribution Program is designed to promote the use of "gas" within residential developments where the extension of natural gas service does not meet the Company's Extension of Facilities Policy. The Company provides incentives under this program in developments incorporating underground propane gas distribution facilities designed to meet natural gas operating standards. At the time natural gas distribution facilities can be feasibly extended to reach the development, the conversion of homes from propane to natural gas can be accomplished with minimum disruption to the neighborhood. The incentives paid to homebuilders or developers under this program are equal to the Company's existing Residential Homebuilder Program. The Company is proposing no change to this program.

(d) <u>Residential Water Heater Retention Program</u>. Chesapeake's Residential Water Heater Retention Program promotes the continued use of natural gas for water heating thereby reducing load loss through conversions to alternate fuels. The water heater is the Company's primary residential base load, and is critical to the long-term retention of natural gas service in a home. Any current customer using natural gas for water heating can participate in the program when they replace their existing unit with a new energy efficient natural gas water heater. The allowances help defray the higher first cost of a natural gas water heater stands and other items that may be necessary to meet current building code requirements. In addition, the Company's program offers an incentive (\$50) to appliance Dealers for the sale of natural gas water heaters installed in eligible residences.

(e) <u>Natural Gas Space Conditioning for Residential Homes Program</u>. Chesapeake administers gas space conditioning programs designed to encourage the use of natural gas space conditioning equipment in residences. The program provides incentives to qualifying participants to reduce the higher first cost of gas space conditioning systems. The program is intended to apply to both direct space conditioning and humidity control. The Company is proposing no change to this program.

(f) <u>Gas Space Conditioning Program</u>. This program encourages the installation of natural gas space conditioning and humidity control systems in non-residential facilities. The program provides an allowance based on the rated capacity of the

installed unit(s) up to a maximum of 500 tons. The Company is proposing no change to this program.

(g) <u>Conservation Education Program</u>. Chesapeake administers a natural gas energy conservation community education program. Several conservation and natural gas awareness programs are directed at schools, the homebuilding industry, appliance dealers and the general public throughout the Company's service area. The Company is proposing no change to this program.

#### **RELIEF REQUESTED**

- 6. By this petition, Chesapeake seeks the Commission's approval for the following modifications to three (3) of its authorized energy conservation programs:
  - Proposed increase in the current cash allowances approved in the existing Residential Homebuilder Program for natural gas storage tank water heating, heating systems, cooking and clothes drying, and the addition of a natural gas tankless water heater allowance above that authorized in the existing program. Chesapeake also proposes to re-title the program for Commission filing purposes the Residential New Construction Program, and would further propose to retain the right to promote this, and other conservation programs, using naming conventions and/or branding consistent with the Company's marketing objectives.
  - Proposed increase in the current cash allowances approved in the existing Residential Appliance Replacement Program for natural gas storage tank water heating, heating, cooking and clothes drying, and the addition of a natural gas tankless water heater allowance above that provided in the existing program.

- Proposed expansion of the Company's Residential Water Heater Retention Program to add natural gas heating systems, cooking and clothes drying appliances, and to increase the allowance levels of the existing natural gas water heater allowances. In addition, a separate allowance for natural gas tankless water heaters is proposed. The existing \$50 Dealer incentive allowance is proposed to be discontinued. Chesapeake also proposes to retitle the program for Commission filing purposes the Residential Appliance Retention Program, and would further propose to retain the right to promote this, and other conservation programs, using naming conventions and/or branding consistent with the Company's marketing objectives.
- In all other respects Chesapeake's energy conservation programs would remain unchanged.
- 7. The conservation allowance amounts proposed in this petition are the result of a cooperative development effort among the member utilities of the Associated Gas Distributors of Florida ("AGDF"), which includes all of the regulated LDCs operating in Florida. Each of the member LDCs either administers an existing Commission-approved energy conservation program, or is actively planning to file a program. The residential conservation programs are especially critical to each LDC's ability to add and retain customers.

Over the past three years, four of the AGDF-member LDCs have participated in a joint energy conservation advertising and customer education program, and two other members are planning to participate this year. The AGDF statewide "Get Gas Florida" campaign is directed primarily at educating the public about the availability of approved energy conservation programs. Pooling each

LDC's conservation education funds in support of a common "Get Gas Florida" campaign reduces development costs and enables bulk purchasing discounts that greatly increase the coverage and effectiveness of the program. AGDF-member LDCs hope to establish Commission-approved energy conservation programs with identical cash allowance levels at each LDC. Current "Get Gas Florida" advertising stops short of promoting specific conservation allowances, since the current allowances are approved in different amounts for each LDC. If each LDC offered the same allowance amounts, the gas industry could deliver a more powerful message through its conservation advertising and education programs. AGDF members focused their initial efforts on developing consistent allowance amounts for the conservation programs directed toward the homebuilding industry, residential appliance replacement and appliance retention. The allowance amounts for new construction and appliance replacement proposed in this petition, and supported by Commission-required cost benefit tests, are identical to the existing Florida City Gas allowances. The Commission recently approved identical allowance levels for Florida Public Utilities Company (Order No. PSC-06-0749-PAA-GU, issued on September 5, 2006), and Peoples Gas System (Order No. PSC-06-0816-PAA-EG, issued on October 10, 2006). The Company's appliance retention allowances are proposed at the same levels as the proposed new construction allowances. Also, in the above referenced Orders, the Commission approved appliance retention program allowance levels identical to those proposed by the Company in this filing.

#### **Residential New Construction Program**

- 8. This program is currently called the "Residential Home Builder Program," but would be re-titled the "Residential New Construction Program." All natural gas appliances installed under the program must demonstrate compliance with the minimum efficiency standards established by the U.S. Department of Energy. (See Uniform Test Method for Measuring the Energy Consumption of Water Heaters, Appendix E to Subpart B of 10 CFR Part 430, and 10 CFR §430.32, Energy and Water Conservation Standards and Effective Dates).
- 9. The residential new construction cash allowances provided by Chesapeake to reduce a homebuilder's house piping and appliance installation costs help bring initial natural gas installation costs in line with the installation costs of competitive energy sources. 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. As the cost of housing in Florida has escalated over the past few years, builders have become even more cost sensitive. 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, clean-burning natural gas appliances will be provided to Florida homeowners.
- 10. Chesapeake is proposing an increase in the current cash allowances for all appliances approved in its Residential New Construction Program primarily to address the cost increases for natural gas piping, venting and appliances in the new home market. As noted previously, the current Chesapeake residential home

builder allowances have been in place since Commission approval in 1998. The following chart depicts Chesapeake's current and proposed residential new construction allowances per appliance.

	Existing	Proposed
Gas Storage Tank Water Heating	\$275	\$350
Gas Tankless Water Heating	\$275	\$450
Gas Heating	\$275	\$350
Gas Cooking	\$75	\$100
Gas Clothes Drying	\$ 75	\$100

Chesapeake Residential New Construction Program Cash Allowances

11. As previously noted, the allowances proposed above are identical to the Commission-approved Florida Public Utilities and Peoples Gas System allowance amounts, and are identical to the Florida City Gas approved allowances with the exception of the separate allowance proposed for tankless water heating systems. Florida City Gas filed on November 14, 2006, for approval of the enhanced tankless water heating allowances. Chesapeake seeks Commission approval to establish a separate allowance of \$450 for natural gas tankless water heating systems installed under its Residential New Construction Program. Chesapeake believes that a separate, higher allowance for tankless units would significantly increase installations of these highly efficient water heaters. The gas-fired tankless water heater market is growing rapidly in Florida and throughout the United States. Millions of tankless units are in operation throughout Europe and Asia. Natural gas utilities in the United States have begun to actively promote tankless technology for four principal reasons: First, the efficiency ratings of most gas-fired tankless units tested in accordance with U.S. Department of Energy test standards are well above a .80 Energy Factor ("EF"), significantly higher than new storage tank water heaters (which typically have a .59 EF). The increased efficiency of tankless units results in substantial energy savings for homeowners. Second, most gas-fired tankless units are installed outside a home's conditioned space and require no venting, reducing installation costs and eliminating the need for indoor combustion air. Third, the exterior installation and elimination of a storage tank provide homebuilders with valuable additional interior square footage. Finally, the service life of a gas-fired tankless unit is estimated at approximately 20 years, significantly longer than the estimated 14-year life of a standard storage tank water heater.

- 12. Tankless technology offers builders and homeowners a gas water heating system that, compared to storage tank systems, provides greater gallon-per-minute hot water production, greater recovery efficiency ratings and higher DOE EF ratings. Most tankless water heater manufacturers are voluntarily complying with the Federal Trade Commission's Appliance Labeling Rule (16 CFR Part 305), which provides a straightforward method for homebuilders, code officials and consumers to identify EF ratings. It should also be noted that the Florida Building Commission ("FBC") issued a declaratory statement in May 2005 (Case No. DCA05-DEC-034) indicating that gas-fired tankless units are eligible to receive the highest level of energy efficiency credit available for gas water heaters in the Florida Energy Code whole house performance compliance methodology.
- 13. The installed cost of a residential natural gas tankless water heater with a gallonper-minute capability sufficient to serve a typical residence (>6 gpm) and standard exterior installation is approximately \$1,350. A typical residential storage tank gas

water heater installed in new construction averages approximately \$650. While the life-cycle cost benefits to consumers support the installation of tankless units, as indicated in the Participants Tests, the initial cost remains a hurdle to significant market penetration. The increased allowance could help Chesapeake offset the additional expense to a homebuilder installing high efficiency natural gas tankless units.

#### **Residential Appliance Replacement Program**

14. Chesapeake proposes an increase in the current cash allowances for all appliances approved in its Residential Appliance Replacement Program primarily to address cost increases for natural gas piping, venting and appliances in the existing home appliance replacement market. The allowances for appliance replacement programs have typically been approved at higher levels than new construction or appliance retention allowances due to the increased cost associated with retrofitting an existing home with natural gas. Installing interior gas piping and venting in existing homes is more challenging than in new construction installations where piping and venting can be installed when walls, ceilings and floors are still open and accessible. The current Chesapeake appliance replacement program allowances have been in place since Commission approval The following chart depicts the current and proposed Chesapeake in 1998. appliance replacement allowances per appliance. The proposed allowances are identical to the allowances approved by the Commission for Florida City Gas, Florida Public Utilities Company and Peoples Gas System, as described above.

Chesapeake Residential Appliance Replacement Program Cash Allowances

	Current	Proposed
Gas Storage Tank Water Heating	\$330	\$525
Gas Tankless Water Heating	\$330	\$525
Gas Heating	\$330	\$625
Gas Cooking	\$ 50	\$100
Gas Clothes Drying	\$ 50	\$100

#### **Residential Appliance Retention Program**

- 15. This program is currently titled the "Residential Water Heater Retention Program," and Chesapeake seeks the Commission's approval to re-title the program the "Residential Appliance Retention Program." Chesapeake's current retention program encourages homeowners with existing natural gas water heaters to retain natural gas when the existing water heater fails. At present, Chesapeake's retention program addresses only natural gas water heating installations. As noted above, Chesapeake's proposal would expand its current retention program to add allowances for natural gas heating, clothes drying and cooking appliances to the existing water heating allowances, and establish a separate allowance for natural gas tankless water heating systems. Chesapeake seeks approval of appliance retention allowance levels identical to the proposed allowances for its Residential New Construction Program. The proposed allowances are also identical to those approved by the Commission for Florida Public Utilities and Peoples Gas System in the above referenced orders, and recently requested by Florida City Gas in Docket No. 060746.
- 16. Chesapeake recognizes that the cost to retain an existing customer is significantly lower than the cost to add a new customer. The proposed retention allowances

will strengthen Chesapeake's ability to retain existing gas customers and 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. Retaining customers also enhances Chesapeake's ability to spread its fixed operating costs over a greater number of customers, thereby assisting in mitigating the need for future rate adjustments. All ratepayers benefit from the retention of revenues from an existing customer. Although the benefit of avoiding service termination costs for existing customers is significant, Chesapeake has elected to present a conservative analysis and did not include avoided cut-and-cap costs in the RIM Test cost benefit calculations.

17. The following chart depicts the current and proposed Chesapeake retention allowances per appliance. As noted above, Chesapeake is proposing to discontinue the Dealer incentive payments provided under the current program. In the Company's view, the proposed increase in overall allowances to existing consumers, coupled with the expanded list of eligible appliances, will provide Dealers ample incentive to market natural gas appliances.

#### Chesapeake Residential Appliance Retention Program Cash Allowances

	Chesapeake	Proposed
Gas Storage Tank Water Heating	\$100	\$350
Gas Tankless Water Heating	\$ O	\$450
Gas Heating	\$ 0	\$350
Gas Cooking	<b>\$</b> 0	\$100
Gas Clothes Drying	\$ O	\$100
Dealer	\$ 50	\$ O

18. Consistent with its proposed Residential New Construction Program allowances, Chesapeake is proposing to establish a separate retention allowance for the installation of natural gas tankless water heating systems at a level higher than that for storage water heating systems. The service life of a storage tank water heater averages approximately 14 years, and the typical efficiency rating of a storage tank water heater installed in the early 1990's was .48 EF. Given the efficiency degradation that naturally occurs as storage tank units age, and the high EF ratings of most tankless water heaters (above .80 EF), it would not be unusual to expect a new tankless installation to be twice as efficient as the water heater to be replaced. The increased allowance for tankless water heaters would help reduce the initial cost of upgrading an inefficient storage tank water heater. Chesapeake seeks Commission approval to establish a \$450 allowance for gas tankless water heaters installed under the Residential Appliance Retention Program.

#### COST BENEFIT TESTS

19. Chesapeake has followed the Commission-approved cost effectiveness test methodologies (RIM Test and Participants Test) required by Rule 25-17.009 to determine the cost-benefit of each proposed program modification and allowance level. Attached hereto as Exhibit A is a composite document containing Chesapeake' RIM and Participants Tests demonstrating the cost benefit of the proposed program modifications for the Residential New Construction Program, the Residential Appliance Replacement Program and the Residential Appliance Retention Program. Other than the above listed programs, Chesapeake is proposing no modifications to its programs that would affect the various programs' cost benefit results as determined by the existing Commission approved RIM and Participants Tests.

- 20. The appliance cost, appliance installation cost and energy usage data required to complete the RIM and Participants Tests were developed through a cooperative effort of members of AGDF. Historically, the Commission has allowed LDCs to use average appliance and usage data in preparing the RIM and Participants Tests. LDCs operating in multiple jurisdictions in the state have not filed multiple regional based conservation programs. The data used to produce the Chesapeake RIM and Participants Tests are representative of appliance costs, installation costs and energy usage information on a statewide basis, and would be applicable to any LDC cost-benefit tests.
- While many of the data elements included in this filing were jointly developed for 21. use by several Florida LDCs, there are several data elements that are applicable solely to Chesapeake. For example, the Firm Transportation Charge (customer charge) and Usage Charge (energy charge) rates used in the analysis are Chesapeake's current Commission-approved rates for the FTS-1 and FTS-B rate classes (Chesapeake 2004 Rate Restructuring proceeding; Order No. PSC-05-0208-PAA-GU, issued on February 22, 2005). The Company's approved rate structure includes several consumer classes, based on annual therm usage, that contain residential type consumers: FTS-A (0-130 therms), FTS-B (>130-250 therms) and FTS-1 (0-500 therms). The FTS-A and FTS-B classes are closed to new consumers. The FTS-1 class includes all new services for consumers using up to 500 therms per year. Virtually all of Chesapeake's residential new construction customer additions fall into this service class. The Company also used the FTS-1 rates to evaluate its proposed Appliance Replacement Program, such rates representing a conservative analysis. The Company used the FTS-B

rates to evaluate the Appliance Retention Program. Consumers in all "residential" service classes could elect to participate in the retention program. The FTS-B rates represent the median rate level. It should be noted, that the variable Usage Charge is the same for all of the above rate classes, the only change is in the fixed monthly Firm Transportation Charge.

- 22. The "residential" service line, meter and regulator investment costs used in the RIM Tests are as approved in MFR Schedule E-7 in Chesapeake's 2004 Rate Restructuring filing, noted above. The New Construction and Appliance Replacement Programs use the E-7 cost data for Chesapeake's FTS-1 rate class. There are no investment requirements for the retention program, given that the program applies to existing consumers. The incremental administrative cost and operations and maintenance cost relative to adding a new consumer through the Residential New Construction Program or Residential Appliance Replacement Program are based on growth trended expense data from the 2000 Chesapeake base rate case (Order No. PSC-00-2263-FOF-GU). The RIM Tests also use Chesapeake's approved weighted average cost of capital (8.6%) from the 2000 Rate Case. The depreciation rates used in the RIM Tests are those approved by the Commission in Chesapeake' 2002 Depreciation Study (Order No. PSC-0319-PAA-GU, issued on March 6, 2003 in Docket No. 020304-GU).
- 23. The cost of gas used in the RIM and Participants Tests is the October 2006 fuel billing rate received from Infinite Energy for the Chesapeake Transitional Transportation Service (TTS) Program (Order No. PSC-02-1646-TRF-GU). The cost of electricity was developed from a weighted average of the residential rates,

including fuel adjustment rates, in place during April 2006 for the four largest Florida investor-owned Commission-regulated electric utilities.

- 24. The annual gas therm usage data by appliance used in the respective cost benefit tests is based on data developed by Peoples Gas System. 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. The study sub-metered appliances in over 300 Peoples Gas customer residences. The residences were selected throughout the Peoples Gas service area, in the north, central and south regions of the state. Consumption data was monitored for over a year.
- 25. Electric appliance Kwh usage data was obtained from several sources. Resistance water heating consumption data was developed using the November 2005 Consumer's Directory of Certified Efficiency Ratings for Heating and Water Heating Equipment published by the Gas Appliance Manufacturers Association ("GAMA"), a national trade association representing over 90 percent of all appliances (gas and electric) manufactured in the United States. Usage data for electric heat pumps was obtained from the EnergyGauge computer model (Version: FLR3SB v4.0) used to assess compliance with the Florida Energy Efficiency Code for Building Construction. Kwh usage data for electric cooking and clothes drying was derived from a standard Btu conversion of the gas therms from the Peoples Gas study to electric Kwh.
- 26. Developing representative appliance installation cost data was problematic for the AGDF project team. Cost data in the new residential construction market is difficult to obtain. For competitive reasons, most homebuilders are reluctant to

provide individualized product or material costs, unless they are pricing an upgrade to their base home package. Subcontractors are equally reticent to publicly disclose component prices. In many cases, a subcontractor provides a package price for services that include gas appliance installations along with other non-gas products. For example, a plumbing contractor may provide a turn-key price for the potable water piping to a homebuilder that also includes installing the In addition, wholesale pricing from distributors becomes gas water heater. relatively meaningless given the escalation in price mark-ups on new homes over the past few years. The AGDF project team determined that, given the above concerns, the most reliable cost data would 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 retail appliance cost information available through Florida Public Utilities Company, Indiantown Gas Company and St. Joe Natural Gas Company. These AGDF member companies retail and install gas appliances.

27. 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 (<u>www.homedepot.com</u> and <u>www.lowes.com</u>). Retail cost data from both sources was available for both gas and electric appliances. Care was taken to ensure that comparable appliance models were selected for both fuel types. 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 Chesapeake's view, the retail Home Depot and/or Lowes prices provide a reasonable price point for inclusion in the RIM and Participants Tests. It should be noted that the National Energy Policy Act of 2005 provides for a \$300 tax credit to homeowners purchasing a water heater with an EF greater than .80. As noted above, virtually all gas-fired tankless units are rated above .80 EF. Although the tax credit is currently available for homeowner improvements, Chesapeake elected to make a conservative analysis and has not included the tax credit in its Participants Test analysis in the appliance replacement or appliance retention programs.

- 28. 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 noted previously, there was significant variation in the price points for installation, in those cases where the contractors were willing to share cost data. For example, variations of several hundred dollars were identified for gas and electric water heating installations depending on the region of the state and the market type of the residence. Finally, installation costs were obtained from the "2006 R.S. Means Residential Construction Cost Data, 25th Annual Edition", construction cost estimating guide. The R.S. Means guide is a nationally recognized construction cost estimator. R.S. Means has established material prices based on national averages and labor rates based on seven average regional wage rates. Costs can be further adjusted to over 900 locations throughout the U.S and Canada.
- 29. The equipment and installation costs for gas heating and electric heat pumps were also difficult to obtain for the same reasons listed above. The R.S. Means guide

was used for space heating equipment and installation costs. The costs for gas main installations (feeder main and development main) were jointly developed by the AGDF project team based on average cost data for installation of 2" plastic main (typical for residential projects).

#### CONCLUSION

- 30. The energy conservation program modifications proposed by Chesapeake reflect realistic market conditions. Increased new home incentives are needed to keep pace with increases in homebuilding costs. The authorization of natural gas tankless water heater incentives will enable Chesapeake to recognize and promote energy efficient technological advances in gas appliance manufacturing. Each of the proposed modifications meets the Commission-required cost effectiveness tests, is capable of being monitored, and will have an overall positive effect on energy conservation.
- 31. Chesapeake is not at this time requesting any adjustment in its approved Energy Conservation Cost Recovery billing factors. If the modifications to the allowances payable under the programs are approved as sought by this petition, the cost impact of such modifications will be incorporated in the projection filing to be made by Chesapeake for the purpose of establishing ECCR billing factors for calendar year 2008. Impact of the proposed increased allowances on Chesapeake's overall energy conservation expenses is expected to increase gradually in future years.
- 32. The cash allowances for which approval is sought in each residential conservation program would be paid based on the installation of the applicable appliances. Multiple allowances would be paid for multiple appliance installations in a single residence. For multi-family residential installations with central heating and/or

water heating systems, Chesapeake would pay allowances based on the number of residential dwelling units served by the central system. All requests for cash allowances under the new construction, appliance replacement or appliance retention programs received by Chesapeake subsequent to the date of Commission approval of any new allowance amounts would be paid at the new allowance levels.

WHEREFORE, Chesapeake respectfully requests that the Commission enter an Order granting this petition and approving the conservation plan modifications described herein within ninety (90) days of the filing date of this petition.

Respectfully submitted,

ealina

Beth Keating Of Counsel Akerman Senterfitt 106 East College Avenue, Suite 1200 Tallahassee, FL 32301 (850) 224-9634 (telephone) (850) 222-0103 (fax)

Attorneys for Petitioner The Florida Division of Chesapeake Utilities Corporation

То

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program Petition December, 2006

Ratepayer Impact Measurement Test Results Participants Test Results

For

Residential New Construction Program Residential Appliance Replacement Program Residential Appliance Retention Program

# Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

# **Residential New Construction Program**

	Proposed <u>Allowance</u>	Participants Test	<u>RIM Tes</u> t
Gas Storage Tank Water Heating	\$350	1.47	1.48
Gas Tankless Water Heating	\$450	1.38	1.47
Gas Heating	\$350	1.07	1.50
Gas Clothes Drying	\$100	1.40	1.49
Gas Cooking	\$100	1.41	1.46

Summary of RIM Test and Participants Test Results

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

### **Residential New Construction Program** RIM Test and Participants Test Results

For

Storage Tank Water Heating

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program Participants Test - Cost Effective Results

#### Appliance Type Storage Tank Water Heating

Benefits							Costs								
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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		
2006	1	\$536	\$350	\$36	\$922	\$259	(\$314)	\$400	\$36	\$175	\$110	\$76	\$742		
2007	2	\$543	0	\$37	\$580	0	0	0	\$37	\$180	\$110	\$76	\$402		
2008	3	\$550	0	\$38	\$588	0	0	0	\$38	\$184	\$110	\$76	\$408		
2009	4	\$557	0	\$39	\$596	0	0	0	\$39	\$188	\$110	\$76	\$413		
2010	5	\$564	0	\$40	\$604	0	0	0	\$40	\$193	\$110	\$76	\$418		
2011	6	\$571	0	\$41	\$612	0	0	0	\$41	\$198	\$110	\$76	\$424		
2012	7	\$578	0	\$42	\$620	0	0	0	\$42	\$202	\$110	\$76	\$430		
2013	8	\$585	0	\$43	\$628	0	0	0	\$43	\$207	\$110	\$76	\$436		
2014	9	\$592	0	\$44	\$636	0	0	0	\$44	\$212	\$110	\$76	\$442		
2015	10	\$599	0	\$45	\$644	0	0	0	\$45	\$217	\$110	\$76	\$448		
2016	11	\$607	0	\$46	\$652	0	0	0	\$46	\$222	\$110	\$76	\$454		
2017	12	\$614	0	\$47	\$660	0	0	0	\$47	\$228	\$110	\$76	\$460		
2018	13	\$621	0	\$48	\$669	0	0	0	\$48	\$233	\$110	\$76	\$467		
2019	14	\$628	350	\$49	\$1,027	361	(438)	348	\$49	\$239	\$110	\$76	\$746		
2020	15	\$635	0	\$50	\$685	0	0	0	\$50	\$245	\$110	\$76	\$481		
2021	16	\$642	0	\$51	\$693	O	0	0	\$51	\$250	\$110	\$76	\$488		
2022	17	\$649	0	\$53	\$702	0	0	0	\$53	\$256	\$110	\$76	\$495		
2023	18	\$656	0	\$54	\$710	0	0	0	\$54	\$263	\$110	\$76	\$502		
2024	19	\$663	0	\$55	\$718	0	0	0	\$55	\$269	\$110	\$76	\$510		
2025	20	\$670	0	\$56	\$727	0	0	0	\$56	\$275	\$110	\$76	\$518		

Present Value of Benefits \$6,613 Present Value of Costs \$4,712

Benefit/Cost	1.40
Ratio	1

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program Participants Test - Data

Appliance Type
Storage Tank Water Heating

#### Escalation Rates O&M Expense 2.4% Fuel Rate 2.4% Electric Fuel Adj. 2.4%

	Electric	: KWH Cost - Tai	ele 1			Gas Supp	y Cost - Ta	ble 2			Gas En	ergy Charg	e - Table :	3				Gas Cust	omer Charg	e - Table 4		
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	Y	ar Cost Per Then	Annual Therms	Tax Rate	Gas Cost	Ye	ar Rate Per Therm	Annual Therms	Tax Rat	e Gas Cost	Ye	Monthly ar Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rate Customer Ch
Α	В	с	D	B*C*(1+D)		в	С	D	B*C*(1+D)		В	С	D	B*C*(1+D)		В	c	D	E	D/E	G	C*(D/E)*(1+
2006	\$0.1020	4,773	10%	\$536	20	06 \$0.9382	170	10%	\$175	20	6 \$0.5880	170	10%	\$110	20	06 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2007	\$0.1034	4,773	10%	\$543	24	07 \$0.9607	170	10%	\$180	20	\$0.5880	170	10%	\$110	20	07 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2008	\$0.1047	4,773	10%	\$550	20	08 \$0.9838	170	10%	\$184	20	8 \$0.5880	170	10%	\$110	20	08 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2009	\$0.1061	4,773	10%	\$557	20	09 \$1.0074	170	10%	\$188	20	9 \$0.5880	170	10%	\$110	20	09 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2010	\$0.1074	4,773	10%	\$564	20	10 \$1.0316	170	10%	\$193	20	0 \$0.5880	170	10%	\$110	20	10 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2011	\$0.1088	4,773	10%	\$571	20	11 \$1,0563	170	10%	\$198	20	1 \$0.5880	170	10%	\$110	20	11 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2012	\$0.1101	4,773	10%	\$578	20	12 \$1.0817	170	10%	\$202	20	2 \$0.5880	170	10%	\$110	20	12 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2013	\$0.1115	4,773	10%	\$585	20	13 \$1.1076	170	10%	\$207	20	3 \$0,5880	170	10%	\$110	20	13 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2014	\$0.1128	4,773	10%	\$592	20	14 \$1.1342	170	10%	\$212	20	4 \$0.5880	170	10%	\$110	20	14 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2015	\$0,1142	4,773	10%	\$599	20	15 \$1,1614	170	10%	\$217	20	5 \$0.5880	170	10%	\$110	20	15 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2016	\$0,1155	4,773	10%	\$607	20	16 \$1,1893	170	10%	\$222	20	6 \$0,5880	170	10%	\$110	20	16 \$15.00	\$180.00	170	443	38,37%	10%	\$76
2017	\$0,1169	4,773	10%	\$614	20		170	10%	\$228	20		170	10%	\$110	20	17 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2018	\$0,1182	4,773	10%	\$621		18 \$1,2471	170	10%	\$233	20	•••••	170	10%	\$110	20		\$180.00	170	443	38.37%	10%	\$76
2019	\$0.1196	4,773	10%	\$628		19 \$1,2770	170	10%	\$233	20	•	170	10%	\$110	20		\$180.00	170	443	38.37%	10%	\$76
	·																					\$76
2020	\$0.1209	4,773	10%	\$635	20		170	10%	\$245	20		170	10%	\$110	20		\$180.00	170	443	38.37%	10%	
2021	\$0.1223	4,773	10%	\$642	20		170	10%	\$250	20	•	170	10%	\$110	20		\$180.00	170	443	38.37%	10%	\$76
2022	\$0.1236	4,773	10%	\$649		22 \$1.3712	170	10%	\$256	20	-	170	10%	\$110	20		\$180.00	170	443	38.37%	10%	\$76
2023	\$0.1250	4,773	10%	\$656	20	23 \$1.4041	170	10%	\$263	20.	3 \$0.5880	170	10%	\$110	20	23 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2024	\$0.1263	4,773	10%	\$663	20	24 \$1,4378	170	10%	\$269	20	4 \$0.5880	170	10%	\$110	20	24 \$15.00	\$180.00	170	443	38.37%	10%	\$76
2025	\$0.1277	4,773	10%	\$670	20	25 \$1.4723	170	10%	\$275	20	5 \$0.5880	170	10%	\$110	20	25 \$15.00	\$180.00	170	443	38.37%	10%	\$76

# Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction 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
2006	\$100	\$159	\$69	\$329	\$159	\$28	\$31	\$359.78	\$578
2007	\$100	\$163	\$69	\$332	\$163	\$27	\$32	\$9.78	\$231
2008	\$100	\$167	\$69	\$336	\$167	\$26	\$32	\$9.78	\$235
2009	\$100	\$171	\$69	\$340	\$171	\$25	\$33	\$9.78	\$239
2010	\$100	\$175	\$69	\$344	\$175	\$24	\$34	\$9.78	\$243
2011	\$100	\$180	\$69	\$349	\$180	\$23	\$35	\$9.78	\$247
2012	\$100	\$184	\$69	\$353	\$184	\$22	\$36	\$9.78	\$252
2013	\$100	\$188	\$69	\$357	\$188	\$21	\$37	\$9.78	\$256
2014	\$100	\$193	\$69	\$362	\$193	\$21	\$37	\$9.78	\$261
2015	\$100	\$197	\$69	\$366	\$197	\$20	\$39	\$9.78	\$266
2016	\$100	\$202	\$69	\$371	\$202	\$19	\$39	\$9.78	\$271
2017	\$100	\$207	\$69	\$376	\$207	\$19	\$40	\$9.78	\$275
2018	\$100	\$212	\$69	\$381	\$212	\$18	\$41	\$9.78	\$281
2019	\$100	\$217	\$69	\$386	\$217	\$17	\$42	\$359.78	\$636
2020	\$100	\$222	\$69	\$391	\$222	\$17	\$43	\$9.78	\$292
2021	\$100	\$228	\$69	\$397	\$228	\$16	\$44	\$9.78	\$298
2022	\$100	\$233	\$69	\$402	\$233	\$15	\$45	\$9.78	\$304
2023	\$100	\$239	\$69	\$408	\$239	\$15	\$46	\$9.78	\$310
2024	\$100	\$244	\$69	\$413	\$244	\$14	\$48	\$9.78	\$316
2025	\$100	\$250	\$69	\$419	\$250	\$14	\$49	\$9.78	\$323

Present Value

of Benefits

\$3,526

Present Value

of Costs

\$2,983

Benefit/Cost	
Ratio	1.18

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 **Residential New Construction Program RIM Test - Calculated Data**

	Appliance Type
s	storage Tank Water Heating

Fuel Rate Escalator	2.4%
Gas Energy Charge Escalator	0%
Gas Customer Charge Escalator	0%
O&M/Inflation Escalator	2.4%

Table 1			
F	tevenue - E	Energy Cha	rge
1	2	3	2*3
	-		
Year	Therms	Base Rate	Total Charge
2006	170	\$0.5880	\$100
2007	170	\$0,5880	\$100
2008	170	\$0.5880	\$100
2009	170	\$0.5880	\$100
2010	170	\$0.5880	\$100
2011	170	\$0.5880	\$100
2012	170	\$0.5880	\$100
2013	170	\$0.5880	\$100
2014	170	\$0.5880	\$100
2015	170	\$0.5880	\$100
2016	170	\$0.5880	\$100
2017	170	\$0,5880	\$100
2018	170	\$0,5880	\$100
2019	170	\$0.5880	\$100
2020	170	\$0,5880	\$100
2021	170	\$0,5880	\$100
2022	170	\$0.5880	\$100
2023	170	\$0,5880	\$100
2024	170	\$0.5880	\$100
2025	170	\$0.5880	\$100

Depreciation Rate - Supply Main	3.30%
Depreciation Rate - Development Main	3.30%
Depreciation Rate - Service Line	3.60%
Depreciation Rate - Meter	3,90%

Revenue - Cost of Gas										
1	2	4	2*3							
Year	Therms	Fuel Rate	Total Charge							
2006	170	\$0.9382	\$159							
2007	170	\$0.9607	\$163							
2008	170	\$0,9838	\$167							
2009	170	\$1.0074	\$171							
2010	170	\$1.0316	\$175							
2011	170	\$1,0563	\$180							
2012	170	\$1.0817	\$184							
2013	170	\$1.1075	\$188							
2014	170	\$1.1342	\$193							
2015	170	\$1.1614	\$197							
2016	170	\$1,1893	\$202							
2017	170	\$1,2179	\$207							
2018	170	\$1,2471	\$212							
2019	170	\$1.2770	\$217							
2020	170	\$1.3077	\$222							
2021	170	\$1.3390	\$228							
2022	170	\$1.3712	\$233							
2023	170	\$1.4041	\$239							
2024	170	\$1.4378	\$244							
2025	170	\$1.4723	\$250							

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							
2006	\$15.00	\$180.00	38.37%	\$69							
2007	\$15.00	\$180.00	38.37%	\$69							
2008	\$15.00	\$180.00	38.37%	\$69							
2009	\$15.00	\$180.00	38.37%	\$69							
2010	\$15.00	\$180.00	38,37%	\$69							
2011	\$15.00	\$180.00	38.37%	\$69							
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	\$180.00	38.37%	\$69							
2017	\$15.00	\$180,00	38,37%	\$69							
2018	\$15.00	\$180.00	38.37%	\$69							
2019	\$15.00	\$180.00	38.37%	\$69							
2020	\$15.00	\$180.00	38.37%	\$69							
2021	\$15.00	\$180.00	38.37%	\$69							
2022	\$15,00	\$180.00	38.37%	\$69							
2023	\$15.00	\$180.00	38.37%	\$69							
2024	\$15.00	\$180.00	38.37%	\$69							
2025	\$15,00	\$180.00	38.37%	\$69							

Table 3 Investment Carrying Costs 6\*7\*8 4 6 8 1 5 Ratio of Therms Supply Development Service Totai Cost Investment 
 Ratio or innerms
 invession

 Consumed To Total
 Carrying Cost

 38.37%
 \$28

 38.37%
 \$27

 38.37%
 \$26

 38.37%
 \$25

 38.37%
 \$25

 38.37%
 \$25

 38.37%
 \$24
 Investment \$840 of Debt Year Main Main Line Meter \$50 \$140 \$470 \$180 8,60% 2006 2007 2008 \$809 \$48 \$135 \$453 \$173 8.60% \$780 8.60% \$46 \$131 \$437 \$166 2009 \$44 \$127 \$421 \$160 \$752 8.60% 2010 2011 2012 \$43 \$123 \$406 \$154 \$726 8,60% \$42 \$41 \$119 \$391 \$148 \$700 8.60% 38.37% \$23 \$377 \$363 \$675 \$650 8.60% 38.37% \$22 \$115 \$142 38.37% 38.37% \$40 \$39 8.60% \$21 \$21 2013 \$111 \$136 2014 2015 \$107 \$350 \$337 \$131 \$627 8.60% \$38 \$103 \$126 \$604 8.60% 38.37% \$20 2016 2017 2018 \$37 \$36 \$19 \$100 \$325 \$121 \$583 8.60% 38,37% \$97 \$313 \$116 \$562 8.60% 38.37% \$19 \$302 \$291 \$35 \$34 \$542 8.60% 38.37% \$18 \$94 \$91 \$111 \$523 \$505 8.60% 38,37% \$17 2019 2020 2021 \$107 38.37% \$17 \$33 \$88 \$281 \$103 8.60% \$32 \$85 \$271 \$99 \$487 8.60% 38.37% \$16 2022 2022 2023 2024 \$15 \$31 \$82 \$261 \$95 \$469 8.60% 38.37% \$30 \$29 \$28 \$79 \$76 \$73 \$252 \$243 \$91 \$87 \$452 8.60% 38,37% \$15 \$435 8.60% 38,37% \$14 \$234 38.37% \$14 2025 \$84 \$419 8.60%

			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	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2006	\$4.01	\$48	38.37%	\$18.42	\$32.81	38.37%	\$13	\$31
2007	\$4.11	\$49	38.37%	\$18.80	\$33.60	38,37%	\$13	\$32
2008	\$4.20	\$50	38.37%	\$19.19	\$34.40	38.37%	\$13	\$32
2009	\$4.31	\$52	38.37%	\$19.95	\$35.23	38,37%	\$14	\$33
2010	\$4.41	\$53	38.37%	\$20.34	\$36.07	38.37%	\$14	\$34
2011	\$4.51	\$54	38.37%	\$20.72	\$36.94	38.37%	\$14	\$35
2012	\$4.62	\$55	38.37%	\$21.11	\$37.83	38.37%	\$15	\$36
2013	\$4.73	\$57	38.37%	\$21.87	\$38.74	38.37%	\$15	\$37
2014	\$4.85	\$58	38.37%	\$22.26	\$39.66	38.37%	\$15	\$37
2015	\$4.96	\$60	38.37%	\$23.02	\$40.62	38.37%	\$16	\$39
2016	\$5.08	\$61	38.37%	\$23.41	\$41.59	38.37%	\$16	\$39
2017	\$5.21	\$62	38,37%	\$23.79	\$42.59	38.37%	\$16	\$40
2018	\$5.33	\$64	38.37%	\$24.56	\$43.61	38.37%	\$17	\$41
2019	\$5.46	\$65	38.37%	\$24.94	\$44.66	38.37%	\$17	\$42
2020	\$5.59	\$67	38.37%	\$25.71	\$45.73	38.37%	\$18	\$43
2021	\$5.72	\$69	38.37%	\$26.48	\$46.83	38.37%	\$18	\$44
2022	\$5.86	\$70	38.37%	\$26.86	\$47.95	38.37%	\$18	\$45
2023	\$6.00	\$72	38.37%	\$27.63	\$49,10	38.37%	\$19	\$46
2024	\$6.15	\$74	38.37%	\$28.40	\$50.28	38.37%	\$19	\$48
2025	\$6.29	\$76	38.37%	\$29.16	\$51,49	38.37%	\$20	\$49

	Gas	s Costs	
1	2	3	2*3
	Therms	Gas Supply	Gas Supply
Year		Rate	Cost
2006	170	0.9382	\$159
2007	170	\$0,9607	\$163
2008	170	\$0.9838	\$167
2009	170	\$1.0074	\$171
2010	170	\$1.0316	\$175
2011	170	\$1,0563	\$180
2012	170	\$1.0817	\$184
2013	170	\$1.1076	\$188
2014	170	\$1.1342	\$193
2015	170	\$1.1614	\$197
2016	170	\$1.1893	\$202
2017	170	\$1.2179	\$207
2018	170	\$1.2471	\$212
2019	170	\$1,2770	\$217
2020	170	\$1.3077	\$222
2021	170	\$1,3390	\$228
2022	170	\$1.3712	\$233
2023	170	\$1.4041	\$239
2024	170	\$1.4378	\$244
2025	170	\$1,4723	\$250

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

Residential New Construction Program

RIM Test and Participants Test Results

For

Tankless Water Heating

## Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program Participants Test - Cost Effective Results

# Appliance Type

**Tankless Water Heating** 

			Benefits	;		Costs								
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas Customer Charge	TOTAL COSTS	
	111 T 111	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	
2006	1	\$536	\$450	\$36	\$1,022	\$950	(\$314)	\$400	\$36	\$155	\$97	\$70	\$1,394	
2007	2	\$543	0	\$37	\$580	0	0	0	\$37	\$159	\$99	\$70	\$365	
2008	з	\$550	0	\$38	\$588	0	0	0	\$38	\$162	\$102	\$70	\$372	
2009	4	\$557	0	\$39	\$596	0	0	0	\$39	\$166	\$104	\$70	\$379	
2010	5	\$564	0	\$40	\$604	0	0	0	\$40	\$170	\$107	\$70	\$387	
2011	6	\$571	0	\$41	\$612	0	0	0	\$41	\$174	\$109	\$70	\$394	
2012	7	\$578	0	\$42	\$620	0	0	0	\$42	\$178	\$112	\$70	\$402	
2013	8	\$585	0	\$43	\$628	0	0	0	\$43	\$183	\$115	\$70	\$410	
2014	9	\$592	0	\$44	\$636	0	0	0	\$44	\$187	\$117	\$70	\$418	
2015	10	\$599	0	\$45	\$644	0	0	0	\$45	\$192	\$120	\$70	\$427	
2016	11	\$607	0	\$46	\$652	0	0	0	\$46	\$196	\$123	\$70	\$435	
2017	12	\$614	0	\$47	\$660	0	0	0	\$47	\$201	\$126	\$70	\$444	
2018	13	\$621	0	\$48	\$669	0	0	0	\$48	\$206	\$129	\$70	\$453	
2019	14	\$628	0	\$49	\$677	0	0	0	\$49	\$211	\$132	\$70	\$462	
2020	15	\$635	0	\$50	\$685	0	0	0	\$50	\$216	\$135	\$70	\$471	
2021	16	\$642	0	\$51	\$693	0	0	0	\$51	\$221	\$138	\$70	\$481	
2022	17	\$649	0	\$53	\$702	0	0	0	\$53	\$226	\$142	\$70	\$491	
2023	18	\$656	0	\$54	\$710	0	0	0	\$54	\$232	\$145	\$70	\$501	
2024	19	\$663	0	\$55	\$718	0	0	0	\$55	\$237	\$149	\$70	\$511	
2025	20	\$670	450	\$56	\$1,177	1,527	(505)	402	\$56	\$243	\$152	\$70	\$1,946	

Present Value of Benefits \$6,683 Present Value

of Costs

\$5,322

Benefit/Cost	1.26
Benefit/Cost Ratio	

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program Participants Test - Data

Appliance Type	
Tankless Water Heat	ing

Escalation Rates			
O&M Expense	2.4%	Fuel Rate	2.4%
Electric Fuel Adj.	2.4%		

	Electric Ki	NH Cost - T	able 1			Gas Si	pply Cost -	Table 2			Gas E	nergy Charg	e - Table 3				(	Gas Custome	r Charge - 1	able 4		
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	Gas Cost	Ye	Monthly r Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	<u>B</u>	с	D	B*C*(1+D)	A	В	с	D	B*C*(1+D)		В	c	D	B*C*(1+D)	A	В	с	D	E	D/E	G	C*(D/E)*(1+Z)
2006	\$0.1020	4,773	10.00%	\$536	2006	\$0.9382	150	10.00%	\$155	2006	\$0.5880	150	10.00%	\$97	20	6 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2007	\$0.1034	4,773	10.00%	\$543	2007	\$0.9607	150	10.00%	\$159	2007	\$0.6021	150	10.00%	\$99	200	7 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2008	\$0.1047	4,773	10.00%	\$550	2008	\$0.9838	150	10.00%	\$162	2008	\$0.6166	150	10.00%	\$102	20	8 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2009	\$0.1061	4,773	10.00%	\$557	2009	\$1.0074	150	10.00%	\$166	2009	\$0.6314	150	10.00%	\$104	20	9 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2010	\$0.1074	4,773	10.00%	\$564	2010	\$1.0316	150	10.00%	\$170	2010	\$0.6465	150	10.00%	\$107	201	0 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2011	\$0.1088	4,773	10.00%	<b>\$</b> 571	2011	\$1.0563	150	10.00%	\$174	2011	\$0.6620	150	10.00%	\$109	20	1 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2012	\$0.1101	4,773	10.00%	\$578	2012	\$1.0817	150	10.00%	\$178	2012	\$0.6779	150	10.00%	\$112	201	2 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2013	\$0.1115	4,773	10.00%	\$585	2013	\$1.1076	150	10.00%	\$183	2013	\$0.6942	150	10.00%	\$115	201	3 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2014	\$0.1128	4,773	10.00%	\$592	2014	\$1.1342	150	10.00%	\$187	2014	\$0.7109	150	10.00%	\$117	201	4 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2015	\$0.1142	4,773	10.00%	\$599	2015	\$1.1614	150	10.00%	\$192	2015	\$0.7279	150	10.00%	\$120	201	5 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2016	\$0.1155	4,773	10.00%	\$607	2016	\$1.1893	150	10.00%	\$196	2016	\$0.7454	150	10.00%	\$123	201	6 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2017	\$0.1169	4,773	10.00%	\$614	2017	\$1.2179	150	10.00%	\$201	2017	\$0.7633	150	10.00%	\$126	201	7 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2018	\$0.1182	4,773	10.00%	\$621	2018	\$1.2471	150	10.00%	\$206	2018	\$0.7816	150	10.00%	\$129	201	8 \$15.00	\$180.00	150	423	35,46%	10.00%	\$70
2019	\$0,1196	4,773	10.00%	\$628	2019	\$1,2770	150	10.00%	\$211	2019	\$0.8004	150	10.00%	\$132	201	9 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2020	\$0,1209	4,773	10.00%	\$635	2020	\$1.3077	150	10.00%	\$216	2020	\$0,8196	150	10.00%	\$135	202		\$180.00	150	423	35.46%	10.00%	\$70
2021	\$0,1223	4.773	10.00%	\$642	2021	\$1,3390	150	10.00%	\$221	2021	\$0,8392	150	10.00%	\$138	202		\$180.00	150	423	35.46%	10.00%	\$70
2021	\$0,1236	4,773	10,00%	\$649	2022	\$1.3712	150	10.00%	\$226	2022	\$0.8594	150	10.00%	\$142	202		\$180.00	150	423	35.46%	10.00%	\$70
2022	\$0,1250	4,773	10,00%	\$656	2023	\$1.4041	150	10.00%	\$232	2023	\$0.88.02	150	10.00%	\$145	202		\$180.00	150	423	35.46%	10.00%	\$70
			10.00%	\$663	2023	\$1,4378	150	10.00%	\$237	2023	\$0.9011	150	10.00%	\$149	202		\$180.00	150	423	35.46%	10.00%	\$70
2024	\$0.1263	4,773												.								
2025	\$0,1277	4,773	10.00%	\$670	2025	\$1.4723	150	10.00%	\$243	2025	\$0.9227	150	10.00%	\$152	202	5 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program **RIM Test - Calculated data**

Appliance Type	
Tankless Water Heating	

#### 2.4% FuelRate Escalator Gas Energy Charge Escalator 0% Gas Customer Charge Escalator 0% O&M/Inflation Escalator 2.4%

Table 1		_									
R	Revenue - Energy Charge										
1	2	3	2*3								
Year	Therms	Base Rate	Total Charge								
2006	150	\$0.5880	\$88								
2007	150	\$0.5880	\$88								
2008	150	\$0.5880	\$88								
2009	150	\$0.5880	\$88								
2010	150	\$0.5880	\$88								
2011	150	\$0.5880	\$88								
2012	150	\$0.5880	\$88								
2013	150	\$0.5880	\$88								
2014	150	\$0.5880	\$88								
2015	150	\$0.5880	\$88								
2016	150	\$0.5880	\$88								
2017	150	\$0.5880	\$88								
2018	150	\$0,5880	\$88								
2019	150	\$0.5880	\$88								
2020	150	\$0.5880	\$88								
2021	150	\$0.5880	\$88								
2022	150	\$0.5880	\$88								
2023	150	\$0.5880	\$88								
2024	150	\$0.5880	\$88								
2025	150	\$0.5880	\$88								

Depreciation Rate - Supply Main	3.30%
Depreciation Rate - Development Main	3.30%
Depreciation Rate - Service Line	3.60%
Depreciation Rate - Meter	3.90%

Table 1a

	Revenue - Cost of Gas								
1	2	4	2*3						
			-						
Year	Therms	Fuel Rate	Total Charge						
2006	150	\$0.9382	\$141						
2007	150	\$0.9607	\$144						
2008	150	\$0.9838	\$148						
2009	150	\$1.0074	\$151						
2010	150	\$1.0316	\$155						
2011	150	\$1.0563	\$158						
2012	150	\$1,0817	\$162						
2013	150	\$1,1076	\$166						
2014	150	\$1.1342	\$170						
2015	150	\$1,1614	\$174						
2016	150	\$1,1893	\$178						
2017	150	\$1.2179	\$183						
2018	150	\$1.2471	\$187						
2019	150	\$1.2770	\$192						
2020	150	\$1.3077	\$196						
2021	150	\$1.3390	\$201						
2022	150	\$1.3712	\$206						
2023	150	\$1.4041	\$211						
2024	150	\$1.4378	\$216						
2025	150	\$1.4723	\$221						

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							
2006	\$15.00	\$180.00	35.46%	\$64							
2007	\$15.00	\$180,00	35.46%	\$64							
2008	\$15.00	\$180.00	35.46%	\$64							
2009	\$15.00	\$180.00	35.46%	\$64							
2010	\$15.00	\$180.00	35.46%	\$64							
2011	\$15.00	\$180,00	35.46%	\$64							
2012	\$15.00	\$180.00	35.46%	\$64							
2013	\$15.00	\$180.00	35.46%	\$64							
2014	\$15.00	\$180.00	35.46%	\$64							
2015	\$15.00	\$180.00	35.46%	\$64							
2016	\$15.00	\$180.00	35.46%	\$64							
2017	\$15.00	\$180.00	35.46%	\$64							
2018	\$15.00	\$180.00	35.46%	\$64							
2019	\$15.00	\$180.00	35,46%	\$64							
2020	\$15.00	\$180.00	35.46%	\$64							
2021	\$15.00	\$180.00	35.46%	\$64							
2022	\$15.00	\$180.00	35,46%	\$64							
2023	\$15.00	\$180.00	35,46%	\$64							
2024	\$15.00	\$180.00	35.46%	\$64							
2025	\$15,00	\$180.00	35.46%	\$64							

Investment Carrying Costs										
1	2	3	4	5	6	7	8	6*7*8		
	Supply	Development	Service		Total	Cost	Ratio of Thenns	Investment		
Year	Main	Main	Line	Meter	investment	of Debt	Consumed To Total	Carrying Cos		
2006	\$50	\$140	\$470	\$180	\$840	8.60%	35.46%	\$26		
2007	\$48	\$135	\$453	\$173	\$809	8.60%	35.46%	\$25		
2008	\$46	\$131	\$437	\$166	\$780	8.60%	35.46%	\$24		
2009	\$44	\$127	\$421	\$160	\$752	8.60%	35.46%	\$23		
2010	\$43	\$123	\$406	\$154	\$726	8.60%	35.46%	\$22		
2011	\$42	\$119	\$391	\$148	\$700	8.60%	35.46%	\$21		
2012	\$41	\$115	\$377	\$142	\$675 8.60%		35.46%	\$21		
2013	\$40	\$111	\$363	\$136	\$650	8.60%	35.46%	\$20		
2014	\$39	\$107	\$350	\$131	\$627	8.60%	35.46%	\$19		
2015	\$38	\$103	\$337	\$126	\$604	8.60%	35.46%	\$18		
2016	\$37	\$100	\$325	\$121	\$583	8.60%	35.46%	\$18		
2017	\$36	\$97	\$313	\$116	\$562	8.60%	35.46%	\$17		
2018	\$35	\$94	\$302	\$111	\$542	8.60%	35.46%	\$17		
2019	\$34	\$91	\$291	\$107	\$523	8.60%	35.46%	\$16		
2020	\$33	\$88	\$281	\$103	\$505	8.60%	35.46%	\$15		
2021	\$32	\$85	\$271	\$99	\$487	8.60%	35.46%	\$15		
2022	\$31	\$82	\$261	\$95	\$469	8.60%	35.46%	\$14		
2023	\$30	\$79	\$252	\$91	\$452 8.60%		35.46%	\$14		
2024	\$29	\$76	\$243	\$87	\$435	8.60%	35.46%	\$13		
2025	\$28	\$73	\$234	\$84	\$419	8.60%	35.46%	\$13		

			Increi	nentaí 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 Incremental
Year	Adm, Cost	Adm. Cost	Total Consumed	Adm, Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & O&M Cost
2006	\$4.01	\$48	35.46%	\$17.02	\$32.81	35.46%	\$12	\$29
2007	\$4.11	\$49	35.46%	\$17.38	\$33.60	35.46%	\$12	\$29
2008	\$4.20	\$50	35.46%	\$17.73	\$34.40	35.46%	\$12	\$30
2009	\$4.31	\$52	35,46%	\$18.44	\$35.23	35.46%	\$12	\$31
2010	\$4.41	\$53	35.46%	\$18,79	\$36.07	35.46%	\$13	\$32
2011	\$4.51	\$54	35.46%	\$19.15	\$36.94	35,46%	\$13	\$32
2012	\$4.62	\$55	35.46%	\$19.50	\$37,83	35,46%	\$13	\$33
2013	\$4.73	\$57	35.46%	\$20.21	\$38.74	35.46%	\$14	\$34
2014	\$4.85	\$58	35.46%	\$20.57	\$39.66	35.46%	\$14	\$35
2015	\$4.96	\$60	35.46%	\$21.28	\$40.62	35.46%	\$14	\$36
2016	\$5.08	\$61	35.46%	\$21.63	\$41.59	35.46%	\$15	\$36
2017	\$5.21	\$62	35.46%	\$21.99	\$42.59	35.46%	\$15	\$37
2018	\$5.33	\$64	35.46%	\$22.70	\$43.61	35.46%	\$15	\$38
2019	\$5.46	\$65	35.46%	\$23.05	\$44.66	35.46%	\$16	\$39
2020	\$5.59	\$67	35.46%	\$23.76	\$45.73	35.46%	\$16	\$40
2021	\$5.72	\$69	35.46%	\$24.47	\$46.83	35.46%	\$17	\$41
2022	\$5.86	\$70	35.46%	\$24.82	\$47.95	35.46%	\$17	\$42
2023	\$6.00	\$72	35.46%	\$25.53	\$49.10	35.46%	\$17	\$43
2024	\$6.15	\$74	35.46%	\$26.24	\$50.28	35.46%	\$18	\$44
2025	\$6.29	\$76	35.46%	\$26,95	\$51,49	35,46%	\$18	\$45

Gas Costs										
1	2	3	2*3							
	Therms	Per Therm	Gas Supply							
Year		Supply Cost	Cost							
2006	150	0.9382	\$141							
2007	150	\$0,9607	\$144							
2008	150	\$0.9838	\$148							
2009	150	\$1.0074	\$151							
2010	150	\$1,0316	\$155							
2011	150	\$1.0563	\$158							
2012	150	\$1.0817	\$162							
2013	150	\$1.1076	\$166							
2014	150	\$1.1342	\$170							
2015	150	\$1.1614	\$174							
2016	150	\$1.1893	\$178							
2017	150	\$1.2179	\$183							
2018	150	\$1.2471	\$187							
2019	150	\$1.2770	\$192							
2020	150	\$1.3077	\$196							
2021	150	\$1.3390	\$201							
2022	150	\$1.3712	\$206							
2023	150	\$1.4041	\$211							
2024	150	\$1.4378	\$216							
2025	150	\$1.4723	\$221							

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program Participants Test - Data

Appliance Type							
Heating System							

Escalation Rates			
O&M Expense	2.4%	Fuel Rate	2.4%
Electric Fuel Adi,	2.4%		

	Electric	KWH Cost - Tat	ole 1			Gas S	upply Cost	- Table 2			Gas Er	ergy Charge	- Table 3		Gas Customer Charge - Table 4							
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	Yea	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Yea	Rate Per Therm	Annual Therms	Tax Rate	Gas Cost	Yea	Nonthly 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	8	с	D	B*C*(1+D)	A	В	с	D	B*C*(1+D)	A	В	с	D	٤	D/E	G	C*(D/E)*(1+Z)
2006	\$0.1020	3,150	10.00%	\$353	200	<b>\$</b> 0.9382	178	10.00%	\$184	200	\$0.5880	178	10.00%	\$115	2006	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2007	\$0.1034	3,150	10.00%	\$358	200	7 \$0.9607	178	10.00%	\$188	200	\$0.5880	178	10.00%	\$115	200	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2008	\$0.1047	3,150	10.00%	\$363	200	\$0.9838	178	10.00%	\$193	200	\$0,5880	178	10.00%	\$115	200	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2009	\$0.1061	3,150	10.00%	\$368	200	\$1.0074	178	10.00%	\$197	200	\$0.5880	178	10.00%	\$115	2009	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2010	\$0.1074	3,150	10.00%	\$372	201	\$1.0316	178	10.00%	\$202	201	\$0,5880	178	10.00%	\$115	2010	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2011	\$0.1088	3,150	10.00%	\$377	201	\$1.0563	178	10.00%	\$207	201	\$0,5880	178	10.00%	\$115	201	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2012	\$0.1101	3,150	10.00%	\$382	201	2 \$1.0817	178	10.00%	\$212	201	\$0.5880	178	10.00%	\$115	2012	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2013	\$0.1115	3,150	10.00%	\$386	201	\$1.1076	178	10.00%	\$217	201	\$0.5880	178	10.00%	\$115	2013	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2014	\$0.1128	3,150	10.00%	\$391	201	\$1.1342	178	10.00%	\$222	201	\$0.5880	178	10.00%	\$115	2014	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2015	\$0.1142	3,150	10.00%	\$396	201	5 \$1.1614	178	10.00%	\$227	201	\$0.5880	178	10.00%	\$115	2015	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2016	\$0,1155	3,150	10.00%	\$400	201	5 \$1.1893	178	10.00%	\$233	201	\$0,5880	178	10.00%	\$115	2016	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2017	\$0.1169	3,150	10.00%	\$405	201	\$1.2179	178	10.00%	\$238	201	\$0.5880	178	10.00%	\$115	2017	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2018	\$0.1182	3,150	10.00%	\$410	201	s \$1.2471	178	10.00%	\$244	201	\$0.5880	178	10.00%	\$115	2018	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2019	\$0,1196	3,150	10.00%	\$414	201	\$1.2770	178	10.00%	\$250	201	\$0.5880	178	10.00%	\$115	2019	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2020	\$0.1209	3,150	10.00%	\$419	202	\$1.3077	178	10.00%	\$256	2020	\$0.5880	178	10.00%	\$115	2020	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2021	\$0.1223	3,150	10.00%	\$424	202	\$1.3390	178	10.00%	\$262	202	\$0.5880	178	10.00%	\$115	2021	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2022	\$0.1236	3,150	10.00%	\$428	202	\$1.3712	178	10.00%	\$268	202	\$0.5880	178	10.00%	\$115	2022	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2023	\$0.1250	3,150	10.00%	\$433	202	\$ \$1.4041	178	10.00%	\$275	2023	\$0,5880	178	10.00%	\$115	2023	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2024	\$0.1263	3,150	10.00%	\$438	202	\$1.4378	178	10.00%	\$282	2024	\$0.5880	178	10.00%	\$115	2024	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80
2025	\$0.1277	3,150	10.00%	\$442	202		178	10.00%	\$288	2025	\$0.5880	178	10.00%	\$115	2025	\$15.00	\$180.00	178	443	40.18%	10.00%	\$80

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program **RIM Test - Calculated Data**

Appliance Type	
Heating System	

Fuel Rate Escalator	2.4%
Gas Energy Charge Escalator	0%
Gas Customer Charge Escalator	0%
O&M/Inflation Escalator	2.4%

Table 1			
	Revenue - I	Energy Chai	ge
1	2	3	2*3
Year	Therms	Base Rate	Total Charge
2006	178	\$0.5880	\$105
2007	178	\$0.5880	\$105
2008	178	\$0.5880	\$105
2009	178	\$0.5880	\$105
2010	178	\$0.5880	\$105
2011	178	\$0.5880	\$105
2012	178	\$0.5880	\$105
2013	178	\$0.5880	\$105
2014	178	\$0.5880	\$105
2015	178	\$0.5880	\$105
2016	178	\$0.5880	\$105
2017	178	\$0.5880	\$105
2018	178	\$0.5880	\$105
2019	178	\$0.5880	\$105
2020	178	\$0.5880	\$105
2021	178	\$0.5880	\$105
2022	178	\$0,5880	\$105
2023	178	\$0,5880	\$105
2024	178	\$0.5880	\$105
2025	178	\$0,5880	\$105

Depreciation Rate - Supply Main	3.30%
Depreciation Rate - Development Main	3,30%
Depreciation Rate - Service Line	3.60%
Depreciation Rate - Meter	3.90%

1	Revenue - Co	st of Gas	
1	2	4	2*3
Year	Therms	Fuel Rate	Total Charge
2006	178	\$0.9382	\$167
2007	178	\$0.9607	\$171
2008	178	\$0,9838	\$175
2009	178	\$1.0074	\$179
2010	178	\$1.0316	\$184
2011	178	\$1.0563	\$188
2012	178	\$1.0817	\$193
2013	178	\$1.1076	\$197
2014	178	\$1,1342	\$202
2015	178	\$1,1614	\$207
2016	178	\$1,1893	\$212
2017	178	\$1,2179	\$217
2018	178	\$1,2471	\$222
2019	178	\$1 2770	\$227
2020	178	\$1,3077	\$233
2021	178	\$1,3390	\$238
2022	178	\$1.3712	\$244
2023	178	\$1.4041	\$250
2024	178	\$1.4378	\$256
2024	178	\$1.4723	\$250

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								
2006	\$15.00	\$180.00	40.18%	\$72								
2007	\$15.00	\$180.00	40,18%	\$72								
2008	\$15.00	\$180.00	40.18%	\$72								
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								
2016	\$15.00	\$180.00	40.18%	\$72								
2017	\$15.00	\$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	\$180.00	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%	\$72								

Table 3 Investment Carrying Costs 6\*7\*8 1 2 3 4 6 7 8 Supply Development Service Total Cost Ratio of Therms investment Main Main Investment of Debt Consumed To Total Carrying Cost Year Line Meter 2006 \$50 \$140 \$470 \$180 \$840 8.60% 40.18% \$29 \$48 \$46 \$44 \$43 2007 \$135 \$453 8,60% 40.18% \$28 \$173 \$809 2008 \$27 \$26 \$131 \$437 8.60% 40.18% \$166 \$780 2009 \$127 \$421 \$160 \$752 8.60% 40.18% 40.18% 2010 \$123 \$406 \$154 \$726 8.60% \$25 \$42 \$41 \$40 2011 \$119 \$391 \$700 \$24 \$148 8.60% 40.18% 2012 \$115 \$377 \$142 \$675 8,60% 40.18% \$23 2013 \$111 \$363 \$136 \$650 8.60% 40.18% \$22 \$627 \$604 \$583 2014 \$39 \$38 \$37 \$36 \$35 \$34 \$107 \$350 \$131 8.60% 40.18% \$22 \$21 2015 \$337 \$126 \$121 8.60% \$103 40.18% \$325 8.60% \$20 2016 \$100 40.18% 2017 \$97 \$313 \$116 \$562 \$542 8.60% 40.18% \$19 2018 **\$**94 \$302 \$111 8.60% 40.18% \$19 2019 \$91 \$291 \$107 \$523 8.60% 40.18% \$18 \$33 \$32 \$31 2020 \$88 \$281 \$103 \$505 8.60% 40.18% \$17 \$487 \$469 \$452 2021 2022 \$85 \$271 \$99 \$95 8.60% \$17 40.18% \$82 \$261 8.60% 40.18% \$16 2023 \$30 \$79 \$252 \$91 8.60% 40.18% \$16 2024 \$29 \$76 \$87 \$435 \$243 8.60% 40.18% \$15 2025 \$28 \$73 \$234 \$84 \$419 8.60% 40.18% \$14

			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	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
2006	\$4.01	\$48	40.18%	\$19.29	\$32.81	40,18%	\$13	\$32
2007	\$4.11	\$49	40.18%	\$19.69	\$33.60	40,18%	\$13	\$33
2008	\$4.20	\$50	40.18%	\$20.09	\$34.40	40,18%	\$14	\$34
2009	\$4.31	\$52	40.18%	\$20.89	\$35.23	40.18%	\$14	\$35
2010	\$4,41	\$53	40.18%	\$21.30	\$36.07	40.18%	\$14	\$36
2011	\$4.51	\$54	40.18%	\$21.70	\$36.94	40.18%	\$15	\$37
2012	\$4.62	\$55	40.18%	\$22.10	\$37.83	40.18%	\$15	\$37
2013	\$4.73	\$57	40.18%	\$22.90	\$38,74	40.18%	\$16	\$38
2014	\$4.85	\$58	40.18%	\$23.30	\$39.66	40.18%	\$16	\$39
2015	\$4.96	\$60	40.18%	\$24.11	\$40.62	40.18%	\$16	\$40
2016	\$5.08	\$61	40.18%	\$24.51	\$41.59	40.18%	\$17	\$41
2017	\$5.21	\$62	40.18%	\$24.91	\$42.59	40.18%	\$17	\$42
2018	\$5.33	\$64	40.18%	\$25.72	\$43.61	40.18%	\$18	\$43
2019	\$5.46	\$65	40.18%	\$26.12	\$44.66	40,18%	\$18	\$44
2020	\$5.59	\$67	40.18%	\$26.92	\$45.73	40,18%	\$18	\$45
2021	\$5.72	\$69	40.18%	\$27.72	\$46.83	40.18%	\$19	\$47
2022	\$5.86	\$70	40.18%	\$28,13	\$47.95	40,18%	\$19	\$47
2023	\$6.00	\$72	40.18%	\$28.93	\$49.10	40.18%	\$20	\$49
2024	\$6.15	\$74	40.18%	\$29.73	\$50.28	40,18%	\$20	\$50
2025	\$6.29	\$76	40.18%	\$30,54	\$51.49	40,18%	\$21	\$51

	Gas	Costs	
1	2	3	2*3
	Therms	Per Therm	Gas Supply
Year		Supply Cost	Cost
2006	178	0.9382	\$167
2007	178	\$0.9382	\$167
2008	178	\$0.9382	\$167
2009	178	\$0.9382	\$167
2010	178	\$0,9382	\$167
2011	178	\$0.9382	\$167
2012	178	\$0,9382	\$167
2013	178	\$0.9382	\$167
2014	178	\$0,9382	\$167
2015	178	\$0.9382	\$167
2016	178	\$0.9382	\$167
2017	178	\$0.9382	\$167
2018	178	\$0.9382	\$167
2019	178	\$0.9382	\$167
2020	178	\$0.9382	\$167
2021	178	\$0.9382	\$167
2022	178	\$0.9382	\$167
2023	178	\$0,9382	\$167
2024	178	\$0.9382	\$167
2025	178	\$0.9382	\$167

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program Participants Test - Data

Appliance Type Cooking

Escalation Rates			
O&M Expense	2.4%	Fuel Rate	2.4%
Electric Fuel Adj.	2.4%		

	Electric	KWH Cost - Tab	ole 1		Gas Supply Cost - Table 2								Gas Ener	gy Charge	- Tabie 3					Gas Custome	r Charge - 1	able 4		
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost		Year	Cost Per Therm	Annual Themas	Tax Rate	Gas Cost	Y	¢ar	Rate Per Therm	Annsal Therms	Tax Rate	Gas Cost	Ya	Monthly r Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Thems	Ratio - Appliance to Total	Tax Rate	Pro-Ratad Customer Churge
A	8	c	D	B*C*(1+D)		A	8	с	D	B*C*(1+D)		A	B	c	Ð	B*C*(1+D)		В	c	D	E	D/E	G	C*(D/E)*(1+Z)
2006	\$0,1020	1,310	10.00%	\$147		2006	\$0.9382	45	10.00%	\$46	20	006	\$0.5880	45	10.00%	\$29	20	6 \$15.00	\$180.00	45	443	10,16%	10,00%	\$20
2007	\$0.1034	1,310	10.00%	\$149		2007	\$0.9607	45	10.00%	\$48	2	007	\$0.6021	45	10,00%	\$30	20	7 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2008	\$0,1047	1,310	10.00%	\$151		2008	\$0.9838	45	10.00%	\$49	2	800	\$0.5166	45	10.00%	\$31	20	8 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2009	\$0.1061	1,310	10.00%	\$153		2009	\$1.0074	45	10.00%	\$50	2	009	\$0.6314	45	10.00%	\$31	20	9 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2010	\$0,1074	1,310	10.00%	\$155		2010	\$1.0316	45	10.00%	\$51	2	010	\$0.6465	45	10.00%	\$32	20	0 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2011	\$0,1088	1,310	10.00%	\$157		2011	\$1.0563	45	10.00%	\$52	2	011	\$0,6620	45	10.00%	\$33	20	1 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2012	\$0,1101	1,310	10.00%	\$159		2012	\$1.0817	45	10.00%	\$54		012	\$0.6779	45	10.00%	\$34	20	2 \$15.00	\$180.00	45	443	10,16%	10.00%	\$20
2013	\$0.1115	1,310	10.00%	\$161		2013	\$1.1076	45	10.00%	\$55		013	\$0.6942	45	10.00%	\$34	20	3 \$15.00	\$180.00	45	443	10, 16%	10.00%	\$20
						2013	\$1,1342	45	10.00%	\$56		014	\$0,7109	45	10.00%		20		\$180.00	45	443	10.16%	10.00%	\$20
2014	\$0.1128	1,310	10.00%	\$163							1				10.00%		20		\$180.00	45	443	10,16%	10.00%	\$20
2015	\$0.1142	1,310	10.00%	\$163		2015	\$1.1614	45	10.00%	\$57		015	\$0.7279	45										-
2016	\$0,1155	1,310	10,00%	\$166	-	2016	\$1.1893	45	10.00%	\$59	2	016	\$0.7454	45	10.00%		20		\$180.00	45	443	10.16%	10,00%	\$20
2017	\$0.1169	1,310	10,00%	\$168		2017	\$1.2179	45	10.00%	\$60	2	017	\$0.7633	45	10.00%	\$38	20	17 \$15.00	\$180.00	45	443	10,16%	10.00%	\$20
2018	\$0.1182	1,310	10.00%	\$170		2018	\$1.2471	45	10.00%	\$62	2	018	\$0,7816	45	10.00%	\$39	20	18 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2019	\$0,1196	1,310	10.00%	\$172		2019	\$1.2770	45	10.00%	\$63	2	019	\$0.8004	45	10.00%	\$40	20	\$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2020	\$0.1209	1,310	10.00%	\$174		2020	\$1.3077	45	10.00%	\$65	2	020	\$0.8196	45	10.00%	\$41	20	20 \$15.00	\$180.00	45	443	10,16%	10.00%	\$20
2021	\$0,1223	1,310	10,00%	\$176		2021	\$1.3390	45	10.00%	\$66	2	021	\$0,8392	45	10,00%	\$42	20	21 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2022	\$0,1236	1,310	10.00%	\$178		2022	\$1.3712	45	10.00%	\$68	2	2022	\$0.8594	45	10.00%	\$43	20	22 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2023	\$0,1250	1,310	10.00%	\$180		2023	\$1.4041	45	10.00%	\$70	2	2023	\$0.8800	45	10.00%	5 544	20	23 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2024	\$0,1263	1,310	10.00%	\$182		2024	\$1,4378	45	10.00%	\$71		024	\$0.9011	45	10.00%	\$45	20	24 \$15.00	\$180.00	45	443	10,16%	10.00%	\$20
2024	\$0,1203	1,310	10.00%	\$184		2025	\$1.4723	45	10.00%	\$73		025	\$0.9227	45	10.00%	\$46	20	25 \$15.00	\$180.00	45	443	10, 16%	10.00%	\$20

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction 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
2006	\$26	\$42	\$18	\$87	\$42	\$7	\$8	\$102.60	\$160
2007	\$26	\$43	\$18	\$88	\$43	\$7	\$8	\$2.60	\$61
2008	\$26	\$44	\$18	\$89	\$44	\$7	\$9	\$2.60	\$62
2009	\$26	\$45	\$18	\$90	\$45	\$7	\$9	\$2.60	\$63
2010	\$26	\$46	\$18	\$91	\$46	\$6	\$9	\$2.60	\$64
2011	\$26	\$48	\$18	\$92	\$48	\$6	\$9	\$2.60	\$65
2012	\$26	\$49	\$18	\$93	\$49	\$6	\$9	\$2.60	\$67
2013	\$26	\$50	\$18	\$95	\$50	\$6	\$10	\$2.60	\$68
2014	\$26	\$51	\$18	\$96	\$51	\$5	\$10	\$2.60	\$69
2015	\$26	\$52	\$18	\$97	\$52	\$5	\$10	\$2.60	\$70
2016	\$26	\$54	\$18	\$98	\$54	\$5	\$10	\$2.60	\$72
2017	\$26	\$55	\$18	\$100	\$55	\$5	\$11	\$2.60	\$73
2018	\$26	\$56	\$18	\$101	\$56	\$5	\$11	\$2.60	\$74
2019	\$26	\$57	\$18	\$102	\$57	\$5	\$11	\$102.60	\$176
2020	\$26	\$59	\$18	\$104	\$59	\$4	\$11	\$2.60	\$77
2021	\$26	\$60	\$18	\$105	\$60	\$4	\$12	\$2.60	\$79
2022	\$26	\$62	\$18	\$106	\$62	\$4	\$12	\$2.60	\$80
2023	\$26	\$63	\$18	\$108	\$63	\$4	\$12	\$2.60	\$82
2024	\$26	\$65	\$18	\$109	\$65	\$4	\$13	\$2.60	\$84
2025	\$26	\$66	\$18	<b>\$11</b> 1	\$66	\$4	\$13	\$2.60	\$85

Present Value of Benefits

\$933

Present Value of Costs

\$799

Benefit/Cost	 
Ratio	 1.17

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program RIM Test - Calculated data

Appliance Type	
Cooking	

Fuel Rate Escalator	2.4%
Base Rate Escalator	0%
Gas Customer Charge Escalator	0%
O&M/Inflation Escalator	2.4%

Revenue - Energy Charge									
1	2	3	2*3						
Year	Therms	Base Rate	Total Charge						
2005	45	\$0.5880	\$26						
2007	45	\$0,5880	\$26						
2008	45	\$0,5880	\$26						
2009	45	\$0,5880	\$26						
2010	45	\$0.5880	\$26						
2011	45	\$0,5880	\$26						
2012	45	\$0.5880	\$26						
2013	45	\$0,5880	\$26						
2014	45	\$0.5880	\$25						
2015	45	\$0,5880	\$26						
2016	45	\$0.5880	\$26						
2017	45	\$0.5880	\$26						
2018	45	\$0,5880	\$26						
2019	45	\$0.5880	\$26						
2020	45	\$0,5880	\$26						
2021	45	\$0,5880	\$26						
2022	45	\$0.5880	\$26						
2023	45	\$0.5880	\$26						
2024	45	\$0,5880	\$26						
2025	45	\$0.5880	\$26						

Depreciation Rate - Supply Main	3.30%
Depreciation Rate - Development Main	3.30%
Depreciation Rate - Service Line	3,60%
Depreciation Rate - Meter	3.90%
Table 1a	

	Revenue - Co	st of Gas	
1	2	4	2*3
Year	Thems	Fuel Rate	Total Charge
2006	45	\$0.9382	\$4Z
2007	45	\$0.9607	\$43
2008	45	\$0,9638	\$44
2009	45	\$1.0074	\$45
2010	45	\$1,0316	\$46
2011	45	\$1.0563	\$48
2012	45	\$1.0817	\$49
2013	45	\$1,1076	\$50
2014	45	\$1.1342	\$51
2015	45	\$1,1614	\$52
2016	45	\$1.1893	\$54
2017	45	\$1.2179	\$55
2018	45	\$1.2471	\$56
2019	45	\$1.2770	\$57
2020	45	\$1,3077	\$59
2021	45	\$1,3390	\$60
2022	45	\$1,3712	\$62
2023	45	\$1.4041	\$63
2024	45	\$1.4378	\$65
2025	45	\$1,4723	\$66

	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							
2006	\$15,00	\$180,00	10.16%	\$18							
2007	\$15.00	\$180,00	10.16%	\$18							
2006	\$15.00	\$180,00	10.16%	\$18							
2009	\$15.00	\$180.00	10.16%	\$18							
2010	\$15.00	\$180,00	10.16%	\$18							
2011	\$15.00	\$180.00	10.16%	\$18							
2012	\$15.00	\$180.00	10.16%	\$18							
2013	\$15.00	\$180.00	10.16%	\$18							
2014	\$15.00	\$180,00	10.16%	\$18							
2015	\$15.00	\$180,00	10.16%	\$18							
2016	\$15.00	\$180.00	10.16%	\$18							
2017	\$15.00	\$180.00	10.18%	\$18							
2018	\$15.00	\$180,00	10.16%	\$18							
2019	\$15.00	\$180.00	10.16%	\$18							
2020	\$15,00	\$180,00	10.16%	\$18							
2021	\$15.00	\$180.00	10.18%	\$18							
2022	\$15.00	\$160.00	10.16%	\$18							
2023	\$15.00	\$180.00	10.16%	\$18							
2024	\$15.00	\$180.00	10.16%	\$18							
2025	\$15.00	\$180.00	10.16%	\$18							

	Investment Carrying Costs											
. 1	2	3	4	5	8	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				
2006	\$50	\$140	\$470	\$180	\$840	5.60%	10.16%	\$7				
2007	\$48	\$135	\$453	\$173	\$809	8.60%	10.16%	\$7				
2008	\$46	\$131	\$437	\$166	\$780	8.60%	10.16%	\$7				
2009	\$44	\$127	\$421	\$160	\$752	8.60%	10.16%	\$7				
2010	\$43	\$123	\$406	\$154	\$726	6.60%	10.16%	\$6				
2011	\$42	\$119	\$391	\$148	\$700	8.60%	10.16%	\$6				
2012	\$41	\$115	\$377	\$142	\$875	8,60%	10.16%	\$6				
2013	\$40	\$111	\$363	\$136	\$650	8.60%	10.16%	\$6				
2014	\$39	\$107	\$350	\$131	\$827	8.60%	10.16%	\$5				
2015	\$38	\$103	\$337	\$128	\$604	8.60%	10.16%	\$5				
2016	\$37	\$100	\$325	\$121	\$583	8.60%	10.16%	\$5				
2017	\$36	\$97	\$313	\$116	\$562	8.60%	10.16%	\$6				
2018	\$35	\$94	\$302	\$111	\$542	8.60%	10.16%	\$5				
2019	\$34	\$91	\$291	\$107	\$523	8,60%	10.16%	\$5				
2020	\$33	\$88	\$281	\$103	\$505	8.60%	10.16%	\$4				
2021	\$32	\$85	\$271	\$99	\$487	8,60%	10.16%	\$4				
2022	\$31	\$82	\$261	\$95	\$469	8,60%	10,16%	\$4				
2023	\$30	\$79	\$252	\$91	\$452	8.60%	10.16%	\$4				
2024	\$29	\$76	\$243	\$87	\$435	8.60%	10.16%	\$4				
2025	\$26	\$73	\$234	\$84	\$419	8,60%	10,16%	\$4				

			Incre	mental Custo	mer Costs	5		
1	2	3	4	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
2006	\$4.01	\$48	10.16%	\$4.88	\$32.81	10.16%	\$3	\$8
2007	\$4.11	\$49	10.16%	\$4,98	\$33.60	10.16%	\$3	58
2008	\$4.20	\$50	10,16%	\$5.08	\$34.40	10.16%	\$3	\$9
2009	\$4.31	\$52	10.16%	\$5.28	\$35.23	10.16%	\$4	\$9
2010	\$4.41	\$53	10,16%	\$5.38	\$36.07	10.18%	\$4	\$9
2011	\$4.51	\$54	10.16%	\$5.49	\$36.94	10.16%	\$4	59
2012	\$4.62	\$55	10,16%	\$5.59	\$37.83	10.16%	\$4	\$9
2013	\$4.73	\$57	10.16%	\$5.79	\$38.74	10.16%	\$4	\$10
2014	\$4,85	\$58	10.18%	\$5,89	\$39,66	10.16%	\$4	\$10
2015	\$4,96	\$60	10.16%	\$6.09	\$40.62	10.16%	\$4	\$10
2018	\$5.08	\$61	10.16%	\$6,20	\$41.59	10.16%	<b>S</b> 4	\$10
2017	\$5.21	\$62	10,16%	\$6.30	\$42.59	10.16%	54	\$11
2018	\$5.33	\$64	10.16%	\$6.50	\$43.61	10.16%	\$4	\$11
2019	\$5.48	\$85	10.15%	\$6.60	\$44.66	10.16%	\$5	\$11
2020	\$5.59	\$67	10.16%	\$6.81	\$45.73	10.16%	\$5	\$11
2021	\$5.72	\$69	10.16%	\$7.01	\$46.83	10.16%	\$5	\$12
2022	\$5.86	\$70	10,16%	\$7.11	\$47.95	10.16%	\$5	\$12
2023	\$6.00	\$72	10.16%	\$7.31	\$49.10	10.18%	\$5	\$12
2024	\$6,15	\$74	10.16%	\$7.52	\$50.28	10.16%	\$5	\$13
2025	\$6.29	\$76	10.16%	\$7.72	\$51.49	10.16%	\$5	\$13

Gas Costs									
1	2	3	2*3						
	Therms	Commodity Gas	Gas Supply						
Year		Supply Cost	Cost						
2006	45	0.9382	\$42						
2007	45	\$0,9607	\$43						
2008	45	\$0,9838	\$44						
2009	45	\$1.0074	\$45						
2010	45	\$1.0316	\$46						
2011	45	\$1,0563	\$48						
2012	45	\$1,0817	\$49						
2013	45	\$1,1076	\$50						
2014	45	\$1.1342	\$51						
2015	45	\$1,1614	\$52						
2016	45	\$1.1893	\$54						
2017	45	\$1.2179	\$55						
2018	45	\$1.2471	\$56						
2019	45	\$1,2770	\$57						
2020	45	\$1.3077	\$59						
2021	45	\$1,3390	\$60						
2022	45	\$1.3712	\$82						
2023	45	\$1.4041	\$53						
2024	45	\$1.4378	\$65						
2025	45	\$1.4723	\$66						

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

Residential New Construction Program RIM Test and Participants Test Results

For

**Clothes Drying Appliances** 

## **Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program**

#### Participants Test - Cost Effective Results

## Appliance Type **Clothes Drying**

			Benefits	•		Costs								
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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	
2005	1	\$164	\$100	\$36	\$300	\$379	(\$454)	\$300	\$36	\$52	\$32	\$22	\$367	
2006	2	\$167	0	\$37	\$203	0	0	0	\$37	\$53	\$32	\$22	\$144	
2007	3	\$169	0	\$38	\$207	0	0	0	\$38	\$54	\$32	\$22	\$147	
2008	4	\$171	0	\$39	\$210	0	0	0	\$39	\$55	\$32	\$22	\$149	
2009	5	\$173	0	\$40	\$213	0	0	0	\$40	\$57	\$32	\$22	\$151	
2010	6	\$175	0	\$41	\$216	0	0	0	\$41	\$58	\$32	\$22	\$153	
2011	7	\$177	0	\$42	\$219	0	0	0	\$42	\$59	\$32	\$22	\$156	
2012	8	\$180	0	\$43	\$222	0	0	0	\$43	\$61	\$32	\$22	\$158	
2013	9	\$182	0	\$44	\$225	0	0	0	\$44	\$62	\$32	\$22	\$161	
2014	10	\$184	0	\$45	\$229	0	0	0	\$45	\$64	\$32	\$22	\$163	
2015	11	\$186	0	\$46	\$232	0	0	0	\$46	\$65	\$32	\$22	\$166	
2016	12	\$188	0	\$47	\$235	0	0	0	\$47	\$67	\$32	\$22	\$168	
2017	13	\$191	100	\$48	\$338	516	(618)	204	\$48	\$69	\$32	\$22	\$273	
2018	14	\$193	0	\$49	\$242	0	ົວ໌	0	\$49	\$70	\$32	\$22	\$174	
2019	15	\$195	0	\$50	\$245	0	0	0	\$50	\$72	\$32	\$22	\$177	
2020	16	\$197	0	\$51	\$248	0	0	0	\$51	\$74	\$32	\$22	\$180	
2021	17	\$199	0	\$53	\$252	0	0	0	\$53	\$75	\$32	\$22	\$183	
2022	18	\$201	0	\$54	\$255	0	0	0	\$54	\$77	\$32	\$22	\$186	
2023	19	\$204	0	\$55	\$259	0	0	0	\$55	\$79	\$32	\$22	\$189	
2024	20	\$206	0	\$56	\$262	0	0	0	\$56	\$81	\$32	\$22	\$192	

1

Present Value

\$2,315 of Benefits

Present Value of Costs \$1,808

1.28 Benefit/Cost Ratio

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program Participants Test - Data

Clothes Drying	
Appliance Type	

Electric Fuel Adj.	%Þ Z		
ezneqx3 M&O	%† Z	ets 9 leu 7 AD 9	***
ents9 noitslese3			

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		t sidi	eT - <del>อ</del> ยาธตว	a Customer	θ			Cas Energy Charge - Table 3			Electric KWH Cost - Table 1 Gata Supply Cost - Table 2											
Рго-Каted Спатотен Спатде	өзая хат	- othe A	iadoT IaunnA amari3	Appliance IsunnA RmenT	leurnA Annateu Otarge	Monthy Customer Chartomer	180 Y	f203 259		IsurnA ermenT	nen etx.R mieriT	Year	1200 ##Đ	ata 9 xaT	IsunaA smedT	Cost Per men	Year	Electric Cost	əfe H xe î	HWX IspruA	KWH Coat Per	Year
Z+1).(∃/□).⊃	ອ	D/E	Э	a	о С	8	Ý	(0+i)-3-8	a	о	9	¥	8.C.(1+D)	d	່ ວ 	8	¥	8-C-(1+D)	0	°	6	¥
\$25	%00'0 <b>!</b>	%82.11	443	90	00.0812	00.212	5006	253	%00°01	09	0885.0\$	5006	ZSS	<b>%00.01</b>	05	2859.0 <b>\$</b>	2006	1915	%00'0l	\$97'1	0201.02	500e
22\$	%00.01	%62.11	643	09	00.0812	00.212	7002	ZES	%00°0L	09	0889.0\$	2002	£9 <b>\$</b>	%00'01	09	£096.0 <b>\$</b>	2002	291\$	%00.01	59 <b>7</b> °L	201034	2002
22 <b>\$</b>	%00'01	%67 11	443	05	00.091\$	00.81\$	\$008	ZES	%00 <sup>.</sup> 01	60	20.5890	800Z	<b>1</b> 55	%00'01	05	8686.0\$	800S	691\$	%00°01	59¥`1	2701'0\$	8002
225	%00`01	%62.11	443	05	\$180.00	00.21\$	5003	22\$	%00'0L	09	0885.02	5003	555	%00'01	05	¥200.1\$	600Z	1215	%00'01	1.465	1901.02	5003
22 <b>5</b>	%00'01	%62.11	644	09	8180.00	00.21\$	5010	25\$	%00'01	09	0885.0\$	010Z	<b>19\$</b>	%00'0I	09	81£0.1 <b>2</b>	5010	£21 <b>\$</b>	%00.01	599'1	\$201.0 <b>\$</b>	5010
275	%00'01	%6Z"11	643	09	00.0812	00'91\$	1102	22\$	%00'01	05	0888.0\$	1 LOZ	85\$	%00.01	09	£990'1 <b>\$</b>	110Z	5215	%00'01	\$9 <b>₽</b> 'L	8801.0\$	1102
ZZ\$	%00'01	%67.11	643	09	00.081\$	00.818	5015	ZES	%00'0l	09	0985.0\$	Z10Z	69\$	%00.01	09	7180.1 <b>\$</b>	2102	1118	%00'01	99 <del>1</del> ,1	\$0.1101	210Z
72 <b>\$</b>	%00'0l	%62.11	643	05	00.0818	00.812	5013	225	%00°01	05	0985.08	5013	L9 <b>\$</b>	%00'01	09	9201.1\$	5013	0818	%00'0L	59 <b>9</b> °l	\$111°0\$	2013
22\$	%00.01	%62.11	443	05	00.0818	00.31\$	\$102	ZE\$	%00'01	09	0995.02	\$102	Z9\$	<b>%00.01</b>	09	2021.13	5014	2818	%00.01	\$9 <b>7</b> `l	8211.02	5014
22\$	%00'01	%67.11	643	09	00.0812	00'SI\$	SLOS	225	%00'01	05	0882.0\$	5102	195	<b>%00.01</b>	05	¥191.1 <b>8</b>	5102	¥215	%00'01	594'1	201145	SIDZ
225	%00.01	%67°41	6443	05	00.081\$	00'51\$	910Z	ZE\$	%00'0l	09	0895.0\$	9102	<b>595</b>	%00'0I	09	2681.12	9102	981\$	%00'01	99 <b>4</b> .1	\$911'0\$	9102
22\$	%00.01	%6Z'II	443	05	00.0818	00'51\$	2107	25\$	%00'01	05	0989'0\$	2102	<b>29</b> \$	%00 <sup>.01</sup>	05	62121\$	2102	8815	%00'0L	59 <b>7</b> °L	6911.0\$	2102
22\$	%00'D1	%67.11	443	05	00.0812	00.212	5018	ZES	%00.01	05	0995'0\$	810Z	69\$	%00'01	05	120215	BLOZ	1615	%00.01	597'1	2911.02	810Z
22\$	%00'0L	%67'11	644	09	00.0812	00'51\$	6102	ZES	%00'01	09	0885.0\$	5102	0/\$	%00 <sup>°</sup> 01	0\$	022218	5018	£61\$	%00°01	\$9 <b>7</b> 'l	9611'0\$	5016
725	%00.01	%62'11	577	05	00.081\$	00.812	5050	ZCS	%00'0L	09	0885.02	0202	215	%00'01	05	2208.18	5020	96L <b>\$</b>	%00'01	59¢'l	6021.0\$	5050
77\$	%00.01	%62'11	694	09	00.0812	00.212	1202	ZES	%00'01	09	0895.0\$	1202	1/5	%00'0L	09	0655.18	5021	261\$	%00'01	59 <b>7</b> 'l	\$0.1223	5024
225 225	%00.01 %00.01	%67°11 %67°11	443 544	09 09	2180'00	00.212	2022	205	%00.01	05	0889'0\$	2202	5/\$	%00.01	09	Z1 /2"1 \$	2202	661\$	%00.01	597'1	201539	5055
225	%00'01	%62.11	6443	09	00.0812	00'91\$	5024	205	%00.01 %00.01	09 05	0862.02	SZOZ	223 225	%00'01	05	1+0+1\$	5053	102\$	%00.01	59¢'l	0521 0\$	5053
											0889'0\$	\$05¢	625	%00.01	05	8764.12	5054	\$204	%00.01	59 <b>7</b> 'l	£921.0\$	5054

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#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction 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
2006	\$29	\$47	\$20	\$97	\$47	\$8	\$9	\$102.88	\$167
2007	\$29	\$48	\$20	\$98	\$48	\$8	\$9	\$2.88	\$68
2008	\$29	\$49	\$20	\$99	\$49	\$8	\$10	\$2.88	\$69
2009	\$29	\$50	\$20	\$100	\$50	\$7	\$10	\$2.88	\$70
2010	\$29	\$52	\$20	\$101	\$52	\$7	\$10	\$2.88	\$72
2011	\$29	\$53	\$20	\$103	\$53	\$7	\$10	\$2.88	\$73
2012	\$29	\$54	\$20	\$104	\$54	\$7	\$10	\$2.88	\$74
2013	\$29	\$55	\$20	\$105	\$55	\$6	\$11	\$2.88	\$75
2014	\$29	\$57	\$20	\$106	\$57	\$6	\$11	\$2.88	\$77
2015	\$29	\$58	\$20	\$108	\$58	\$6	\$11	\$2.88	\$78
2016	\$29	\$59	\$20	\$109	\$59	\$6	\$12	\$2.88	\$80
2017	\$29	\$61	\$20	\$111	\$61	\$5	\$12	\$2.88	\$81
2018	\$29	\$62	\$20	\$112	\$62	\$5	\$12	\$102.88	\$183
2019	\$29	\$64	\$20	\$114	\$64	\$5	\$12	\$2.88	\$84
2020	\$29	\$65	\$20	\$115	\$65	\$5	\$13	\$2.88	\$86
2021	\$29	\$67	\$20	\$117	\$67	\$5	\$13	\$2.88	\$88
2022	\$29	\$69	\$20	\$118	\$69	\$5	\$13	\$2.88	\$89
2023	\$29	\$70	\$20	\$120	\$70	\$4	\$14	\$2.88	\$91
2024	\$29	\$72	\$20	\$122	\$72	\$4	\$14	\$2.88	\$93
2025	\$29	\$74	\$20	\$123	\$74	\$4	\$14	\$2.88	\$95

Present Value of Benefits

\$1,037

Present Value of Costs

\$876

Benefit/Cost	
Ratio	1.18

#### Chesapeake Utilites Corporation Florida Division - Energy Conservation Filing 2006 Residential New Construction Program RIM Test - Calculated Data

3,30%

3.30%

····	
Appliance Type	
Clothes Drying	

Fuel Rate Escalator	2.4%	Depreciation Rate - Supply Main
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line
O&M/Inflation Escalator	2.4%	Depreciation Rate - Meter

able 1			
R	evenue - E	nergy Cha	rge
1	2	3	2*3
Year	Therms	Base Rate	Total Charge
2006	50	\$0.5880	\$29
2007	50	\$0,5880	\$29
2008	50	\$0.5880	\$29
2009	50	\$0,5880	\$29
2010	50	\$0,5880	\$29
2011	50	\$0,5880	\$29
2012	50	\$0,5880	\$29
2013	50	\$0,5880	\$29
2014	50	\$0,5880	\$29
2015	50	\$0,5880	\$29
2016	50	\$0,5880	\$29
2017	50	\$0.5880	\$29
2018	50	\$0,5880	\$29
2019	50	\$0.5880	\$29
2020	50	\$0.5880	\$29
2021	50	\$0.5880	\$29
2022	50	\$0.5880	\$29
2023	50	\$0.5880	\$29
2024	50	\$0.5880	\$29
2025	50	\$0.5880	\$29

Depreciation Rate	<ul> <li>Development i</li> </ul>	Main	3.30%
Depreciation Rate	3,609		
Depraciation Rate	3.90%		
Table 1a			
	Revenue - Co	ost of Gas	
1	2	4	2*3
Year	Thems	Fuel Rate	Total Charge
2006	50	\$0.9382	\$47
2007	50	\$0,9607	\$48
2008	50	\$0,9838	\$49
2009	50	\$1,0074	\$50
2010	50	\$1.0316	\$52
2011	50	\$1,0563	\$53
2012	50	\$1.0817	\$54
2013	50	\$1.1076	\$55
2014	50	\$1,1342	\$57
2015	50	\$1,1614	\$58
2016	50	\$1,1893	\$59
2017	50	\$1.2179	\$61
2018	50	\$1.2471	\$62
2019	50	\$1.2770	\$64
2020	50	\$1,3077	\$65
2021	50	\$1.3390	\$67
2022	50	\$1.3712	\$69
2023	50	\$1.4041	\$70
2024	50	\$1.4378	\$72
2025	50	\$1,4723	\$74

	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							
2006	\$15.00	\$180,00	11.29%	\$20							
2007	\$15.00	\$180.00	11.29%	\$20							
2008	\$15.00	\$180.00	11.29%	\$20							
2009	\$15,00	\$180.00	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	\$180.00	11.29%	\$20							
2014	\$15.00	\$180,00	11.29%	\$20							
2015	\$15.00	\$180.00	11.29%	\$20							
2016	\$15.00	\$180,00	11.29%	\$20							
2017	\$15.00	\$180,00	11.29%	\$20							
2018	\$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%	\$20							
2025	\$15.00	\$180,00	11.29%	\$20							

	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 Cost				
2008	\$50	\$140	\$470	\$180	\$840	8,60%	11.29%	\$8				
2007	\$48	\$135	\$453	\$173	\$809	8.60%	11.29%	\$8				
2008	\$46	\$131	\$437	\$166	\$780	8,60%	11.29%	\$8				
2009	\$44	\$127	\$421	\$160	\$752	8.60%	11,29%	\$7				
2010	\$43	\$123	\$405	\$154	\$726	8.60%	11.29%	\$7				
2011	\$42	\$119	\$391	\$148	\$700	8.60%	11.29%	\$7				
2012	\$41	\$115	\$377	\$142	\$875	8,60%	11.29%	\$7				
2013	\$40	\$111	\$363	\$138	\$650	8,60%	11.29%	\$6				
2014	\$39	\$107	\$350	\$131	\$627	8.60%	11.29%	\$6				
2015	\$38	\$103	\$337	\$126	\$604	8,80%	11.29%	\$6				
2016	\$37	\$100	\$325	\$121	\$583	8.60%	11.29%	\$6				
2017	\$36	\$97	\$313	\$116	\$562	8,60%	11.29%	\$5				
2018	\$35	\$94	\$302	\$111	\$542	8,60%	11.29%	\$5				
2019	\$34	\$91	\$291	\$107	\$523	8.60%	11.29%	\$5				
2020	\$33	\$88	\$281	\$103	\$505	5,60%	11.29%	\$5				
2021	\$32	\$85	\$271	\$99	\$487	8.60%	11.29%	\$6				
2022	\$31	\$82	\$261	\$95	\$469	8.60%	11.29%	\$5				
2023	\$30	\$79	\$252	\$91	\$452	8,60%	11.29%	\$4				
2024	\$29	\$76	\$243	\$87	\$435	8,60%	11,29%	\$4				
2025	\$28	\$73	\$234	\$84	\$419	5.60%	11.29%	\$4				

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	<b>Total Consumed</b>	O&M Cost	Adm. & O&M Cost			
2006	\$4.01	\$48	11.29%	\$5.42	\$32.81	11.29%	\$4	\$9			
2007	\$4,11	\$49	11.29%	\$5.53	\$33.60	11.29%	\$4	\$9			
2008	\$4.20	\$50	11.29%	\$5.64	\$34.40	11.29%	54	\$10			
2009	\$4,31	\$52	11.29%	\$5.87	\$35.23	11.29%	\$4	\$10			
2010	\$4.41	\$53	11.29%	\$5.98	\$36.07	11.29%	\$4	\$10			
2011	\$4.51	\$54	11.29%	\$6.09	\$36.94	11.29%	\$4	\$10			
2012	\$4.62	\$55	11,29%	\$5.21	\$37,83	11.29%	\$4	\$10			
2013	\$4.73	\$57	11.29%	\$6.43	\$38.74	11.29%	\$4	\$11			
2014	\$4.85	\$58	11.29%	\$6.55	\$39,66	11.29%	\$4	\$11			
2015	\$4,96	\$60	11,29%	\$6.77	\$40.62	11.29%	\$5	\$11			
2016	\$5.08	\$61	11.29%	\$6.88	\$41.59	11.29%	\$5	\$12			
2017	\$5.21	\$62	11.29%	\$7.00	\$42.59	11.29%	\$5	\$12			
2018	\$5.33	\$64	11.29%	\$7.22	\$43,61	11.29%	\$5	\$12			
2019	\$5,46	\$65	11.29%	\$7.34	\$44.66	11.29%	\$5	\$12			
2020	\$5,59	\$67	11.29%	\$7.56	\$45,73	11.29%	\$5	\$13			
2021	\$5,72	\$69	11.29%	\$7.79	\$46,83	11.29%	\$5	\$13			
2022	\$5.88	\$70	11.29%	\$7,90	\$47.95	11.29%	\$5	\$13			
2023	\$6.00	\$72	11.29%	\$8.13	\$49,10	11.29%	\$6	\$14			
2024	\$6.15	\$74	11.29%	\$8.35	\$50.28	11.29%	\$6	\$14			
2025	\$6.29	\$78	11.29%	\$8.58	\$51.49	11.29%	\$8	\$14			

Gas Costs						
1	2	3	2*3			
	Therms	Per Therm	Gas Supply			
Year		Supply Cost	Cost			
2008	50	0.9382	\$47			
2007	50	\$0,9607	\$48			
2008	50	\$0,9838	\$49			
2009	50	\$1,0074	\$50			
2010	50	\$1,0316	\$52			
2011	50	\$1.0563	\$53			
2012	50	\$1,0817	\$54			
2013	50	\$1,1076	\$55			
2014	50	\$1,1342	\$57			
2015	50	\$1,1614	\$58			
2016	50	\$1,1893	\$59			
2017	50	\$1.2179	\$61			
2018	50	\$1,2471	\$62			
2019	50	\$1.2770	\$64			
2020	50	\$1,3077	\$65			
2021	50	\$1,3390	\$67			
2022	50	\$1.3712	\$69			
2023	50	\$1,4041	\$79			
2024	50	\$1,4378	\$7Z			
2025	50	\$1,4723	\$74			

#### Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

#### **Residential Appliance Replacement Program** Summary of RIM Test and Participants Test Results

	Proposed <u>Allowance</u>	Participants Test	<u>RIM Tes</u> t
Gas Storage Tank Water Heating	\$525	1.40	1.11
Gas Tankless Water Heating	\$525	1.24	1.11
Gas Heating	\$625	1.03	1.09
Gas Clothes Drying	\$100	1.25	1.20
Gas Cooking	\$100	1.19	1.18

#### Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

#### Residential Appliance Replacement Program RIM Test and Participants Test Results

For

Storage Tank Water Heating

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Cost Effective Results

Appliance Type
Storage Tank Water Heating

			Benefits	5					Costs				
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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
2006	1	\$536	\$525	\$36	\$1,097	\$259	(\$314)	\$550	\$36	\$175	\$110	\$76	\$892
2007	2	\$543	0	\$37	\$580	0	0	0	\$37	\$180	\$110	\$76	\$402
2008	3	\$550	0	\$38	\$588	0	0	0	\$38	\$184	\$110	\$76	\$408
2009	4	\$557	0	\$39	\$596	0	0	0	\$39	\$188	<b>\$1</b> 10	\$76	\$413
2010	5	\$564	0	\$40	\$604	0	0	0	\$40	\$193	\$110	\$76	\$418
2011	6	\$571	0	\$41	\$612	0	0	0	\$41	\$198	\$110	\$76	\$424
2012	7	\$578	0	\$42	\$620	0	0	0	\$42	\$202	\$110	\$76	\$430
2013	8	\$585	0	\$43	\$628	0	0	0	\$43	\$207	\$110	\$76	\$436
2014	9	\$592	0	\$44	\$636	0	0	0	\$44	\$212	\$110	\$76	\$442
2015	10	\$599	0	\$45	\$644	0	0	0	\$45	\$217	\$110	\$76	\$448
2016	11	\$607	0	\$46	\$652	0	0	0	\$46	\$222	\$110	\$76	\$454
2017	12	\$614	0	\$47	\$660	0	0	0	\$47	\$228	\$110	\$76	\$460
2018	13	\$621	0	\$48	\$669	0	0	0	\$48	\$233	\$110	\$76	\$467
2019	14	\$628	350	\$49	\$1,027	361	(438)	348	\$49	\$239	\$110	\$76	\$746
2020	15	\$635	0	\$50	\$685	0	0	0	\$50	\$245	\$110	\$76	\$481
2021	16	\$642	0	\$51	\$693	0	0	0	\$51	\$250	\$110	\$76	\$488
2022	17	\$649	0	\$53	\$702	0	0	0	\$53	\$256	\$110	\$76	\$495
2023	18	\$656	0	\$54	\$710	0	0	0	\$54	\$263	\$110	\$76	\$502
2024	19	\$663	0	\$55	\$718	0	0	0	\$55	\$269	\$110	\$76	\$510
2025	20	\$670	0	\$56	\$727	0	0	0	\$56	\$275	\$110	\$76	\$518

Present Value

s \$6,775

Present Value \_\_\_\_\_ of Costs

\$4,850

Benefit/Cost 1.40 Ratio

# 0002 Conservation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Teat - Data

Storage Tank Water Heating Appliance Type

Electric Fuel Adj.	5.4%		
eznegx3 M&O	%Þ Z	ets 9 leu i	*'Z
zets R noitsisse 3			

		\$ eldsT.	er Charge	notauO aso					5 alds7 - s	BY Charge	Inter Ener			Z *	dst - 3205	Aldring see			1.9	KWH Cost - Tabi	Electric	
Рго-Катры Спятотег Спатоје	atast zata	- oite:Я at eonsilqqA lætoT	latoT IsunnA smnedT	eonsiiqqA Ammu amooff	IsunnA tematau Starge	Konthy Chatemer Monthy	Year	120 <b>3 24</b> 8		leunnA annarfT	Rate Per Themp	Year	120J 225		leunnA zmnsdT	Cost Per Therm	Year	Electric Cost	etz A xsT	HWN leannA	KWH Cost Per	1500¥
(2+1).(3/0).0	9	3/0	Э	ä	S	8	¥	0+1)-2-8	Ö	С.	8	V	B*C*(1+0)	a	<u>с</u>	e	V	B+C+(1+D)	٥	э	8	¥
92\$	%01	38'31%	643	021	00.0818	00'51\$	5006	011\$	%01	021	0885.0\$	500E	521\$	%0 <b>I</b>	021	2856.0\$	5006	9638	%01	£77.4	<b>2</b> 0110 <b>5</b>	5006
92\$	%01	%7E.8E	6443	021	00.0812	00.21\$	2002	0115	%01	0/1	0999'0\$	2002	081\$	%01	021	2096°0 <b>\$</b>	2002	88 <b>4</b> 3	%01	677.4	\$01103	200Z
972	%0L	%/£'8£	644	021	00.081\$	00'51\$	5008	011\$	%0I	0/1	0995.0\$	2008	\$8L\$	%01	021	8086.0\$	\$008	095\$	%0L	£77, <b>4</b>	7101.02	2008
92\$	%01	%/E.8E	524	021	\$180.00	00.21\$	5003	0115	%0I	021	0895.0\$	5003	8812	%0I	021	¢200.3\$	5003	29 <b>5</b> \$	%01	5/L'V	1901.02	5009
92\$	%0I	%26.86	643	021	00.081\$	00,21\$	5040	0115	%0I	021	20'2880	5010	261\$	%0i	021	9150.1\$	5010	\$264	%01	£77,4	¥201'0\$	2010
92\$	%01	%25.85	647	0/1	00.0812	00.212	5011	0115	%0I	0/1	0885.0\$	1102	861\$	%0l	021	\$950.1\$	LLOZ	1.29 <b>5</b>	%01	£11,4	8801.0\$	1102
92\$	%01	%/£'8£	644	021	2180.00	00'915	2102	0115	%01	021	0885.02	2102	zozs	%01	021	7180.12	2102	8/5\$	%01	522'7	1011.0\$	2102
925	%01 %01	%75.85 %75.85	443 443	021 021	00.0612	00.312	\$10Z	0115	%01 %01	021	0882.02	\$10Z	212\$	%01 %01	021	9201-15	5019	5855	%01	C17.4	8011.02	5014
92\$	%01	%7E.BE	443	021	2190'00	00'51\$	5012	011\$	%0I	021	0995'0\$	5012	112\$	%01 %01	021	\$191"1\$ ZPEL"1\$	5016	665\$ Z69\$	%01 %01	677,A	8211.02	5012
92\$	%01	%/C'8C	644	021	00.081\$	\$12:00	9102	011\$	%0I	021	20.5860	910Z	222\$	%0L	021	5681.12	3102	209\$	%01	£77,A	2511.0 <b>\$</b>	201e
92\$	%01	%7E,8E	643	0/1	00'081\$	00.81\$	2102	011\$	%01	021	0885.0\$	710Z	977\$	%0L	0/1	62121\$	7r02	¥19\$	%0L	£77,A	6911.0\$	2017
925	%01	%75.85	443	021	\$180'00	\$12.00	810Z	011\$	%01	021	20.5880	8102	\$233	%01	021	172.18	8102	129 <b>\$</b>	%01	£77.4	S811.02	8102
82\$	%01	%7C.BC	643	021	\$180.00	00.21\$	610Z	011\$	%0L	021	0885.0\$	6102	\$538	\$61	0/1	0275.12	610Z ·	829\$	%01	£222 W	9611 0\$	5018
9/\$	%01	%/£.8£	443	021	00.0812	\$12.00	5050	0115	%01	021	0885.0\$	ozoz	\$742	%01	021	1102.12	5050	\$635	%01	\$277,4	2011508	2020
9/\$	%0L	%LC'8C	£##	021	00'081\$	00'\$1\$	1202	0115	%0I	021	0885.0\$	1202	8529	%01	021	21,3390	5021	Z#9\$	%0L	£77.Þ	20,1223	1202
9/\$	%0I	%/C.8E	643	021	00.0812	00.212	2022	DF1\$	%01	0/1	0883.08	5055	952\$	%01	024	21/2.18	zozz	6795	%01	£77.A	<b>20</b> ,1236	5055
925	%01 %01	%10.80 %10.80	544	021	00.0812	00.212	EZOZ	0115	%01	021	20.5880	EZOZ	\$383	%01	021	1909.15	\$202	2826	%01	£22.4	80,1250	5023
9/\$	%01 %01	%/E'8E %/E'8E	C44	021	00.0812	00'91\$	5052	011\$	%01 %01	021 021	0882.02	5202	\$27\$ 697\$	%01 %01	021 021	87E4.12 ESTA.12	502 \$202	2995	%01 %01	£11,4 £17,4	£971.0\$	2022 2054

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement 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
2006	\$100	\$159	\$69	\$329	\$159	\$32	\$31	\$527.22	\$750
2007	\$100	\$163	\$69	\$332	\$163	\$31	\$32	\$2.22	\$228
2008	\$100	\$167	\$69	\$336	\$167	\$30	\$32	\$2.22	\$232
2009	\$100	\$171	\$69	\$340	\$171	\$29	\$33	\$2.22	\$236
2010	\$100	\$175	\$69	\$344	\$175	\$28	\$34	\$2.22	\$240
2011	\$100	\$180	\$69	\$349	\$180	\$27	\$35	\$2.22	\$244
2012	\$100	\$184	\$69	\$353	\$184	\$26	\$36	\$2.22	\$248
2013	\$100	\$188	\$69	\$357	\$188	\$25	\$37	\$2.22	\$252
2014	\$100	\$193	\$69	\$362	\$193	\$24	\$37	\$2.22	\$257
2015	\$100	\$197	\$69	\$366	\$197	\$23	\$39	\$2.22	\$262
2016	\$100	\$202	\$69	\$371	\$202	\$23	\$39	\$2.22	\$266
2017	\$100	\$207	\$69	\$376	\$207	\$22	\$40	\$2.22	\$271
2018	\$100	\$212	\$69	\$381	\$212	\$21	\$41	\$2.22	\$276
2019	\$100	\$217	\$69	\$386	\$217	\$20	\$42	\$527.22	\$807
2020	\$100	\$222	\$69	\$391	\$222	\$20	\$43	\$2.22	\$287
2021	\$100	\$228	\$69	\$397	\$228	\$19	\$44	\$2.22	\$293
2022	\$100	\$233	\$69	\$402	\$233	\$18	\$45	\$2.22	\$299
2023	\$100	\$239	\$69	\$408	\$239	\$18	\$46	\$2.22	\$305
2024	\$100	\$244	\$69	\$413	\$244	\$17	\$48	\$2.22	\$311
2025	\$100	\$250	\$69	\$419	\$250	\$16	\$49	\$2.22	\$318

Present Value of Benefits

\$3,526

Present Value of Costs

\$3,167

Benefit/Cost	
Ratio	1.11

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program RIM Test - Calculated Data

Appliance Type	
Storage Tank Water Heating	

Fu	iel Rate Es	calator		2.4%	
Ģ	as Energy (	Charge Escal	ator	0%	
G	as Custom	er Charge Es	calator	0%	
		-	Guidion		
0	5M/Inflatio	n Escalator		2.4%	
Te	ble 1				
Γ					
L	1		Energy Cha		
┝	1	2	3	2*3	
				1	
L	Year	Therms	Base Rate	Total Charge	
	2006	170	\$0,5880	\$100	
	2007	170	\$0.5880	\$100	
(	2008	170	\$0.5860	\$100	
1	2009	170	\$0,5880	\$100	
1	2010	170	\$0.5880	\$100	
	2011	170	\$0.5880	\$100	
	2012	170	\$0.5880	\$100	
	2013	170	\$0.5880	\$100	
	2014	170	\$0.5880	\$100	
	2015	170	\$0,5880	\$100	
	2016	170	\$0,5880	\$100	
	2017	170	\$0.5880	\$160	
	2018	170	\$0.5880	\$100	
	2019	170	\$0,5880	\$100	
	2020	170	\$0.5880	\$100	
	2021	170	\$0,5880	\$100	
ł	2022	170	\$0.5880	\$100	
1	2023	170	\$0,5880	\$100	
{	2024	170	\$0.5880	\$100	
	2025	170	\$0.5880	\$100	

Depreciation Rate - Supply Main	3:30%
Depreciation Rate - Development Main	3.30%
Depreciation Rate - Service Line	3.60%
Depreciation Rate - Meter	3.90%

	Revenue - Cost of Gas						
1	2	4	2*3				
Year	Therms	Fuel Rate	Total Charge				
2006	170	\$0.9382	\$159				
2007	170	\$0,9607	\$163				
2008	170	\$0,9838	\$167				
2009	170	\$1.0074	\$171				
2010	170	\$1,0316	\$175				
2011	170	\$1.0563	\$180				
2012	170	\$1.0817	\$184				
2013	170	\$1,1076	\$188				
2014	170	\$1,1342	\$193				
2015	170	\$1.1614	\$197				
2016	179	\$1,1893	\$202				
2017	170	\$1.2179	\$207				
2018	170	\$1,2471	\$212				
2019	170	\$1.2770	\$217				
2020	170	\$1.3077	\$222				
2021	170	\$1.3390	\$228				
2022	170	\$1.3712	\$233				
2023	170	\$1,4041	\$239				
2024	170	\$1.4378	\$244				
2025	170	\$1,4723	\$250				

	Re	venue - Custom	er Charge	
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2008	\$15.00	\$180,00	38.37%	\$69
2007	\$15.00	\$180.00	38.37%	\$69
2008	\$15.00	\$180.00	38,37%	\$69
2009	\$15.00	\$180.00	38.37%	\$69
2010	\$15.00	\$180.00	38.37%	\$69
2011	\$15.00	\$180.00	38.37%	\$69
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	\$180.00	38.37%	\$69
2017	\$15.00	\$180.00	38.37%	\$69
2018	\$15.00	\$180.00	38,37%	\$69
2019	\$15,00	\$180.00	38.37%	\$69
2020	\$15.00	\$180.00	38.37%	\$69
2021	\$15.00	\$180,00	36,37%	\$69
2022	\$15.00	\$180.00	38,37%	\$69
2023	\$15,00	\$180.00	38.37%	\$69
2024	\$15.00	\$180.00	38.37%	\$69
2025	\$15.00	\$180.00	38.37%	\$69

			Inve	stment Car	rying 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 Cost
2006	\$50	\$280	\$470	\$180	\$980	8.60%	38.37%	\$32
2007	\$48	\$271	\$453	\$173	\$945	8.60%	38.37%	\$31
2008	\$46	\$262	\$437	\$166	\$911	8.60%	38,37%	\$30
2009	\$44	\$253	\$421	\$160	\$878	8.60%	38,37%	\$29
2010	\$43	\$245	\$406	\$154	\$848	8.60%	38.37%	\$28
2011	\$42	\$237	\$391	\$148	\$818	8.60%	38.37%	\$27
2012	\$41	\$229	\$377	\$142	\$789	8.60%	38,37%	\$26
2013	\$40	\$221	\$363	\$136	\$760	8,60%	38.37%	\$25
2014	\$39	\$214	\$350	\$131	\$734	8.60%	38.37%	\$24
2015	\$38	\$207	\$337	\$126	\$708	8.60%	38.37%	\$23
2016	\$37	\$200	\$325	\$121	\$683	8.60%	38.37%	\$23
2017	\$36	\$193	\$313	\$116	\$658	8.60%	38.37%	\$22
2018	\$35	\$187	\$302	\$111	\$635	8.60%	38.37%	\$21
2019	\$34	\$181	\$291	\$107	\$613	8.60%	38.37%	\$20
2020	\$33	\$175	\$281	\$103	\$592	8.60%	38.37%	\$20
2021	\$32	\$169	\$271	\$99	\$571	8.60%	38.37%	\$19
2022	\$31	\$163	\$261	\$95	\$550	8.60%	38.37%	\$18
2023	\$30	\$158	\$252	\$91	\$531	8.60%	38.37%	\$18
2024	\$29	\$153	\$243	\$87	\$512	8.60%	38.37%	\$17
2025	\$28	\$148	\$234	\$84	\$494	8.60%	38.37%	\$16

			Incre	mental Custo	omer Costs			
1	2	3	. 4	5=3*4	6	1	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 Cos
2006	\$4.01	\$48	38,37%	\$18.42	\$32.81	38.37%	\$13	\$31
2007	\$4.11	\$49	38,37%	\$18,80	\$33.60	38.37%	\$13	\$32
2008	\$4.20	\$50	38.37%	\$19.19	\$34.40	38.37%	\$13	\$32
2009	\$4.31	\$52	38.37%	\$19.95	\$35.23	38,37%	\$14	\$33
2010	\$4.41	\$53	38.37%	\$20.34	\$36.07	38,37%	\$14	\$34
2011	\$4.51	\$54	38.37%	\$20.72	\$36.94	38,37%	\$14	\$35
2012	\$4.62	\$55	35.37%	\$21.11	\$37.83	38.37%	\$15	\$36
2013	\$4,73	\$57	38.37%	\$21.87	\$38,74	38.37%	\$15	\$37
2014	\$4,85	\$58	38.37%	\$22.26	\$39.66	38.37%	\$15	\$37
2015	\$4,96	\$60	38.37%	\$23.02	\$40.82	38,37%	\$16	\$39
2016	\$5.08	\$61	38.37%	\$23.41	\$41.59	38.37%	\$16	\$39
2017	\$5.21	\$62	38.37%	\$23.79	\$42.59	38.37%	\$16	\$40
2018	\$5,33	\$64	38.37%	\$24.56	\$43.81	38.37%	\$17	\$41
2019	\$5,48	\$65	38.37%	\$24.94	\$44.66	38.37%	\$17	\$4Z
2020	\$5,59	\$67	38.37%	\$25.71	\$45.73	38.37%	\$18	\$43
2021	\$5.72	\$69	38,37%	\$26.48	\$46.83	38.37%	\$16	\$44
2022	\$5.86	\$70	38.37%	\$26.86	\$47.95	38,37%	\$18	\$45
2023	\$6.00	\$72	38.37%	\$27.63	\$49.10	38.37%	\$19	\$46
2024	\$6.15	\$74	38,37%	\$28.40	\$50.28	38,37%	\$19	\$48
2025	\$6.29	\$76	38,37%	\$29.16	\$51.49	38.37%	\$20	\$49

	Gas	Costs	
1	2	3	2*3
	Therms	Gas Supply	Gas Suppl
Year		Rate	Cost
2006	170	0.9382	\$159
2007	170	\$0.9607	\$163
2008	170	\$0.9838	\$167
2009	170	\$1,0074	\$171
2010	170	\$1,0316	\$175
2011	170	\$1.0563	\$180
2012	170	\$1.0817	\$184
2013	170	\$1.1076	\$188
2014	170	\$1,1342	\$193
2015	170	\$1.1614	\$197
2016	170	\$1.1893	\$202
2017	170	\$1.2179	\$207
2018	170	\$1.2471	\$212
2019	170	\$1.2770	\$217
2020	170	\$1,3077	\$222
2021	170	\$1.3390	\$228
2022	170	\$1.3712	\$233
2023	170	\$1.4041	\$239
2024	170	\$1,4378	\$244
2025	170	\$1,4723	\$250

#### Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

Residential Appliance Replacement Program RIM Test and Participants Test Results

For

Tankless Water Heating

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Cost Effective Results

# Appliance Type

**Tankless Water Heating** 

			Benefits	š					Costs				
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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
2006	1	\$536	\$525	\$36	\$1,097	\$950	(\$314)	\$500	\$36	\$155	\$97	\$70	\$1,494
2007	2	\$543	0	\$37	\$580	0	0	0	\$37	\$159	\$99	\$70	\$365
2008	3	\$550	0	\$38	\$588	0	0	0	\$38	\$162	\$102	\$70	\$372
2009	4	\$557	0	\$39	\$596	0	0	0	\$39	\$166	\$104	\$70	\$379
2010	5	\$564	0	\$40	\$604	0	0	0	\$40	\$170	\$107	\$70	\$387
2011	6	\$571	0	\$41	\$612	0	0	0	\$41	\$174	\$109	\$70	\$394
2012	7	\$578	0	\$42	\$620	0	0	0	\$42	\$178	\$112	\$70	\$402
2013	8	\$585	0	\$43	\$628	0	0	0	\$43	\$183	\$115	\$70	\$410
2014	9	\$592	0	\$44	\$636	0	0	0	\$44	\$187	\$117	\$70	\$418
2015	10	\$599	0	\$45	\$644	0	0	0	\$45	\$192	\$120	\$70	\$427
2016	11	\$607	0	\$46	\$652	0	0	0	\$46	\$196	\$123	\$70	\$435
2017	12	\$614	0	\$47	\$660	0	0	0	\$47	\$201	\$126	\$70	\$444
2018	13	\$621	0	\$48	\$669	0	0	0	\$48	\$206	\$129	\$70	\$453
2019	14	\$628	0	\$49	\$677	0	0	0	\$49	\$211	\$132	\$70	\$462
2020	15	\$635	0	\$50	\$685	0	0	0	\$50	\$216	\$135	\$70	\$471
2021	16	\$642	0	\$51	\$693	0	0	0	\$51	\$221	\$138	\$70	\$481
2022	17	\$649	0	\$53	\$702	0	0	0	\$53	\$226	\$142	\$70	\$491
2023	18	\$656	0	\$54	\$710	0	0	0	\$54	\$232	\$145	\$70	\$501
2024	19	\$663	0	\$55	\$718	0	0	0	\$55	\$237	\$149	\$70	\$511
2025	20	\$670	450	\$56	\$1,177	1,527	(505)	562	\$56	\$243	\$152	\$70	\$2,106

Present Value of Benefits \$6,753 Present Value of Costs

\$5,449

Benefit/Cost 1.24 Ratio

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#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Data

Appliance Type	
Tankless Water Heating	

Escalation Rates			
O&M Expense	2.4%	Fuel Rate	2.4%
Electric Fuel Adi.	2.4%		

	Electric K	NH Cost - T	able 1			Gas	Supply Cast	Table 2		Gas Energy Charge - Table 3								Sas Custome	r Charge - 1	able 4		
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	Ye	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	Gas Cost	Y-	Monthly tr Customer Charge	Annual Gustomer Charge	Appliance Annual Thenns	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	В	с	D	B*C*(1+D)		8	c	D	B*C*(1+D)	A		c	D	B*C*(1+D)		В	c	D_	E	D/E	G	C*(D/E)*(1+Z)
2006	\$0.1020	4,773	10.00%	\$536	20	6 \$0.9382	150	10.00%	\$155	2006	\$0.5880	150	10.00%	\$97	20	6 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2007	\$0.1034	4,773	10.00%	\$543	20	o7 \$0.9607	150	10.00%	\$159	2007	\$0.6021	150	10.00%	\$99	20	\$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2008	\$0.1047	4,773	10.00%	\$550	20	80.9838	150	10.00%	\$162	2008	\$0.6166	150	10.00%	\$102	20	8 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2009	\$0.1061	4,773	10.00%	\$557	20	9 \$1.0074	150	10.00%	\$166	2009	\$0.6314	150	10.00%	\$104	20	9 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2010	\$0.1074	4,773	10.00%	\$564	20	10 \$1.0316	150	10.00%	\$170	2010	\$0.6485	150	10.00%	\$107	20	0 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2011	\$0.1068	4,773	10.00%	\$571	20	11 \$1.0563	150	10.00%	\$174	2011	\$0.6620	150	10.00%	\$109	20	1 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2012	\$0.1101	4,773	10.00%	\$578	20	12 \$1.0817	150	10.00%	\$178	2012	\$0.6779	150	10.00%	\$112	20	2 \$15.00	\$180.00	150	423	35,46%	10.00%	\$70
2013	\$0.1115	4,773	10.00%	\$585	20			10.00%	\$183	2013	\$0.6942	150	10.00%	\$115	20	-	\$180.00	150	423	35.46%	10.00%	\$70
2014	\$0.1128	4,773	10.00%	\$592	20			10.00%	\$187	2014	\$0.7109	150	10.00%	\$117	20		\$180.00	150	423	35.46%	10.00%	\$70
	-											150						150			10.00%	\$70
2015	\$0.1142	4,773	10.00%	\$599	20			10.00%	\$192	2015	\$0.7279		10.00%	\$120	20		\$180.00		423	35.46%		
2016	\$0.1155	4,773	10.00%	\$607	20			10.00%	\$196	2016	\$0.7454	150	10.00%	\$123	20		\$180.00	150	423	35.46%	10.00%	\$70
2017	\$0.1169	4,773	10.00%	\$614	20	17 \$1.2179	150	10.00%	\$201	2017	\$0,7633	150	10.00%	\$126	20	7 \$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2018	\$0.1182	4,773	10.00%	\$621	20	18 \$1.2471	150	10.00%	\$206	2018	\$0.7816	150	10.00%	\$129	20	8 \$15.00	\$180.00	150	423	35.46%	10,00%	\$70
2019	\$0.1196	4,773	10.00%	\$628	20	19 \$1.2770	150	10.00%	\$211	2019	\$0.8004	150	10.00%	\$132	20	19 \$15.00	\$180,00	150	423	35.46%	10.00%	\$70
2020	\$0.1209	4,773	10.00%	\$635	20	20 \$1,3077	150	10.00%	\$216	2020	\$0.8196	150	10.00%	\$135	20	\$15.00	\$180,00	150	423	35.46%	10.00%	\$70
2021	\$0.1223	4,773	10.00%	\$64 <b>2</b>	20	\$1.3390	150	10.00%	\$221	2021	\$0.8392	150	10.00%	\$138	20	\$15.00	\$180.00	150	423	35.46%	10.00%	\$70
2022	\$0.1236	4 773	10.00%	\$649	20	22 \$1.3712	150	10.00%	\$226	2022	\$0.8594	150	10.00%	\$14z	20	\$15.00	\$180.00	150	423	35,46%	10.00%	\$70
2023	\$0.1250	4,773	10.00%	\$656	20	23 \$1.4041	160	10.00%	\$232	2023	\$0.8800	150	10.00%	\$145	20	23 <b>\$</b> 15.00	\$180.00	150	423	35.46%	10.00%	\$70
2024	\$0.1263	4,773	10.00%	\$663	20	24 \$1.4378	150	10.00%	\$237	2024	\$0.9011	150	10.00%	\$149	20	\$15.00	\$180.00	150	423	35.45%	10.00%	\$70
2025	\$0.1277	4,773	10.00%	\$670	20	25 \$1.4723	150	10.00%	\$243	2025	\$0.9227	150	10.00%	\$152	20	25 \$15.00	\$180.00	150_	423	35.46%	10.00%	\$70

# Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement 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
2002	\$88	\$141	\$64	\$293	\$141	\$30	\$29	\$527.22	\$726
2003	\$88	\$144	\$64	\$296	\$144	\$29	\$29	\$2.22	\$204
2004	\$88	\$148	\$64	\$300	\$148	\$28	\$30	\$2.22	\$207
2005	\$88	\$151	\$64	\$303	\$151	\$27	\$31	\$2.22	\$211
2006	\$88	\$155	\$64	\$307	\$155	\$26	\$32	\$2.22	\$214
2007	\$88	\$158	\$64	\$310	\$158	\$25	\$32	\$2.22	\$218
2008	\$88	\$162	\$64	\$314	\$162	\$24	\$33	\$2.22	\$221
2009	\$88	\$166	\$64	\$318	\$166	\$23	\$34	\$2.22	\$225
2010	\$88	\$170	\$64	\$322	\$170	\$22	\$35	\$2.22	\$229
2011	\$88	\$174	\$64	\$326	\$174	\$22	\$36	\$2.22	\$234
2012	\$88	\$178	\$64	\$330	\$178	\$21	\$36	\$2.22	\$238
2013	\$88	\$183	\$64	\$335	\$183	\$20	\$37	\$2.22	\$242
2014	\$88	\$187	\$64	\$339	\$187	\$19	\$38	\$2.22	\$247
2015	\$88	\$192	\$64	\$344	\$192	\$19	\$39	\$2.22	\$251
2016	\$88	\$196	\$64	\$348	\$196	\$18	\$40	\$2.22	\$256
2017	\$88	\$201	\$64	\$353	\$201	\$17	\$41	\$2.22	\$262
2018	\$88	\$206	\$64	\$358	\$206	\$17	\$42	\$2.22	\$266
2019	\$88	\$211	\$64	\$363	\$211	\$16	\$43	\$2.22	\$272
2020	\$88	\$216	\$64	\$368	\$216	\$16	\$44	\$2.22	\$278
2021	\$88	\$221	\$64	\$373	\$221	\$15	\$45	\$527.22	\$808

Present Value of Benefits

\$3,139

Present Value of Costs

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\$2,834

Benefit/Cost	 	
Ratio	 1.	11

Year         Therms         Sace Fare         Sace And           2012         1:40         50.5840         \$66           2010         1:50         50.5840         \$66           2010         1:50         50.5840         \$66           2006         1:50         50.5840         \$66           2006         1:50         50.5840         \$66           2006         1:50         50.5840         \$66           2006         1:50         50.5840         \$66           2007         1:50         50.5840         \$66           2008         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840         \$66           2009         1:50         50.5840<	3011         120         202800         269           3010         120         202800         269           3000         120         202800         269           3000         120         202800         269           3009         120         202800         269           3009         120         202800         269           3000         120         202800         269           3000         120         203800         298           3002         120         202800         298           3002         120         203800         298
5000         120         202890         298           5002         120         202890         298           5002         120         202890         298           5002         120         202890         298           5002         120         202890         298           5002         120         202880         298	5000         120         20 2980         299           5002         120         20 2980         298           5002         120         20 2980         298           5002         120         20 2980         298           5002         120         20 2980         298
2001 120 2012880 288 2006 120 2012880 288	2001 120 202880 288 2006 120 202880 288
1 5 3 5.3	
Revenue - Energy charge	
	Kevenue - Energy charge
	Revenue - Energy charge
abietto Abietta - entrevent	

Appliance Type

60E'E	nis	Supply Main Development M	<ul> <li>epreclation Rate</li> </ul>					
¥09.C	Depreciation Rate - Service Line							
%06°C		Meter	<ul> <li>ets noitsionqe0</li> </ul>					
			st eids i					
	ssO to te	oO - euneveñ						
5+3	*	5	١					
Total Charge	Fuel Rate	2009dT	Year					
1015	286.03	091	9002					
****	1096.0\$	051	2002					
8915	80.9838	091	2005					
1915	\$1 00.1\$	120	5003					
551\$	21.0316	051	0102					
8915	£950'1\$	051	LIOZ					
2915	1180.12	051	ZLOZ					
991\$	9/01.12	051	£10Z					
0/15	21/1345	091	\$10Z					
821\$ 821\$	\$191'LS	051	SLOZ					
2183	6/12.12	05 L 05 L	2012					
1815	1742.12	051	5018					
261\$	0/12.18	051	6102					
961\$	TTOE.12	051	5050					
102\$	0655.12	051	1202					
902\$	2175.12	051	2022					
112\$	1101.12	051	2023					
812\$	8754.12	051	\$202					
\$221	\$1.4723	051	5202					

	er Charge	moteu0 - eunev	еЯ	
E.Þ	÷	6	2	1
	erment olteR		Monthly	
sunnA betanon9	IsloT oT	Annual Customer	Customer	
Customer Charge	petinsuoO	emento	ອຊາຍຕ່ວ	Year
79\$	%9 <b>7</b> '9E	\$180.00	212 00	2006
795	%9*'SE	00.0612	\$12.00	7002
795	32.46%	\$180.00	00'51\$	800S
<b>795</b>	%91 56	\$180.00	00'51\$	6007
\$9\$	%9¥'5£	00.0812	00'51\$	0102
¥9\$	%9¥'5C	00'091\$	00'51\$	1102
795	%9¥'5£	2180.00	00'91\$	2102
195	%8#'SE	00.0612	00.212	£10Z
*9\$	%9 <b>#</b> `\$£	2180.00	00'51\$	102
¥9\$	%97'50	2190'00	00'51\$	5102
795	%97'SC	2180.00	\$12,00	9102
264	%97'SE	00.0818	00'5 <b>1\$</b>	21102
29\$	%97'50	2180.00	00'51\$	8102
195	%8¥'SE	2180'00	00'51\$	6102
\$9\$	%9¥'SE	00.0812	00'51\$	5050
19\$	%81°SE	00.0812	00'51\$	1202
195	%9¥ SE	00'081\$	00'51\$	2022
201	%9+'50	00.081\$	00'51\$	2023
195	%9 <b>7</b> 50	00.0818	00 515	\$2024
195	%97 50	00.0812	\$12.00	520Z

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Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006

	er Charge	moisu0 - eunev	eЯ	
£.7	•	3	5	1
IsunnA beistor9	erment olle R lefoT oT	Annual Customer	Monthly Customer	
Customer Charge	paminsuoO	emento	ទប្តានកុប	Year
79\$	%97'SE	2180.00	212:00	5006
195	%9¥'SC	00.0612	90.212	7002
79\$	%9¥'SE	\$180.00	00'51\$	2008
195	%91 SE	00.0818	00'51\$	5003
264	%9¥'SE	00.0812	00'51\$	2010
195	%91'50	2190'00	00'51\$	1102
795	%97'52	2180.00	00'91\$	210Z
195	%9#'SE	00.0612	00'51\$	5013
¥9\$	%9¥'SE	2180.00	00'51\$	5014
195	%97'56	2190'00	00'51\$	\$102
795	%97 SC	2180.00	00'51\$	2016
195	%9*'SE	D0 091\$	00'51\$	2102
P9\$	%9# SC	2180.00	00'51\$	8102
195	%9¥'SE	00'081\$	00'51\$	6102
195	32'48%	2180.00	00'51\$	5050
19\$	%01 SE	00.081\$	\$15.00	1202
195	%9¥ SE	2180'00	00'51\$	2022
195	%9 <b>†</b> '\$£	\$180.00	00'51\$	2023
195	%9 <b>*</b> 5C	00.0818	00'51\$	2024
795	32 46%	2180.00	212 00	5202

£.Z		2	L
Total Charge	Fuel Rate	smedT	Year
1915	286.02	091	9002
****	1096.0\$	051	/007
8915	8686.03	091	2008
1915	7400 1\$	120	6002
551\$	\$1.0316	051	0102
8915	£950'1\$	051	LLOZ
2915	1180.12	051	ZLOZ
3915	9/01.12	051	£10Z
0/15	2111345	091	\$107
1215	\$19L'LS	051	SLOZ
8/15	2691.12	051	9102
2192	6/1215	051	2102
/815	1/1215	091	8102
261\$	0//215	051	6102
961\$	2202015	051	2020
1025	062515	051	1202
9025	21/2.12	051	2023
1125	1404.12	051	2023
2354 218	\$Z/\$`L\$ 8/\$\$`L\$	051	5052 5054

	3120	,	5 ald
5.2	3	7 (585)	ŀ
Vigqu8 260	AiddaS 28D	zmedT	
Cost	BleB		Year
1915	2859.0	051	2006
8918	7080.02	051	2002
8915	8686.02	051	8002
\$121	\$1,0074	051	5008
\$122	81:0316	051	2010
851\$	£850°1\$	051	1102
2918	1180.12	120	2012
991\$	9201.12	051	2013
0215	2461.1242	051	5014
\$215	\$191°1\$	051	5102
8215	5681.12	051	9102
C81\$	6212.12	091	21102
<b>7818</b>	1742.12	051	8102
261\$	0112.12	091	5018
961\$	LLOE'15	091	2020
1025	0665.12	120	5021
\$206	Z1/2'1\$	051	2022
1125	100115	120	2023
2716	8764.12	051	2024
122\$	£Z27 15	120	505S

		mean Intil	DISTO INTING	10 1010			
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oliteA ieunnA	oT ament ottaß	leunnA	otte R teunnA	oT ennertT ottes9	leunnA	Monthly	
O&M Cost	Total Consumed	O&M Cost	Adm. Cost	Total Consumed	Reo J. mbA	teoD.mbA	Year
\$15	%01 SE	18.252	20.71 <b>2</b>	%99°SE	845	10.42	500e
215	%9 <b>*</b> '5E	233'00	85.718	32'46%	615	11.145	2007
212	%97'50	234'40	67.718	%9¥'SE	05\$	24:20	2008
21\$	%9¥'SE	\$32,23	11 915	%97'SE	25\$	16.42	5003
\$13	%9*'SE	20'96\$	6/ 91\$	%84'SE	25\$	11'15	0102
£1\$	%9†'SE	16'96\$	\$1.61\$	%8*'SE	¥5\$	15'1\$	1102
£13	%97'SE	\$37.83	09'61\$	%8#'SC	SS <b>S</b>	29.42	Z10Z
215	32.46%	\$7.85\$	12.052	%9#'SE	£5\$	£1.1 <b>%</b>	2013
*1\$	%9F'SE	238.66	15.02\$	37794	85\$	58' <b>#\$</b>	5102
*15	%91 SE	29.04\$	\$21.28	%9¥'SE	09\$	96'+\$	5102
51\$	%9¥'SE	65 115	251 63	%9*'SE	19\$	80'5\$	2016
51\$	%9† SC	65'Z <b>1\$</b>	86 125	32 46%	29\$	12.28	2012
91 <b>\$</b>	%87'55	19.642	222.70	%9¥'S£	19\$	££.23	810Z
91\$	%97 SC	99'77\$	\$0.55\$	%9 <b>#</b> '5£	595	91'5\$	5102
91\$	%97'56	£1'5#\$	94 223	%9#"SC	295	65'5\$	2020
L1\$	32'49%	£8.8h2	21 125	%9# 'SE	69\$	21.38	12021
215	%97'98	56'Z#\$	28.122	%97'SC	D/\$	98.22	2022
L15	%97 SE	01'6+\$	CS SZS	%97'SE	2/\$	00'9\$	2023
81\$	%9*'50	\$20.28	¥2'92\$	%9*'SE	¥/\$	\$1.95	\$20Z
	210 211 211 211 211 211 212 212 212 212	T         B-e-T         State           25.40%         510           25.40%         511           25.40%         517           25.40%         517           25.40%         517           25.40%         516           25.40%         516           25.40%         517           25.40%         513           25.40%         513           25.40%         513           25.40%         513           25.40%         513           25.40%         514           25.40%         513           25.40%         514           25.40%         513           25.40%         513           25.40%         513           25.40%         513           25.40%         513           25.40%         513           25.40%         513           25.40%         513           25.40%         514           25.40%         513           25.40%         514           25.40%         514           25.40%         514           25.40%         514           25.40%	T-B-B         T         B           T-B-B         T         B           1905 Natroth, 61 terment (of htt)         Natroth, 91 terment (of htt)         Natroth, 91 terment (of htt)           1905 Natroth, 91 terment (of htt)         Natroth, 91 terment (of htt)         Natroth, 91 terment (of htt)           1905 Natroth, 91 terment (of htt)         Natroth, 91 terment (of htt)         Natroth, 91 terment (of htt)           1915 Natroth, 91 terment (of htt)         Natroth, 91 terment (of htt)         Natroth, 91 terment (of htt)           1915 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)           1915 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)           1916 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)           1917 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)           1918 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)           1918 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)           1918 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)           1918 Natroth, 92 terment (of htt)         Natroth, 92 terment (of htt)<	T-6-6         T         6         T           1         Transf Oxford         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         8         7         8         7         8         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8         7         7         8	Ribit Thermar To, Annual Radio Annual Radio Thermar To, Annual Radio Annual Radio Carlo Car	T-B-B         T         - <td>26/15         5/4         5/2/4         6/2/4</td>	26/15         5/4         5/2/4         6/2/4

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8-4-9	8	L	9	5	*	3	z	
tnemteevni	erment to other	Cost	into T		soivie2	namqolavaQ	Aµddng:	
Carrying Cost	IstoT oT bemuznoO	of Dept	Investment	heter	eniJ	nisM	nieM	Year
20	%9#'SE	%09'R	2860	081\$	0/#\$	082\$	05\$	900Z
6Z\$	%9¥'SC	%09.5	S#6\$	E21\$	E5#\$	1722	848	7007
825	%9*'SE	%09.8	116\$	891\$	LEVS	292\$	946	2008
222	%9¥'5E	%09'8	828\$	\$160	124\$	2523	244	5003
92\$	%97'SE	%0 <del>0</del> 8	8482	<b>*51\$</b>	2406	\$742	£ <b>†\$</b>	010Z
\$2\$	%8 <b>*</b> 'SE	%09'8	8185	8115	1665	2525	245	\$107
\$2\$	%97'SE	%09.8	68/\$	2142	1.1.5\$	\$229	115	2012
\$53	%9 <b>†</b> 'SE	%09 <sup>.</sup> 8	092\$	\$136	2363	1225	240	\$013
22\$	%9† 'SE	%09.5	¥£2\$	1618	056\$	*LZ\$	8238	\$10Z
ZZ\$	38*'90	%09.8	8078	\$156	1668	202\$	803	510Z
\$21	%97 SE	%09.8	2683	1215	\$325	\$500	1e <b>s</b>	2016
az\$	%9 <b>7</b> 'SE	%09'8	859\$	8118	\$313	2183	236	710S
612	%9† SE	%09'9	9636	111\$	205\$	7818	\$32	8102
61\$	%9¥'\$£	%09.8	£19 <b>5</b>	2018	\$521	1818	234	5102
812	%97'SE	%09.8	265\$	£01 <b>\$</b>	18281	5/15	\$33	2020
Z1\$	%9Þ SE	%09'8	125\$	66\$	1728	\$169	252	1202
215	%9¥'SC	%09.B	2220	56\$	1922	2163	153	2022
91\$	%9+ SE	%09`8	15231	264	2525	851\$	230	2023
91\$	%97 SE	%09.8	2128	78 <b>\$</b>	543	651\$	67\$	2024
\$1\$	%97 SC	%09'8	1615	182	<b>PEZ\$</b>	8148	228	2022

		sble 4	- egnsdo -	nemoteu.) es	9					5 əlds† -	egnad Charge	en3 as0			2 elde	T - IsoO ylqu	ing srg			L a	KWH Cost - Tabl	Electric	
Pro-Rated Customer Charge	eliz A xe T	roite.F Replance to Total	) teto T InseritA Remort	eonsiiqqA IeunnA zmmerT	Annual Temoteu O	Monthyy Customer Monthyy	Yeer	19	100 <b>280</b>		ieunnA ermoriT	te9 ets9 mierit	Jes∕	teoD 280	etas xasī	leunorA ermontT	Cost Per Them	Year	feoD office Cost	afin H xa T	KWX isoraA	KWH Cost Per	Year
(Z+1)*(3/Q)*O	9	Э/а	Э	a	Э	8	V	G	H-C-(1+	a	Э	8	¥	(0+1).O.E	a	c	8	A	B*C*(1+D)	a	о Э	ម	¥
08\$	%00'01	%81.0 <b>Þ</b>	443	871	00,0812	00.318	5006		911\$	%00'0 <b>!</b>	821	0885.0 <b>2</b>	5006	<b>#81\$</b>	%00'01	871	2869.0 <b>\$</b>	2006	ESE <b>S</b>	%00.01	051,5	\$0.1020	5006
08\$	%00 <sup>.</sup> 01	%81 OF	443	8/1	\$180.00	00.21\$	2002		\$11\$	%00 <sup>-</sup> 01	871	0885.0\$	2002	881\$	%D0'01	82 L	2096°0\$	2002	8358	%00.01	061,0	\$01.03	2002
280	%00'01	%81 OF	443	821	00.0818	00.21\$	800S		\$11 <b>\$</b>	%00'0L	971	0995.02	2008	\$183	%00.01	821	80.9838	2008	\$363	%00'0 <b>I</b>	021,6	2401.02	2008
08\$	%00'01	%81.04	6443	871	00.081\$	00.212	5005		\$11\$	%00°01	821	0885.0\$	5002	261\$	%00°01	8/1	\$1,0074	5002	\$368	%00.01	051,5	1901.0\$	5003
085	%00'01	%81.01	644	871	00.081\$	00.81\$	5010		5115	%00'01	821	0883.02	0102	\$202	%00.01	871	91CO.1 <b>2</b>	2010	225\$	%00.01	3,150	₩201.0 <b>\$</b>	0102
880	%00'0 <b>I</b>	%81.0 <b>h</b>	6443	841	00.0812	00'91\$	1102		SLI\$	%00'01	821	0885.0\$	LIOZ	2025	%00.01	87 L	£950'1\$	1102	116\$	%00'0L	051.6	8801.08	1102
085	%00'01	%B1'0¥	443	826	00.081\$	00.21\$	2102		5115	%00.01	821	0885.0\$	210Z	2125	%00'01	871	1180.1 <b>2</b>	2102	2985	%00'01	3,150	1011.0\$	2102
08\$	%00'01	%81°0#	443	921	00.0818	210.00	5013		S11 <b>5</b>	%00.01	821	0885.0\$	5013	212\$	%00 <sup>.</sup> 01	821	9201-1\$	5013	\$386	%00°01	051'E	S111'0\$	2013
085	%00'01	%81.0 <del>1</del>	443	821	00'081\$	00.212	\$10Z		511\$	%00.01	921	0985.0\$	\$102	222\$	%00'0I	871	2111345	5014	166\$	%00.01	091°E	\$0.1128	\$10Z
08\$	%00°01	%81°0#	644	821	\$180.00	00.81\$	5102		911\$	%00.01	821	0885.0\$	ŞLOZ	122\$	%00.01	871	Atat.12	5102	968\$	%00'01	3,150	201145	2012
08\$	%00'01	%81.0 <b>4</b>	644	8/1	00'081\$	00.212	9102		SLI\$	%00'01	821	0989-0\$	910Z	\$532	%00'01	871	E691'1\$	9102	00+\$	<b>%00.01</b>	051,6	\$\$11:0 <b>\$</b>	9102
08\$	%00'01	%81'0¥	443	821	00.081\$	00.21\$	2012		5115	%00°01	821	0889.0\$	210Z	8025	%00'01	821	62121\$	LIOZ	50 <b>1</b> -\$	%00.01	051,5	6911.0\$	2102
08\$	%00'01	%81.0 <b>h</b>	644	871	00.0812	00'51\$	8102		511\$	%00.01	821	0885.0\$	810Z	****	%00 <sup>.</sup> 01	8/1	1742.18	8102	01#\$	%00'0I	051,6	\$0.1182	8102
085	%00'01	%81°0#	CP1	821	00.0812	00.212	610Z			%00'01	B71	0895.0\$	6102	097\$	%00°01	871	0222.1\$	5102	P195	%00'0I	31,150	9611'0\$	610Z
025	%00'01	%81'09	£77	821	00.0812	00.212	5050			%00'01	821	0885.02	ozoz	9925	%00.01	821	220E.18	0202	6175	%00.01	3,150	60Z1'0\$	2020
08\$	%00.01 %00.01	%81'0¥	643 643	872 871	00.0812	00.212	1202			%00'01	821	0885.02	1202	297\$	%00'01	9/1	0622.12	1202	7275	%00.01	051'E	\$0.1223	5024
DB\$	%00'01	%91°0≯	644	8/1	00.0812	00.212	2023 2055			%00.01	871 871	0882.02	5023	\$775 \$268	%00.01 %00.01	821	2176.12 1406.12	2023	8275	%00.01	051,5	9521-05	2002 2202
025	%00.01	%91°0#	644	8/L	00.0812	00'91\$	5024			%00.01	871	0885.0\$	5024	2825	%00'0L	821 821	8764.12	2024	8675	%00'01	091'E	0921-0\$	502
08\$	%00.01	%81.0 <del>1</del>	6443	8/1	00.081\$	00'91 <b>\$</b>	5025			%00'01	871	0885.08	5025	882\$	%00'01	871	\$274.12	SZOZ	2005	%00.01 %00.01	051,6	5921.0\$	5059

Participants Test - Data	
msrport fremessiges esnigida isinebises	
Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006	

mətaya grita ayatem
Appliance Type

Electric Fuel Adj.	5.4%		
asneqt3 M&O	%¥'Z	eta Rate	¥'Z
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dbA level Adj.	5.4%		
asuedx3 W	% <b>#</b> `Z	ets R leu i	¥'Z

#### Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

#### Residential Appliance Replacement Program RIM Test and Participants Test Results

For

Heating Systems

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Cost Effective Results

Appliance Type
Heating System

			Benefits			Costs							
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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
2006	1	\$353	\$625	\$192	\$1,170	\$2,052	(\$3,850)	\$2,085	\$192	\$184	\$115	\$80	\$857
2007	2	\$358	0	\$197	\$555	0	0	0	\$197	\$188	\$115	\$80	\$579
2008	3	\$363	0	\$201	\$564	0	0	0	\$201	\$193	\$115	\$80	\$589
2009	4	\$368	0	\$206	\$574	0	0	0	\$206	\$197	\$115	\$80	\$598
2010	5	\$372	0	\$211	\$583	0	0	0	\$211	\$202	\$115	\$80	\$608
2011	6	\$377	0	\$216	\$593	0	0	0	\$216	\$207	\$115	\$80	\$618
2012	7	\$382	0	\$221	\$603	0	0	0	\$221	\$212	\$115	\$80	\$628
2013	8	\$386	0	\$227	\$613	0	0	0	\$227	\$217	\$115	\$80	\$638
2014	9	\$391	0	\$232	\$623	0	0	0	\$232	\$222	\$115	\$80	\$649
2015	10	\$396	0	\$238	\$633	0	0	0	\$238	\$227	\$115	\$80	\$660
2016	11	\$400	0	\$243	\$644	0	0	0	\$243	\$233	\$115	\$80	\$671
2017	12	\$405	0	\$249	\$654	0	0	0	\$249	\$238	\$115	\$80	\$682
2018	13	\$410	0	\$255	\$665	0	0	0	\$255	\$244	\$115	\$80	\$694
2019	14	\$414	0	\$261	\$676	0	0	0	\$261	\$250	\$115	\$80	\$706
2020	15	\$419	350	\$268	\$1,037	2,929	(5,495)	2,352	\$268	\$256	\$115	\$80	\$504
2021	16	\$424	0	\$274	\$698	0	0	0	\$274	\$262	\$115	\$80	\$731
2022	17	\$428	0	\$281	\$709	0	0	0	\$281	\$268	\$115	\$80	\$744
2023	18	\$433	0	\$287	\$720	0	0	0	\$287	\$275	\$115	\$80	\$757
2024	19	\$438	0	\$294	\$732	0	0	0	\$294	\$282	\$115	\$80	\$770
2025	20	\$442	0	\$301	\$744	0	0	0	\$301	\$288	\$115	\$80	\$784

Present Value \$6,730

of Benefits

Present Value of Costs

\$6,506

Benefit/Cost 1.03 Ratio

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement 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
2006	\$105	\$167	\$72	\$344	\$167	\$34	\$32	\$627.33	\$861
2007	\$105	\$171	\$72	\$348	\$171	\$33	\$33	\$2.33	\$239
2008	\$105	\$175	\$72	\$352	\$175	\$31	\$34	\$2.33	\$243
2009	\$105	\$179	\$72	\$356	\$179	\$30	\$35	\$2.33	\$247
2010	\$105	\$184	\$72	\$361	\$184	\$29	\$36	\$2.33	\$251
2011	\$105	\$188	\$72	\$365	\$188	\$28	\$37	\$2.33	\$255
2012	\$105	\$193	\$72	\$370	\$193	\$27	\$37	\$2,33	\$259
2013	\$105	\$197	\$72	\$374	\$197	\$26	\$38	\$2.33	\$264
2014	\$105	\$202	\$72	\$379	\$202	\$25	\$39	\$2.33	\$269
2015	\$105	\$207	\$72	\$384	\$207	\$24	\$40	\$2.33	\$274
2016	\$105	\$212	\$72	\$389	\$212	\$24	\$41	\$2.33	\$279
2017	\$105	\$217	\$72	\$394	\$217	\$23	\$42	\$2.33	\$284
2018	\$105	\$222	\$72	\$399	\$222	\$22	\$43	\$2.33	\$289
2019	\$105	\$227	\$72	\$404	\$227	\$21	\$44	\$2.33	\$295
2020	\$105	\$233	\$72	\$410	\$233	\$20	\$45	\$627.33	\$926
2021	\$105	\$238	\$72	\$415	\$238	\$20	\$47	\$2.33	\$307
2022	\$105	\$244	\$72	\$421	\$244	\$19	\$47	\$2.33	\$313
2023	\$105	\$250	\$72	\$427	\$250	\$18	\$49	\$2.33	\$319
2024	\$105	\$256	\$72	\$433	\$256	\$18	\$50	\$2.33	\$326
2025	\$105	\$262	\$72	\$439	\$262	\$17	\$51	\$2.33	\$333

Present Value of Benefits

\$3,692

**Present Value** of Costs

\$3,395

Benefit/Cost	
Ratio	1.09

# Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Replacement Program RIM Test - Calculated Data

t eld	
%1.2 2.4%	% <b>*</b> °7
s Customer Charge Escalator 0%	%0
a Energy Charge Escalator 0%	%0
al Rale Escalator 2.4%	542

	er Charge	Moter - Custom	PA	
E.P	,	3	z	L.
	ermedT ofteB		Monthiy	
IsunnA bajaron9	erment oltex letoT oT	temotauQ leunnA	Customer	
Customer Charge	Consumed	apparto	Charge	Year
225	%81.04	\$180.00	00'91\$	2006
225	%81.0*	00.0818	212'00	2002
272	%81.0¥	00.0818	00'51\$	8002
272	%81.0¥	00.0818	00'51\$	2009
Z1\$	%81.0h	00.0812	212'00	010Z
2 <b>/\$</b>	%81.0 <del>1</del>	\$180.00	00.212	1102
Z2\$	%81.0M	\$180.00	00'51\$	210Z
Z/\$	481.01	\$120.00	212,00	2013
Z2\$	%81.0 <del>1</del>	00.0818	00'51\$	\$10Z
Z1\$	%81 OF	\$180.00	DD.212	5102
Z/\$	%81.01	\$180.00	00'51\$	9102
Z/\$	%81.0 <b>b</b>	\$190,00	00'51\$	210Z
Z/\$	%81.OF	00.0818	00'51\$	810Z
Z2\$	%81.0Þ	00.0818	212 00	6102
Z/\$	%81.04	\$180.00	00'51\$	0202
272	%81 01	2180.00	00.212	1202
212	%81.0h	00'081\$	\$12,00	2202
272	%81 OF	00.081\$	212,00	C202
Z.£\$	%91 OF	2180'00	212 00	¥202
Z2\$	%81.0M	00.0818	00.212	9Z0Z

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5-3		Z	•
Total Charge	Fuel Rate	Sunsal	уваУ
(915	2956'0\$	8/1	900Z
1/15	2096'05	821	2002
5/15	8586.05	8/1	2008
6/15	\$/00'1S	8/1	600Z
1915	192012	821	0102
212	2180.12	8/1	1102
2615	7180.12	8/1 8/1	2102
Z0Z\$ /61\$	2451,1242	8/1	£102
202\$	1191 15	871	5102
212\$	21,1893	8/3	9102
1125	6/12.12	871	210Z
222\$	1745.12	871	8102
122\$	0112.12	871	6102
EEZ\$	1705.12	871	2020
BCZS	0665.18	821	12021
PP2\$	2176.1 <b>8</b>	BLL	2022
\$520	1404.12	871	£2023
952\$	8764.12	8/1	\$2024
Z92\$	\$1.4723	8/1	2025

Deprecistion Rate - Service Line

nieM ylqqu2 - sisA nollsbergeD

Depreciation Rate - Development Main

3.60%

%0£'£

3'30%

901	rergy Cha	3 - euneva	эŊ
5.2	3	2	
emeri'' lefoT	etr C escá	annadT	-seaY
1019  Charge	916 X 926 U	924 suuay i	S006
2102	0882.02	87F	7002
SOLS	0895 0\$	871	8008
2012	0862.02	871	800Z
\$102	0882.02	871	2010
\$102	0882.03	871	1102
\$102	\$0.5880	821	2102
\$015	0985.02	BZL	2013
501\$	0882.02	871	5014
\$102	0885.02	871	5102
5015	0885.02	871	3016
\$102	0885.0\$	8/1	2015
\$102	0882.02	8/1	8102
\$102	0885.0\$	871	6102
501\$	0885.02	8/1	2020
501\$	20,5880	8/1	1202
501\$	0995.02	871	2202
\$01\$	0862.08	821	5023
\$102	0995.02	841	5024
901\$	0985 0\$	871	5202

	Costs	640	
5.3	8	z	L L
iliqqui se Ə	Viqqu2 260	zmart	
1500	ete Rate		Year
191\$	2858.0	821	200e
1215	2096.0\$	871	2007
\$21\$	8586.02	8/1	2008
6215	\$1.00.12	8/1	6002
#8L\$	9100.12	871	5010
8812	2950.12	8/1	5011
2132	2180'15	871	2102
Z61\$	9201-15	871	C102
2025	21,1342	8/1	\$102
202\$	\$19L'1\$	B/1	S10Z
2125	21.1893	871	9102
112\$	\$1,2179	871	2102
222\$	1745.12	821	S105
1228	0112.12	821	5102
££2\$	1100.12	8/1	020Z
8228	0622.12	821	1202
2244	21/2-15	8/1	2202
052\$	1101-15	871	£2023
992\$	8764.12	871	202¢
Z9Z\$	21 4723	871	52025

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Total Incrementa	oiteA leunnA	oT ament oltsA	leurinA	olfe A levenA	oT ermenT olisЯ	launnA	Monthly	
Adm. & O&M Cost	OTW COR	Total Consumed	OW COST	Adm. Cost	Total Consumed	Red Cost	Adm. Cost	Year
ZE\$	E1\$	%81.04	19.552	62'81\$	%81.01	815	10.142	2006
233	£1\$	%81.0+	233'60	69 61 \$	%81.0*	815	11.142	7002
***	*15	%81.01	234'40	60.02\$	%81.04	270	24,20	2008
\$28	¥1\$	%81'0#	232 33	68'07\$	%81 OF	295	16.42	2008
\$36	214	%81 OF	10.968	\$51.30	%81.01	£9\$	19'95	0102
265	S1\$	%81'0#	\$36.94	01.158	%81.04	+5\$	19'15	110Z
28\$	\$1\$	%91'0+	\$31.83	255.10	%81.04	222	29.42	210Z
825	915	%81'0*	12.852	06'22\$	%81.04	L\$\$	£4"13	2013
66\$	81\$	%81'01	99'66\$	253'30	<b>%81.04</b>	85\$	59° <b>15</b>	\$107
01+\$	915	%91 0+	29.042	11.428	%81.0 <b>&gt;</b>	260	96'95	5102
195	215	%81'0#	85 L7\$	15'72\$	%81.01	195	22'02	910Z
Z¥\$	Z1\$	%81 01	65'2#\$	16.42\$	%81'0#	Z9 <b>S</b>	12'55	2107
C75	818	%81.07	19'595	227925	%81'07	201	22'33	8102
**5	81\$	%81'0#	99'++\$	21'92\$	%81'0#	<b>\$95</b>	99'55	6102
995	815	%81'07	£42'S#\$	259'35	%81'0*	<b>29\$</b>	65'5\$	0Z0Z
115	61\$	40 18%	246.83	ZL'12\$	%81.01	695	22.5\$	1202
114\$	61\$	%81'01	56'175	£1'8Z\$	%81'0#	0/\$	99.2\$	ZZ0Z
675	250	%81 0*	01.648	228.93	%81.01	2/\$	26.00	\$2023
09\$	250	%B1 0*	82.028	236'13	%81 01	¥25	S1'9\$	\$2024

			SISOO BUILLI	so inemize	MU			
8.4.9	8	4	9	5		£	Z	1
Investment	Ratio of Therms	120C	IsloT		Service	nemqolaveQ	<b>Yiqqu</b> ð	
Carrying Cost	Consumed To Total	Mebi	Insetment	1910M	eniJ	nisM	nisM	JE91
¥E\$	%81.0*	%09'B	096\$	081\$	0275	2280	05\$	9008
223	%81.0*	%09.8	\$76\$	\$113	ES#\$	1728	248	7002
125	%91.09	%09'8	116\$	2100	2645	2925	914\$	8008
230	%81'0#	%09.8	8/85	091\$	1212	£52\$	244	6003
6Z\$	%81.01	%09'9	2949	¥91\$	9075	\$778	C#\$	0102
275	%81.0#	%09.6	8182	2148	2331	2533	245	110
125	%91.09	%09.8	68/\$	2115	1165	\$523	L9\$	210i
97\$	%81.04	%09'8	09/\$	\$136	2363	122\$	240	210
\$Z\$	%81 07	%09.8	¥5/\$	1213	055\$	2514	228	110
254	%81.01	%09'8	90/\$	\$156	1662	202\$	238	510
¥Z\$	%81.01	%09.8	2895	1215	\$26\$	\$500	28\$	910
225	%81.01	%09.8	8995	8118	£1£\$	2183	236	210
225	%81.04	%09'9	\$635	1115	202\$	2818	98\$	8108
125	%81.0*	%09.8	\$19\$	201\$	162\$	181\$	925	6103
aZ\$	%81 07	%09'9	265\$	\$103	1828	\$/1\$	223	020
02\$	%81'0#	%09'B	1255	86\$	1223	2169	232	120
615	%81.01	%09.8	099\$	<b>\$6\$</b>	192\$	2163	16\$	ZZ02
815	%81'0*	%09'9	10234	16\$	2525	851\$	230	6203
81\$	%81'07	%09'8	Z12\$	78 <b>2</b>	E\$2\$	ESI\$	62\$	\$2024

#### Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

Residential Appliance Replacement Program RIM Test and Participants Test Results

For

Cooking Appliances

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Cost Effective Results

 Appliance Type	
Cooking	

-			Benefits						Costs				_
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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
2006	1	\$147	\$100	\$36	\$283	\$449	(\$574)	\$400	\$36	\$46	\$29	\$20	\$407
2007	2	\$149	0	\$37	\$186	0	0	0	\$37	\$48	\$30	\$20	\$134
2008	3	\$151	0	\$38	\$189	0	0	0	\$38	\$49	\$31	\$20	\$137
2009	4	\$153	0	\$39	\$191	0	0	0	\$39	\$50	\$31	\$20	\$140
2010	5	\$155	0	\$40	\$194	0	0	0	\$40	\$51	\$32	\$20	\$143
2011	6	\$157	0	\$41	\$197	0	0	0	\$41	\$52	\$33	\$20	\$146
2012	7	\$159	0	\$42	\$200	0	0	0	\$42	\$54	\$34	\$20	\$149
2013	8	\$161	0	\$43	\$203	0	0	0	\$43	\$55	\$34	\$20	\$152
2014	9	\$163	0	\$44	\$206	0	0	0	\$44	\$56	\$35	\$20	\$155
2015	10	\$165	0	\$45	\$209	0	0	0	\$45	\$57	\$36	\$20	\$158
2016	11	\$166	0	\$46	\$212	0	0	0	\$46	\$59	\$37	\$20	\$162
2017	12	\$168	0	\$47	\$215	0	0	0	\$47	\$60	\$38	\$20	\$165
2018	13	\$170	0	\$48	\$218	0	0	0	\$48	\$62	\$39	\$20	\$168
2019	14	\$172	100	\$49	\$321	626	(800)	279	\$49	\$63	\$40	\$20	\$276
2020	15	\$174	0	\$50	\$224	0	0	0	\$50	\$65	\$41	\$20	\$176
2021	16	\$176	0	\$51	\$228	0	0	0	\$51	\$66	\$42	\$20	\$179
2022	17	\$178	0	\$53	\$231	0	0	0	\$53	\$68	\$43	\$20	\$183
2023	18	\$180	0	\$54	\$234	0	0	0	\$54	\$70	\$44	\$20	\$187
2024	19	\$182	0	\$55	\$237	0	0	0	\$55	\$71	\$45	\$20	\$191
2025	20	\$184	0	\$56	\$240	0	0	0	\$56	\$73	\$46	\$20	\$195

Present Value

of Benefits \$2,126

Present Value of Costs

\$1,793

Benefit/Cost	1.19
Ratio	

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Data

Appliance Type Cooking

Escalation Rates O&M Expense 2.4% Fuel Rate 2.4% Electric Fuel Adj. 2.4%

	Electric	KWH Cost - Tab	le 1			Gas St	apply Cost -	Table 2			Gas En	ergy Charge	- Table 3					Jas Custome	r Charge - 1	able 4		
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	Gas Cost	Ye	Monthly r Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
Α		c	D	B*C*(1+D)	A	8	с	D	8*C*(1+D)	A		c	D	B*C*(1+D)	A	в	c	D	E	D/E	G	C*(D/E)*(1+Z)
2006	\$0.1020	1,310	10.00%	\$147	2006	\$0.9382	45	10.00%	\$46	2006	\$0,5880	45	10.00%	\$29	200	6 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2007	\$0.1034	1,310	10.00%	\$149	2007	\$0.9607	45	10.00%	\$48	2007	\$0.6021	45	10,00%	\$30	200	7 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2008	\$0, 1047	1,310	10.00%	\$151	2008	\$0.9838	45	10.00%	\$49	2008	\$0.6166	45	10.00%	\$31	200	18 \$15.0D	\$180.00	45	443	10.16%	10.00%	\$20
2009	<b>\$</b> 0.1061	1,310	10.00%	\$153	2009	\$1,0074	45	10.00%	\$50	2009	\$0.6314	45	10.00%	\$31	200	9 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2010	\$0.1074	1,310	10.00%	\$155	2010	\$1.0316	45	10.00%	\$51	2010	\$0.6465	45	10.00%	\$32	20	0 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2011	\$0,1088	1,310	10.00%	\$157	2011	\$1.0563	45	10.00%	\$52	2011	\$0.6620	45	10.00%	\$33	20-	1 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2012	\$0.1101	1,310	10.00%	\$159	2012	\$1.0817	45	10.00%	\$54	2012	\$0.6779	45	10.00%	\$34	20	2 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2013	\$0.1115	1,310	10.00%	\$161	2013	\$1.1076	45	10.00%	\$55	2013	\$0.6942	45	10.00%	\$34	20	3 \$15.00	\$180.00	45	443	10.18%	10.00%	\$20
2014	\$0.1128	1,310	10.00%	\$163	2014	\$1.1342	45	10.00%	\$56	2014	\$0.7109	45	10.00%	\$35	20-	4 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2015	\$0.1142	1,310	10.00%	\$165	2015	\$1.1614	45	10.00%	\$57	2015	\$0.7279	45	10.00%	\$36	20	5 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2016	\$0.1155	1,310	10.00%	\$166	2016	\$1.1893	45	10.00%	\$59	2016	\$0.7454	45	10.00%	\$37	20	6 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2017	\$0.1169	1,310	10.00%	\$168	2017	\$1.2179	45	10.00%	\$60	2017	\$0.7633	45	10.00%	\$38	20	7 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2018	\$0,1182	1,310	10.00%	\$170	2018	\$1.2471	45	10.00%	\$62	2018	\$0.7816	45	10.00%	\$39	201	8 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2019	\$0,1196	1,310	10.00%	\$172	2019	\$1.2770	45	10.00%	\$63	2019	\$0.8004	45	10.00%	\$40	20	9 \$15.00	\$180.00	45	443	10,16%	10.00%	\$20
2020	\$0.1209	1,310	10.00%	\$174	2020	\$1.3077	45	10.00%	\$65	2020	\$0.8196	45	10.00%	\$41	203	0 \$15.00	\$180.00	45	443	10,16%	10.00%	\$20
2021	\$0.1223	1,310	10.00%	\$176	2021	\$1,3390	45	10.00%	\$66	2021	\$0.8392	45	10.00%	\$42	20	1 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2022	\$0.1236	1,310	10.00%	\$178	2022	\$1,3712	45	10.00%	\$68	2022	\$0.8594	45	10.00%	\$43	203	2 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2023	\$0,1250	1,310	10.00%	\$180	2023	\$1.4041	45	10.00%	\$70	2023	\$0.8800	45	10.00%	\$44	203	3 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2024	\$0.1263	1,310	10.00%	\$182	2024	\$1.4378	45	10.00%	\$71	2024	\$0.9011	45	10.00%	\$45	20	4 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20
2025	\$0,1277	1,310	10.00%	\$184	2025	\$1,4723	45	10.00%	\$73	2025	\$0,9227	45	10.00%	\$46	20	5 \$15.00	\$180.00	45	443	10.16%	10.00%	\$20

## Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement 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
2006	\$26	\$42	\$18	\$87	\$42	\$9	\$8	\$100.59	\$160
2007	\$26	\$43	\$18	\$88	\$43	\$8	\$8	\$0.59	\$60
2008	\$26	\$44	\$18	\$89	\$44	\$8	\$9	\$0.59	\$61
2009	\$26	\$45	\$18	\$90	\$45	\$8	\$9	\$0.59	\$62
2010	\$26	\$46	\$18	\$91	\$46	\$7	\$9	\$0.59	\$63
2011	\$26	\$48	\$18	\$92	\$48	\$7	\$9	\$0.59	\$65
2012	\$26	\$49	\$18	\$93	\$49	\$7	\$9	\$0.59	\$66
2013	\$26	\$50	\$18	\$95	\$50	\$7	\$10	\$0.59	\$67
2014	\$26	\$51	\$18	\$96	\$51	\$6	\$10	\$0.59	\$68
2015	\$26	\$52	\$18	\$97	\$52	\$6	\$10	\$0.59	\$69
2016	\$26	\$54	\$18	\$98	\$54	\$6	\$10	\$0.59	\$70
2017	\$26	\$55	\$18	\$100	\$55	\$6	\$11	\$0.59	\$72
2018	\$26	\$56	\$18	\$101	\$56	\$6	\$11	\$0.59	\$73
2019	\$26	\$57	\$18	\$102	\$57	\$5	\$11	\$100.59	\$175
2020	\$26	\$59	\$18	\$104	\$59	\$5	\$11	\$0.59	\$76
2021	\$26	\$60	\$18	\$105	\$60	\$5	\$12	\$0.59	\$78
2022	\$26	\$62	\$18	\$106	\$62	\$5	\$12	\$0.59	\$79
2023	\$26	\$63	\$18	\$108	\$63	\$5	\$12	\$0.59	\$81
2024	\$26	\$65	\$18	\$109	\$65	\$4	\$13	\$0.59	\$82
2025	\$26	\$66	\$18	\$111	\$66	\$4	\$13	\$0.59	\$84

Present Value of Benefits

\$933

Present Value of Costs

\$789

Benefit/Cost	
Ratio	1.18

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program RIM Test - Calculated Data

3.30% 3.30% 3.60% 3.90%

[	Appliance Type	
	Cooking	

Base Rate \$0.5880\$0.5880 \$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880 \$0.5880\$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.5880 \$0.580

 Total Charge

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Revenue - Energy Char 1 2 3	ge2*3	Revenue - Cost of C
Table 1		Table 1a
O&M/Inflation Escalator	2.4%	Depreciation Rate - Meter
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main
Fuel Rate Escalator	2.4%	Depreciation Rate - Supply Main

	Revenue - Co		
1	2	4	2*3
Year	Therms	Fuel Rate	Total Charge
2006	45	\$0.9382	\$42
2007	45	\$0,9607	\$43
2008	45	\$0.9838	\$44
2009	45	\$1.0074	\$45
2010	45	\$1.0316	\$46
2011	45	\$1.0563	\$48
2012	45	\$1.0817	\$49
2013	45	\$1,1076	\$50
2014	45	\$1.1342	\$51
2015	45	\$1,1614	\$5Z
2016	45	\$1,1893	\$54
2017	45	\$1.2179	\$55
2018	45	\$1.2471	\$56
2019	45	\$1.2770	\$57
2020	45	\$1,3077	\$59
2021	45	\$1,3390	\$60
2022	45	\$1,3712	\$62
2023	45	\$1.4041	\$63
2024	45	\$1,4378	\$65
2025	45	\$1,4723	\$66

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						
2006	\$15.00	\$180.00	10.16%	\$18						
2007	\$15.00	\$180,00	10,16%	\$18						
2008	\$15.00	\$180.00	10.16%	\$18						
2009	\$15.00	\$160.00	10,16%	\$18						
2010	\$15.00	\$180.00	10,16%	\$18						
2011	\$15.00	\$180.00	10,16%	\$18						
2012	\$15.00	\$180.00	10.16%	\$18						
2013	\$15.00	\$180.00	10.16%	\$18						
2014	\$15.00	\$180.00	10.16%	\$18						
2015	\$15.00	\$180.00	10.16%	\$18						
2016	\$15.00	\$180.00	10,16%	\$18						
2017	\$15.00	\$180.00	10.16%	\$18						
2018	\$15.00	\$180.00	10.16%	\$18						
2019	\$15.00	\$180.00	10.16%	\$18						
2020	\$15.00	\$180,00	10.16%	\$18						
2021	\$15.00	\$180.00	10,16%	\$18						
2022	\$15.00	\$180.00	10.16%	\$18						
2023	\$15.00	\$180,00	10.16%	\$18						
2024	\$15,00	\$180.00	10,16%	\$18						
2025	\$15.00	\$180.00	10,16%	\$18						

			ពេមខ	stment Ca	rrying Costs			
1	2	3	4	5	6	7	8	5"7"8
	Supply	Development	Service		Total	Cost	Ratio of Therms	investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Cos
2006	\$50	\$280	\$470	\$180	\$980	8,60%	10,16%	\$9
2007	\$48	\$271	\$453	\$173	\$945	8.60%	10,16%	\$8
2005	\$46	\$262	\$437	\$166	\$911	8.60%	10,16%	\$8
2009	\$44	\$253	\$421	\$160	\$878	8.60%	10.16%	\$8
2010	\$43	\$245	\$406	\$154	\$848	8.60%	10.16%	\$7
2011	\$42	\$237	\$391	\$148	\$818	8.60%	10.16%	\$7
2012	\$41	\$229	\$377	\$142	\$789	8.60%	10.16%	\$7
2013	\$40	\$221	\$363	\$136	\$760	8,60%	10,16%	\$7
2014	\$39	\$214	\$350	\$131	\$734	8.60%	10.16%	\$6
2015	\$38	\$207	\$337	\$126	\$708	8.60%	10.18%	\$6
2016	\$37	\$200	\$325	\$121	\$683	8.60%	10.16%	\$6
2017	\$36	\$193	\$313	\$116	\$658	8.60%	10.16%	\$6
2018	\$35	\$187	\$302	\$111	\$635	8.60%	10.16%	\$6
2019	\$34	\$181	\$291	\$107	\$613	8.60%	10.16%	\$5
2020	\$33	\$175	\$281	\$103	\$592	8.80%	10.16%	\$5
2021	\$32	\$169	\$271	\$99	\$571	8.60%	10.16%	\$5
2022	\$31	\$163	\$261	\$95	\$550	8.60%	10.16%	\$5
2023	\$30	\$158	\$252	\$91	\$531	8.60%	10,16%	\$5
2024	\$29	\$153	\$243	\$87	\$512	8,60%	10,16%	\$4
2025	\$28	\$148	\$234	\$84	\$494	8,60%	10.16%	\$4

			Incr	emental Cus	tomer Cos	ts		
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 Ratio	Total Incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consumed	O&M Cost	Adm. & Q&M Cost
2005	\$4.01	\$48	10,16%	\$4.88	\$32.81	10,16%	\$3	\$8
2007	\$4.11	\$49	10.16%	\$4,98	\$33.60	10.16%	\$3	\$8
2008	\$4.20	\$50	10,16%	\$5.08	\$34,40	10.16%	\$3	\$9
2009	\$4.31	\$52	10.16%	\$5.28	\$35,23	10,16%	\$4	\$9
2010	\$4.41	\$53	10.16%	\$5,38	\$36.07	10,16%	\$4	\$9
2011	\$4.51	\$54	10.16%	\$5.49	\$36.94	10,16%	\$4	\$9
2012	\$4.62	\$55	10.16%	\$5.59	\$37.83	10.16%	\$4	\$9
2013	\$4,73	\$57	10.16%	\$5.79	\$38,74	10.16%	<b>\$4</b>	\$10
2014	\$4.85	\$58	10.16%	\$5.89	\$39.66	10,16%	\$4	\$10
2015	\$4.96	\$60	10.16%	\$6,09	\$40.62	10.16%	\$4	\$10
2016	\$5.08	\$61	10.16%	\$6.20	\$41.59	10.16%	\$4	\$10
2017	\$5.21	\$62	10.16%	\$8,30	\$42.59	10.16%	\$4	\$11
2018	\$5,33	\$64	10,16%	\$6,50	\$43,61	10.16%	\$4	\$11
2019	\$5,48	\$85	10.18%	\$8.60	\$44,66	10.18%	\$5	\$11
2020	\$5.59	\$67	10.16%	\$6.81	\$45,73	10.16%	\$5	\$11
2021	\$5.72	\$69	10.16%	\$7.01	\$46.83	10.16%	\$5	\$12
2022	\$5,86	\$70	10.16%	\$7.11	\$47.95	10.16%	\$5	\$12
2023	\$6,00	\$72	10.16%	\$7.31	\$49.10	10.16%	\$5	\$12
2024	\$6.15	\$74	10.16%	\$7.52	\$50.28	10,16%	\$5	\$13
2025	\$6,29	\$76	10,16%	\$7.72	\$51.49	10,16%	\$5	\$13

	Gas	Costs	
1	2	3	2*3
	Therms	Gas Supply	Gas Supply
Year		Rate	Cost
2006	45	0,9382	\$4z
2007	45	\$0,9607	\$43
2008	45	\$0.9838	\$44
2009	45	\$1,0074	\$45
2010	45	\$1,0316	\$46
2011	45	\$1.0563	\$48
2012	45	\$1,0817	\$49
2013	45	\$1.1076	\$50
2014	45	\$1,1342	\$51
2015	45	\$1.1614	\$5z
2016	45	\$1,1893	\$54
2017	45	\$1.2179	\$55
2018	45	\$1.2471	\$56
2019	45	\$1.2770	\$57
2020	45	\$1.3077	\$59
2021	45	\$1.3390	\$60
2022	45	\$1,3712	\$62
2023	45	\$1,4041	\$63
2024	45	\$1,4378	\$65
2025	45	\$1.4723	\$66

#### Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

## Residential Appliance Replacement Program RIM Test and Participants Test Results

For

**Clothes Drying Appliances** 

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## Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Cost Effective Results

## Appliance Type Clothes Drying

			Benefits	· · · · · · · · · · · · · · · · · · ·					Costs	·····			
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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
2005	1	\$164	\$100	\$36	\$300	\$379	(\$454)	\$350	\$36	\$52	\$32	\$22	\$417
2006	2	\$167	0	\$37	\$203	0	0	0	\$37	\$53	\$32	\$22	\$144
2007	3	\$169	0	\$38	\$207	0	0	0	\$38	\$54	\$32	\$22	\$147
2008	4	\$171	0	\$39	\$210	0	0	0	\$39	\$55	\$32	\$22	\$149
2009	5	\$173	0	\$40	\$213	0	0	0	\$40	\$57	\$32	\$22	\$151
2010	6	\$175	0	\$41	\$216	0	0	0	\$41	\$58	\$32	\$22	\$153
2011	7	\$177	0	\$42	\$219	0	0	0	\$42	\$59	\$32	\$22	\$156
2012	8	\$180	0	\$43	\$222	0	0	0	\$43	\$61	\$32	\$22	\$158
2013	9	\$182	0	\$44	\$225	0	0	0	\$44	\$62	\$32	\$22	\$161
2014	10	\$184	0	\$45	\$229	0	0	0	\$45	\$64	\$32	\$22	\$163
2015	11	\$186	0	\$46	\$232	0	0	0	\$46	\$65	\$32	\$22	\$166
2016	12	\$188	0	\$47	\$235	0	0	0	\$47	\$67	\$32	\$22	\$168
2017	13	\$191	100	\$48	\$338	516	(618)	204	\$48	\$69	\$32	\$22	\$273
2018	14	\$193	0	\$49	\$242	0	0	0	\$49	\$70	\$32	\$22	\$174
2019	15	\$195	0	\$50	\$245	) o	0	0	\$50	\$72	\$32	\$22	\$177
2020	16	\$197	0	\$51	\$248	0	0	0	\$51	\$74	\$32	\$22	\$180
2021	17	\$199	0	\$53	\$252	0	0	0	\$53	\$75	\$32	\$22	\$183
2022	18	\$201	0	\$54	\$255	0	0	0	\$54	\$77	\$32	\$22	\$186
2023	19	\$204	0	\$55	\$259	0	0	0	\$55	\$79	\$32	\$22	\$189
2024	20	\$206	0	\$56	\$262	0	0	0	\$56	\$81	\$32	\$22	\$192

Present Value

of Benefits \$2,315

Present Value of Costs

\$1,854

Benefit/Cost	1.25
Ratio	

# Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program Participants Test - Data

Appliance Type Clothes Drying

Escalation Rates			
O&M Expense	2.4%	Fuel Rate	2.4%
Electric Fuel Adj.	2.4%		

	Electric	KWH Cost - Tal	oie 1			Gas	Supply Cost	Table 2		Gas Energy Charge - Table 3							(	Gas Custome	r Charge - 1	abie 4		
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	- ,	ear Cost Per	Annsual Therms	Tax Rate	Gas Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	Gas Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Themis	Total Annual Therms	Ratio - Appliance to Total	Tax Rate	Pro-Rated Customer Charge
A	в	с	D	B*C*(1+D)		A 8	c	D	B*C*(1+D)	A	в	с	D	B*C*(1+D)	A	в	c	D	E	D/E	G	C*(D/E)*(1+Z)
2006	\$0.1020	1,465	10.00%	\$164	2	006 \$0.9382	50	10.00%	\$52	2005	\$0.5860	50	10.00%	\$32	2006	\$15.00	\$180.00	50	443	11.29%	10,00%	\$22
2007	\$0.1034	1,465	10.00%	\$167	2	007 <b>\$</b> 0,9607	50	10.00%	<b>\$</b> 53	2007	\$0.5880	50	10.00%	\$32	2007	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2008	\$0,1047	1,465	10.00%	\$169	2	008 \$0.9838	50	10.00%	\$54	2008	\$0,5880	50	10.00%	\$32	2008	\$15,00	\$180.00	50	443	11.29%	10,00%	\$22
2009	\$0.1061	1,465	10.00%	\$171	2	009 \$1.0074	50	10.00%	\$55	2009	\$0,5880	50	10.00%	\$32	2009	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2010	\$0.1074	1,465	10.00%	\$173	2	010 \$1.0316	50	10.00%	\$57	2010	\$0,5880	50	10.00%	\$32	2010	\$15.00	\$180,00	50	443	11.29%	10.00%	\$22
2011	\$0,1088	1,465	10.00%	\$175	2	011 \$1.0563	50	10.00%	\$58	2011	\$0.5880	50	10.00%	\$32	2011	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2012	\$0,1101	1,465	10.00%	\$177	2	012 \$1.0817	50	10.00%	\$59	2012	\$0,5880	50	10.00%	\$32	2012	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2013	\$0.1115	1,465	10.00%	\$180	2	013 \$1.1076	50	10.00%	\$61	2013	\$0.5880	50	10.00%	\$32	2013	\$15.00	\$180,00	50	443	11.29%	10.00%	\$22
2014	\$0.1128	1,465	10.00%	\$18Z	2	014 \$1,1342	50	10.00%	\$62	2014	\$0,5880	50	10.00%	\$32	2014	\$15.00	\$180,00	50	443	11.29%	10.00%	\$22
2015	\$0.1142	1,465	10.00%	\$184	2	015 \$1.1614	50	10.00%	\$64	2015	\$0,5880	50	10.00%	\$32	2015	\$15.00	\$180,00	50	443	11,29%	10.00%	\$22
2016	\$0,1155	1,465	10.00%	\$186	2	016 \$1.1893	50	10.00%	\$65	2016	\$0,5880	50	10.00%	\$32	2016	\$15,00	\$180.00	50	443	11.29%	10.00%	\$22
2017	\$0,1169	1,465	10.00%	\$188	2	017 \$1.2179	50	10.00%	\$67	2017	\$0.5880	50	10.00%	\$32	2017	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2018	\$0.1182	1,465	10.00%	\$191	1	018 \$1.2471	50	10.00%	\$69	2018	\$0,5880	50	10,00%	\$32	2018	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2019	\$0.1196	1,465	10.00%	\$193	1 2	019 \$1.2770	50	10.00%	\$70	2019	\$0.5880	50	10.00%	\$32	2019	\$15.00	\$180,00	50	443	11.29%	10.00%	\$22
2020	\$0.1209	1,465	10.00%	\$195	1	020 \$1.3077	50	10.00%	\$72	2020	\$0.5880	50	10.00%	\$32	2020	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2021	\$0.1223	1,465	10.00%	\$197	2	021 \$1.3390	50	10.00%	\$74	2021	\$0.5880	50	10.00%	\$32	2021	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2022	\$0.1236	1,465	10.00%	\$199	1	022 \$1.3712	50	10.00%	\$75	2022	\$0.5880	50	10.00%	\$32	2022	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2023	\$0.1250	1,465	10.00%	\$201		023 \$1.4041	50	10.00%	\$77	2023	\$0.5880	50	10.00%	\$32	2023	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2024	\$0.1263	1,465	10.00%	\$204	:	024 \$1.4378	50	10.00%	\$79	2024	\$0.5880	50	10.00%	\$32	2024	\$15.00	\$180.00	50	443	11.29%	10.00%	\$22
2025	\$0.1277	1.465	10.00%	\$206		025 \$1.4723	50	10,00%	\$81	2025	\$0.5860	50	10.00%	\$32	2025	\$15.00	\$180.00	50	443	11,29%	10.00%	\$22

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement 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
2006	\$29	\$47	\$20	\$97	\$47	\$10	\$9	\$100.65	\$166
2007	\$29	\$48	\$20	\$98	\$48	\$9	\$9	\$0.65	\$67
2008	\$29	\$49	\$20	\$99	\$49	\$9	\$10	\$0.65	\$68
2009	\$29	\$50	\$20	\$100	\$50	\$9	\$10	\$0.65	\$69
2010	\$29	\$52	\$20	\$101	\$52	\$8	\$10	\$0.65	\$71
2011	\$29	\$53	\$20	\$103	\$53	\$8	\$10	\$0.65	\$72
2012	\$29	\$54	\$20	\$104	\$54	\$8	\$10	\$0.65	\$73
2013	\$29	\$55	\$20	\$105	\$55	\$7	\$11	\$0.65	\$74
2014	\$29	\$57	\$20	\$106	\$57	\$7	\$11	\$0.65	\$76
2015	\$29	\$58	\$20	\$108	\$58	\$7	\$11	\$0.65	\$77
2016	\$29	\$59	\$20	\$109	\$59	\$7	\$12	\$0.65	\$78
2017	\$29	\$61	\$20	\$111	\$61	\$6	\$12	\$0.65	\$80
2018	\$29	\$62	\$20	\$112	\$62	\$6	\$12	\$100.65	\$181
2019	\$29	\$64	\$20	\$114	\$64	\$6	\$12	\$0.65	\$83
2020	\$29	\$65	\$20	\$115	\$65	\$6	\$13	\$0.65	\$85
2021	\$29	\$67	\$20	\$117	\$67	\$6	\$13	\$0.65	\$86
2022	\$29	\$69	\$20	\$118	\$69	\$5	\$13	\$0.65	\$88
2023	\$29	\$70	\$20	\$120	\$70	\$5	\$14	\$0.65	\$90
2024	\$29	\$72	\$20	\$122	\$72	\$5	\$14	\$0.65	\$92
2025	\$29	\$74	\$20	\$123	\$74	\$5	\$14	\$0.65	\$93

Present Value of Benefits

\$1,037

.

Present Value of Costs

\$865

Benefit/Cost	
Ratio	1.20

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Replacement Program RIM Test - Calculated Data

Appliance Type	l
Clothes Drying	

uel Rale Es	calator		2.4%	Depreciation Rate - :	Supply Main		
as Energy (	Charge Esca	lator	0%	Depreciation Rate -	Development M	ain	
as Custom	er Charge Es	calator	0%	Depreciation Rate -	Servica Line		
&M/Inflatio	n Escalator		2.4%	Depreciation Rate -	Møter		
able 1				Table 1a			
		· · ·	-	r <u></u>			
		nergy Cha			Revenue - Co	st of Gas	
1	2	3	2*3	11	2	4	
Year	Therms	Base Rate	Total Charge	Year	Thems	Fuel Rate	Tot
2006	50	\$0.5880	\$29	2006	50	\$0,9382	
2007	50	\$0.5880	\$29	2007	50	\$0.9607	
800	50	\$0.5880	\$29	2008	50	\$0,9838	
009	50	\$0.5880	\$29	2009	50	\$1,0074	
0	50	\$0.5880	\$29	2010	50	\$1.0316	
1	50	\$0,5880	\$29	2011	50	\$1.0563	
12	50	\$0.5880	\$29	2012	50	\$1.0817	
13	50	\$0.5880	\$29	2013	50	\$1,1076	
14	50	\$0.5880	\$29	2014	50	\$1.1342	
2015	50	\$0.5880	\$29	2015	50	\$1,1614	
2016	50	\$0.5880	\$29	2016	50	\$1,1893	
2017	50	\$0,5880	\$29	2017	50	\$1.2179	
2018	50	\$0,5880	\$29	2018	50	\$1.2471	
2019	50	\$0.5880	\$29	2019	50	\$1,2770	
2020	50	\$0.5880	\$29	2020	50	\$1.3077	
2021	50	\$0.5880	\$29	2021	50	\$1,3390	
2022	50	\$0.5880	\$29	2022	50	\$1.3712	
2023	50	\$0.5880	\$29	2023	50	\$1.4041	
2024	50	\$0.5880	\$29	2024	50	\$1.4378	
2025	50	\$0,5680	\$29	2025	50	\$1.4723	

on Rate -	Supply Main		3.30%
on Rate -	Development M	ain	3.30%
on Rate -	Service Line		3.60%
on Rate -	Matar		3.90%
	woler		5,50 %
	Revenue - Co	at of Gao	
í	2 2	4	2*3
·	<b>*</b>		~ <u>4</u> 3
ar	Therms	Fuel Rate	Total Charge
106	50	\$0,9382	\$47
107	50	\$0.9607	\$48
08	50	\$0.9838	\$49
109	50	\$1,0074	\$50
10	50	\$1.0316	\$52
111	50	\$1.0563	\$53
12	50	\$1.0817	\$54
13	50	\$1,1076	\$55
114	50	\$1.134Z	\$57
15	50	\$1,1614	\$58
16	50	\$1,1893	\$59
117	50	\$1.2179	\$61
18	50	\$1.2471	\$62
19	50	\$1,2770	\$64
20	50	\$1.3077	\$65
21	50	\$1,3390	\$67
22	50	\$1.3712	\$69
23	50	\$1.4041	\$70
24	50	\$1.4378	\$72
25	50	\$1.4723	\$74

	Re	venue - Custome	r Charge	
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2006	\$15.00	\$180.00	11.29%	\$20
2007	\$15.00	\$180.00	11.29%	\$20
2008	\$15.00	\$180.00	11.29%	\$20
2009	\$15.00	\$180.00	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	\$180.00	11.29%	\$20
2014	\$15.00	\$180.00	11.29%	\$20
2015	\$15.00	\$180,00	11.29%	\$20
2016	\$15.00	\$180.00	11,29%	\$20
2017	\$15.00	\$180.00	11,29%	\$20
2018	\$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%	\$20
2025	\$15.00	\$180.00	11.29%	\$20

			Inv	estment C	arrying Costs			
1	2	3	. 4	5	8	1	8	6-7-8
	Supply	Development	Service		Total	Cost	Ratio of Themas	Investment
Year	Main	Main	Line	Meter	Investment	of Debt	Consumed To Total	Carrying Co.
2006	\$50	\$280	\$470	\$180	\$980	8.60%	11.29%	\$10
2007	\$48	\$271	\$453	\$173	\$945	8.60%	11.29%	\$9
2008	\$46	\$262	\$437	\$166	\$911	8,60%	11.29%	\$9
2009	\$44	\$253	\$421	\$160	\$878	8.60%	11.29%	\$9
2010	\$43	\$245	\$406	\$154	\$848	8.60%	11.29%	\$8
2011	\$42	\$237	\$391	\$148	\$818	8.60%	11.29%	\$8
2012	\$41	\$229	\$377	\$142	\$789	8.60%	11.29%	\$8
2013	\$40	\$221	\$363	\$136	\$760	8.60%	11.29%	\$7
2014	\$39	\$214	\$350	\$131	\$734	8.60%	11.29%	\$7
2015	\$38	\$207	\$337	\$126	\$708	8.60%	11.29%	\$7
2016	\$37	\$200	\$325	\$121	\$663	8.60%	11.29%	\$7
2017	\$36	\$193	\$313	\$116	\$658	8.60%	11.29%	\$6
2018	\$35	\$187	\$302	\$111	\$635	8.60%	11.29%	\$6
2019	\$34	\$181	\$291	\$107	\$613	8.60%	11.29%	\$6
2020	\$33	\$175	\$281	\$103	\$592	8.60%	11.29%	\$6
2021	\$32	\$169	\$271	\$99	\$571	8.80%	11.29%	\$6
2022	\$31	\$163	\$261	\$95	\$550	8.80%	11.29%	\$5
2023	\$30	\$158	\$252	\$91	\$531	8.60%	11.29%	\$5
2024	\$29	\$153	\$243	\$87	\$512	8.60%	11,28%	\$5
2025	\$28	\$148	\$234	\$84	\$494	8.60%	11.29%	\$5

			incre	mental Cust	omer Costa			
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
2006	\$4.01	\$48	11.29%	\$5.42	\$32.81	11.29%	\$4	\$9
2007	\$4.11	\$49	11.29%	\$5,53	\$33.60	11.29%	\$4	\$9
2008	\$4.20	\$50	11.29%	\$5.64	\$34,40	11.29%	\$4	\$10
2009	\$4,31	\$52	11.29%	\$5.87	\$35.23	11.29%	\$4	\$10
2010	\$4,41	\$53	11.29%	\$5.98	\$36.07	11.29%	\$4	\$10
2011	\$4.51	\$54	11.29%	\$6.09	\$36.94	11.29%	\$4	\$10
2012	\$4.62	\$55	11.29%	\$6.21	\$37.83	11.29%	\$4	\$10
2013	\$4.73	\$57	11.29%	\$6.43	\$38.74	11.29%	\$4	\$11
2014	\$4,85	\$58	11.29%	\$6.55	\$39.66	11.29%	\$4	\$11
2015	\$4,96	\$60	11.29%	\$6.77	\$40.62	11,29%	\$5	\$11
2016	\$5.08	\$61	11.29%	\$6.88	\$41.59	11.29%	\$5	\$12
2017	\$5.21	\$62	11.29%	\$7.00	\$42.59	11.29%	\$5	\$12
2018	\$5,33	\$64	11.29%	\$7.22	\$43.61	11.29%	\$5	\$12
2019	\$5.46	\$65	11.29%	\$7.34	\$44.66	11.29%	\$5	\$12
2020	\$5.59	\$67	11.29%	\$7.56	\$45.73	11.29%	\$5	\$13
2021	\$5.72	\$69	11.29%	\$7.79	\$46.83	11.29%	\$5	\$13
2022	\$5.86	\$70	11.29%	\$7.90	\$47.95	11.29%	\$5	\$13
2023	\$6.00	\$72	11.29%	\$8,13	\$49.10	11.29%	\$6	\$14
2024	\$6.15	\$74	11.29%	\$8.35	\$50.28	11.29%	\$6	\$14
2025	\$6.29	\$76	11.29%	\$8.58	\$51.49	11.29%	\$8	\$14

Gas Costs						
1	2	3	2*3			
	Therms	Gas Supply	Gas Supply			
Year		Rate	Cost			
2006	50	0.9382	\$47			
2007	50	\$0.9607	\$48			
2008	50	\$0.9838	\$49			
2009	50	\$1.0074	\$50			
2010	50	\$1.0316	\$52			
2011	50	\$1,0563	\$53			
2012	50	\$1.0817	\$54			
2013	50	\$1,1076	\$55			
2014	50	\$1.1342	\$57			
2015	50	\$1.1614	\$58			
2016	50	\$1,1893	\$59			
2017	50	\$1.2179	\$61			
2018	50	\$1.2471	\$62			
2019	50	\$1.2770	\$64			
2020	50	\$1,3077	\$65			
2021	50	\$1,3390	\$67			
2022	50	\$1.3712	\$69			
2023	50	\$1,4041	\$70			
2024	50	\$1,4378	\$72			
2025	50	\$1,4723	\$74			

#### Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

#### Residential Appliance Retention Program

	Proposed <u>Allowance</u>	Participants Test	<u>RIM Tes</u> t
Gas Storage Tank Water Heating	\$350	1.45	1.28
Gas Tankless Water Heating	\$450	1.32	1.24
Gas Heating	\$350	1.12	1.29
Gas Clothes Drying	\$100	1.41	1.29
Gas Cooking	\$100	1.39	1.27

Summary of RIM Test and Participants Test Results

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

Residential Appliance Retention Program RIM Test and Participants Test Results

For

Storage Tank Water Heating

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Retention Program Participants Test - Cost Effective Results

Appliance Type
Storage Tank Water Heatin

Storage Tank Water Heating

			Benefits	3				Costs					
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas Customer Charge	TOTAL
		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
2005	1	\$536	\$350	\$36	\$922	\$259	(\$314)	\$250	\$36	\$175	\$115	\$63	\$585
2006	2	\$543	0	\$37	\$580	0	0	0	\$37	\$180	\$115	\$63	\$395
2007	3	\$550	0	\$38	\$588	0	0	0	\$38	\$184	\$115	\$63	\$401
2008	4	\$557	0	\$39	\$596	0	0	0	\$39	\$188	\$115	\$63	\$406
2009	5	\$564	0	\$40	\$604	0	0	0	\$40	\$193	\$115	\$63	\$411
2010	6	\$571	0	\$41	\$612	0	0	0	\$41	\$198	\$115	\$63	\$417
2011	7	\$578	0	\$42	\$620	0	0	0	\$42	\$202	\$115	\$63	\$423
2012	8	\$585	0	\$43	\$628	0	0	0	\$43	\$207	\$115	\$63	\$428
2013	9	\$592	0	\$44	\$636	0	0	0	\$44	\$212	\$115	\$63	\$434
2014	10	\$599	0	\$45	\$644	0	0	0	\$45	\$217	\$115	\$63	\$441
2015	11	\$607	0	\$46	\$652	0	0	0	\$46	\$222	\$115	\$63	\$447
2016	12	\$614	0	\$47	\$660	0	0	0	\$47	\$228	\$115	\$63	\$453
2017	13	\$621	0	\$48	\$669	0	0	0	\$48	\$233	\$115	\$63	\$460
2018	14	\$628	350	\$49	\$1,027	361	(438)	348	\$49	\$239	\$115	\$63	\$738
2019	15	\$635	0	\$50	\$685	0	0	0	\$50	\$245	\$115	\$63	\$473
2020	16	\$642	0	\$51	\$693	0	0	0	\$51	\$250	\$115	\$63	\$481
2021	17	\$649	0	\$53	\$702	0	0	0	\$53	\$256	\$115	\$63	\$488
2022	18	\$656	0	\$54	\$710	0	0	0	\$54	\$263	\$115	\$63	\$495
2023	19	\$663	0	\$55	\$718	0	0	0	\$55	\$269	\$115	\$63	\$503
2024	20	\$670	0	\$56	\$727	0	0	0	\$56	\$275	\$115	\$63	\$511

Present Value	
of Benefits	\$6,613

Present Value of Costs

\$4,503

Benefit/Cost 1.47 Ratio

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Retention Program Participants Test - Data

Appliance Type Storage Tank Water Heating

Escalation Rates O&M Expense 2.4% Fuel Rate 2.4% Electoric Fuel Adj 2.4%

	Electric KW	H Cost - T	able 1			Gas Suppl	Cost - Tal	ble 2		] [		Gas En	ergy Charg	e - Table 3	L	Ľ				Gas Custo	mer Charge	- Table 4		
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	Yea	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost		Year	Rate Per Therm	Annuat Therms	Tax Rate	Gas 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	<u>D</u>	8*C*(1+D)	A	B	C	D	8*C*(1+D)		A	8	c	D	B*C*(1+D)		_A	В	c	D	Е	D/E	G	C*(D/E)*(1+Z)
2006	\$0.1020	4,773	10%	\$536	200	\$0.9382	170	10%	\$175		2006	\$0.6175	170	10%	\$115		2006	\$12.50	\$150.00	170	443	38.37%	10%	<b>\$</b> 63
2007	\$0.1034	4,773	10%	\$543	200	\$0.9607	170	10%	\$180		2007	\$0.6175	170	10%	\$115		2007	\$12.50	\$150,00	170	443	38,37%	10%	\$63
2008	\$0.1047	4,773	10%	\$550	200	\$0.9838	170	10%	\$184		2008	\$0.6175	170	10%	\$115		2008	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2009	\$0.1061	4,773	10%	\$557	200	\$1.0074	170	10%	\$188		2009	\$0.6175	170	10%	\$115		2009	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2010	\$0.1074	4,773	10%	\$564	201	\$1.0316	170	10%	\$193		2010	\$0.6175	170	10%	\$115		2010	\$12,50	\$150.00	170	443	38.37%	10%	\$63
2011	\$0.1088	4,773	10%	\$571	201	\$1.0563	170	10%	\$198		2011	\$0.6175	170	10%	\$115		2011	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2012	50 1101	4,773	10%	\$578	201	\$1.0817	170	10%	\$202		2012	\$0.6175	170	10%	\$115		2012	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2013	\$0.1115	4,773	10%	\$585	201	\$1,1076	170	10%	\$207		2013	\$0.6175	170	10%	\$115		2013	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2014	\$0.1128	4,773	10%	\$592	201-	\$1.1342	170	10%	\$212		2014	\$0.6175	170	10%	\$115		2014	\$12.50	\$150.00	170	443	38,37%	10%	\$63
2015	\$0.1142	4,773	10%	\$599	201	5 \$1,1614	170	10%	\$217		2015	\$0,6175	170	10%	\$115		2015	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2016	\$0.1155	4,773	10%	\$607	201	s <b>\$1</b> ,1893	170	10%	\$222		2016	\$0.6175	170	10%	\$115		2016	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2017	\$0.1169	4,773	10%	\$614	201	\$1.2179	170	10%	\$228		2017	\$0.6175	170	10%	\$115		2017	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2018	\$0.1182	4,773	10%	\$621	201	\$1.2471	170	10%	\$233		2018	\$0.6175	170	10%	\$115		2018	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2019	\$0.1196	4,773	10%	\$628	201	\$1.2770	170	10%	\$239		2019	\$0.6175	170	10%	\$115		2019	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2020	\$0,1209	4,773	10%	\$635	202	\$1.3077	170	10%	\$245		2020	\$0.6175	170	10%	\$115		2020	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2021	\$0,1223	4,773	10%	\$642	202	\$1.3390	170	10%	\$250		2021	\$0.6175	170	10%	\$115		2021	\$12,50	\$150.00	170	443	38.37%	10%	\$63
2022	\$0.1236	4,773	10%	\$649	202	\$1.3712	170	10%	\$256		2022	\$0,6175	170	10%	\$115		2022	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2023	\$0.1250	4,773	10%	\$656	202	3 \$1,4041	170	10%	\$263		2023	\$0.6175	170	10%	\$115		2023	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2024	\$0.1263	4,773	10%	\$663	202	\$1.4378	170	10%	\$269		2024	\$0.6175	170	10%	\$115		2024	\$12.50	\$150.00	170	443	38.37%	10%	\$63
2025	\$0.1277	4,773	10%	\$670	202	5 \$1.4723	170	10%	\$275		2025	\$0.6175	170	10%	\$115		2025	\$12.50	\$150,00	170	443	38.37%	10%	\$63

# Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Retention 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
2002	\$105	\$159	\$58	\$322	\$159	\$0	\$0	\$352.55	\$512
2003	\$105	\$163	\$58	\$326	\$163	\$0	\$0	\$2.55	\$166
2004	\$105	\$167	\$58	\$330	\$167	\$0	\$0	\$2.55	\$170
2005	\$105	\$171	\$58	\$334	\$171	\$0	\$0	\$2.55	\$174
2006	\$105	\$175	\$58	\$338	\$175	\$0	\$0	\$2.55	\$178
2007	\$105	\$180	\$58	\$342	\$180	\$0	\$0	\$2.55	\$182
2008	\$105	\$184	\$58	\$346	\$184	\$0	\$0	\$2.55	\$186
2009	\$105	\$188	\$58	\$351	\$188	\$0	\$0	\$2.55	\$191
2010	\$105	\$193	\$58	\$355	\$193	\$0	\$0	\$2.55	\$195
2011	\$105	\$197	\$58	\$360	\$197	\$0	\$0	\$2.55	\$200
2012	\$105	\$202	\$58	\$365	\$202	\$0	\$0	\$2.55	\$205
2013	\$105	\$207	\$58	\$370	\$207	\$0	\$0	\$2.55	\$210
2014	\$105	\$212	\$58	\$375	\$212	\$0	\$0	\$2.55	\$215
2015	\$105	\$217	\$58	\$380	\$217	\$0	\$0	\$352.55	\$570
2016	\$105	\$222	\$58	\$385	\$222	\$0	\$0	\$2.55	\$225
2017	\$105	\$228	\$58	\$390	\$228	\$0	\$0	\$2.55	\$230
2018	\$105	\$233	\$58	\$396	\$233	\$0	\$0	\$2.55	\$236
2019	\$105	\$239	\$58	\$401	\$239	\$0	\$0	\$2.55	\$241
2020	\$105	\$244	\$58	\$407	\$244	\$0	\$0	\$2.55	\$247
2021	\$105	\$250	\$58	\$413	\$250	\$0	\$0	\$2.55	\$253

Present Value of Benefits

\$3,462

Present Value

of Costs

\$2,334

Benefit/Cost Ratio 1.48

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006

Residential Appliance Retention Program RIM Test - Calculated Data

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Customer Charge	peunsuog	Cusule	Change	1691
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895	%/£'8£	2120.00	05'21\$	2002
855	%46.86	00.0212	05'71\$	8002
222	%/£'8£	2120.00	05.212	600Z
222	%/£'8£	00'0515	05'71\$	0102
295	%/£'BE	2120.00	05.21\$	LLDZ
895	%/5.85	00.0212	\$15.50	2102
855	\$42.86	00.0212	05 215	£10Z
228	%/£'R£	00.0212	05.212	107
855	\$425.85	00'051\$	\$15,50	5102
155	%/£'8£	00'051\$	05'21\$	9102
295	%28.85	2120'00	212.50	2102
228	\$45.85	2120.00	05.215	BL07
895	\$12.85	00.0212	212.50	6107
805	%/E'85	00'051\$	215'20	0202
855	\$6/5.85	2120'00	09715	LZOZ
228	%/E'8E	00'051\$	05'215	2202
272	%/0'80	00'051\$	05.21\$	62023
895	%/£'8£	00'051\$	05'71\$	1707

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0815	E950'1\$	0/1	LIOZ
1915	1180.12	021	2102
8815	920115	021	\$10Z
2615	ZYE1'15	021	5102
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212\$	1/24215	0/1	2018
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5015	5/19'0\$	021	Z10Z
2102	5219'0\$	0/1	£10Z
5015	\$219'0\$	0/1	*L0Z
\$102	5/19'0\$	0/1	5102
2102	5/19'0\$	0/1	9102
501\$	5219'0\$	0/1	2102
5015	5/19/05	0/1	8102
2102	5/19:05	0/1	6102
5015	5/19:05	0/1	0202
5015	S/19'DS	021	1202
2102	S/19/05	0/1	2023
901\$	5/19/05	021	2024
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1215	\$1,0074	0/1	5003
5215	\$1.0318	021	2010
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\$8184	7180.12	0/1	2102
8815	9/01/15	024	2013
\$183	2121345	0/1	5014
2615	+191.12	0/1	SIOZ
202\$	21.1893	023	9102
102\$	8/12.12	0/1	2102
Z12\$	17.2471	071	2018
212\$	\$1.2770	0/1	5102
222\$	11:3077	0/1	5050
\$228	0666.12	041	1202
\$533	2175.12	041	2022
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\$244	8/24'15	0/1	5054

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WC         OS         OS         OS         OS           OS         %LC WC         OS         OS         OS         OS           OS         %LC WC         OS         OS         OS         OS           OS         %LC WS         OS         OS         OS         OS           OS         %LC WS         OS         OS         OS         OS           VALS WS         OS         OS         OS         OS         OS           VALS WS         OS         OS         OS         OS         OS           VALS WS         OS         OS         OS         OS         OS           OS         %LC WS         OS         OS         OS         OS           OS         %LC WS         OS         OS <td>36 31.0%         20         36 31.0%         20         36 31.0%         20           36 31.0%         30         36 31.0%         20         36 31.0%         20           36 31.0%         30         36 31.0%         30         36 31.0%         20           36 31.0%         30         36 31.0%         30         36 31.0%         20           36 31.0%         30         36         36 31.0%         20&lt;</td> <td>20         39'1, M'         80         80         90'1, M'         80         80         92'1, M'         80           20         39'1, M'         80         80         39'1, M'         80         80'1, M'         80'1, M'<!--</td--><td>ODS         %LC 98C         ODS         ODS         %LC 98C         ODS         MC 98C         ODS         ODS         %LC 98C         ODS         ODS         %LC 98C         ODS         ODS         MC 98C         ODS         ODS         MC 98C         ODS         ODS         MC 98C         MC 98C         ODS         MC 98C         MC 98C</td></td>	36 31.0%         20         36 31.0%         20         36 31.0%         20           36 31.0%         30         36 31.0%         20         36 31.0%         20           36 31.0%         30         36 31.0%         30         36 31.0%         20           36 31.0%         30         36 31.0%         30         36 31.0%         20           36 31.0%         30         36         36 31.0%         20<	20         39'1, M'         80         80         90'1, M'         80         80         92'1, M'         80           20         39'1, M'         80         80         39'1, M'         80         80'1, M'         80'1, M' </td <td>ODS         %LC 98C         ODS         ODS         %LC 98C         ODS         MC 98C         ODS         ODS         %LC 98C         ODS         ODS         %LC 98C         ODS         ODS         MC 98C         ODS         ODS         MC 98C         ODS         ODS         MC 98C         MC 98C         ODS         MC 98C         MC 98C</td>	ODS         %LC 98C         ODS         ODS         %LC 98C         ODS         MC 98C         ODS         ODS         %LC 98C         ODS         ODS         %LC 98C         ODS         ODS         MC 98C         ODS         ODS         MC 98C         ODS         ODS         MC 98C         MC 98C         ODS         MC 98C        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0\$	38.37%	%09.8	0\$	0\$	0\$	0\$	0\$	\$203

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# Exhibit A

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

**Residential Appliance Retention Program** RIM Test and Participants Test Results

For

Tankless Water Heating

### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Retention Program Participants Test - Cost Effective Results

Appliance Type	
Tankless Water Heating	

			Benefits	i					Costs				
Year	Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gas Appliance O & M	Gas Supply Cost	Gas Energy Charge	Gas 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
2005	1	\$536	\$450	\$36	\$1,022	\$950	(\$314)	\$250	\$36	\$155	\$102	\$59	\$1,237
2006	2	\$543	0	\$37	\$580	0	0	0	\$37	\$155	\$104	\$59	\$355
2007	3	\$550	0	\$38	\$588	0	0	0	\$38	\$155	\$107	\$59	\$358
2008	4	\$557	0	\$39	\$596	0	0	0	\$39	\$155	\$109	\$59	\$361
2009	5	\$564	0	\$40	\$604	0	0	0	\$40	\$155	\$112	\$59	\$365
2010	6	\$571	0	\$41	\$612	0	0	0	\$41	\$155	\$115	\$59	\$369
2011	7	\$578	0	\$42	\$620	0	0	0	\$42	\$155	\$117	\$59	\$372
2012	8	\$585	0	\$43	\$628	0	0	0	\$43	\$155	\$120	\$59	\$376
2013	9	\$592	0	\$44	\$636	0	0	0	\$44	\$155	\$123	\$59	\$380
2014	10	\$599	0	\$45	\$644	0	0	0	\$45	\$155	\$126	\$59	\$384
2015	11	\$607	0	\$46	\$652	0	0	0	\$46	\$155	\$129	\$59	\$388
2016	12	\$614	0	\$47	\$660	0	0	0	\$47	\$155	\$132	\$59	\$392
2017	13	\$621	0	\$48	\$669	0	0	0	\$48	\$155	\$135	\$59	\$397
2018	14	\$628	0	\$49	\$677	0	0	0	\$49	\$155	\$139	\$59	\$401
2019	15	\$635	0	\$50	\$685	0	0	0	\$50	\$155	\$142	\$59	\$406
2020	16	\$642	0	\$51	\$693	0	0	0	\$51	\$155	\$145	\$59	\$410
2021	17	\$649	0	\$53	\$702	0	0	0	\$53	\$155	\$149	\$59	\$415
2022	18	\$656	0	\$54	\$710	0	0	0	\$54	\$155	\$152	\$59	\$420
2023	19	\$663	0	\$55	\$718	0	0	0	\$55	\$155	\$156	\$59	\$425
2024	20	\$670	450	\$56	\$1,177	1,527	(505)	402	\$56	\$155	\$160	\$59	\$1,853

Present Value

s \$6,683

Present Value of Costs

\$4,834

Benefit/Cost 1.38 Ratio

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Retention Program Participants Test - Data

	Applian			4										
Ta	inkless Wa	ater Heatir	ng	]										
Escalation Rates O&M Expenses Electric fuel Adj	2.4%		Fuel Rates	2.4%										
	Electric	KWH Cost - T	able 1			Gas Su	pply Cost -	Table 2			Gas E	nergy Charg	e - Tabie 3	_
Year	Cost Per KWH	Annual KWH	Tax Rate	Electric Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Y=	ar Rate Per Therm	Annual Therms	Tax Rate	,
Α	B	с	D	B*C*(1+D)	A	B	с	D	B*C*(1+D)	_	8	c	D	_
2006	\$0.1020	4,773	10.00%	\$536	2006	\$0.9382	150	10,00%	\$155	20	6 <b>\$</b> 0.6175	150	10.00%	
2007	\$0.1034	4,773	10.00%	\$543	2007	\$0.9382	150	10.00%	\$155	20	\$0.6323	150	10.00%	
2008	\$0.1047	4,773	10.00%	\$550	2008	\$0.9382	150	10.00%	\$155	20	8 \$0.6475	150	10.00%	,
2009	\$0,1061	4,773	10.00%	\$557	2009	\$0.9382	150	10.00%	\$155	20	9 \$0.6630	150	10.00%	
2010	\$0.1074	4,773	10.00%	\$564	2010	\$0.9382	150	10.00%	\$155	20	0 \$0.6789	150	10.00%	
2011	\$0,1088	4,773	10.00%	\$571	2011	\$0.9382	150	10.00%	\$155	20	11 <b>\$</b> 0.6952	150	10.00%	,
2012	\$0.1101	4,773	10.00%	\$578	2012	\$0,9382	150	10.00%	\$155	20	12 \$0.7119	150	10.00%	
2013	\$0.1115	4,773	10.00%	\$585	2013	\$0.9382	150	10.00%	\$155	20	13 \$0.7290	150	10.00%	
2014	\$0.1128	4,773	10,00%	\$592	2014	\$0,9382	150	10.00%	\$155	20	4 \$0,7465	150	10.00%	,
2015	\$0.1142	4,773	10.00%	\$599	2015	\$0.9382	150	10.00%	\$155	20	15 <b>\$</b> 0.7644	150	10.00%	,
2016	\$0.1155	4,773	10.00%	\$607	2016	\$0.9382	150	10.00%	\$155	20	16 \$0.7828	150	10.00%	,
2017	\$0,1169	4,773	10,00%	\$614	2017	\$0.9382	150	10.00%	\$155	20	7 <b>\$0.8016</b>	150	10.00%	i
2018	\$0.1182	4,773	10.00%	\$621	2018	\$0.9382	150	10.00%	\$155	20	\$0.8208	150	10.00%	5
2019	\$0,1196	4,773	10.00%	\$628	2019	\$0.9382	150	10.00%	\$155	20	19 \$0.8405	150	10.00%	5
2020	\$0.1209	4,773	10.00%	\$635	2020	\$0.9382	150	10.00%	\$155	20	20 \$0.8607	150	10.00%	ż
2021	\$0.1223	4,773	10.00%	\$642	2021	\$0.9382	150	10.00%	\$155	20	21 \$0.8813	150	10.00%	
2022	\$0.1236	4,773	10.00%	\$649	2022	\$0.9382	150	10.00%	\$155	20	\$0,9025	150	10.00%	5
2023	\$0.1250	4,773	10.00%	\$658	2023	\$0.9382	150	10.00%	\$155	20	23 \$0.9241	150	10.00%	
2024	\$0.1263	4,773	10.00%	\$663	2024	\$0.9382	150	10.00%	\$155	20	24 \$0.9463	150	10.00%	5
2025	\$0,1277	4,773	10.00%	\$670	2025	\$0.9382	150	10.00%	\$155	20	25 \$0,9690	150	10.00%	

_		ł				s Customer				
	Gas Cost		Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annuat Therms	Total Annual Therms	Ratio - Appliance to Total	7ax Rate	Pro-Rated Customer Charge
	B*C*(1+D)		A	в	с	, D	E	D/E	G	C*(D/E)*(1+Z)
	\$102		2006	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$104		2007	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$107		2008	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$109		2009	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$112		2010	\$12.50	\$150,00	150	423	35.46%	10.00%	\$59
	\$115		2011	\$12.50	\$150,00	150	423	35.46%	10.00%	\$59
	\$117		2012	\$12.50	\$150.00	150	423	35,46%	10.00%	\$59
	\$120		2013	\$12,50	\$150.00	150	423	35.46%	10.00%	\$59
	\$123		2014	\$12,50	\$150.00	150	423	35.46%	10.00%	\$59
	\$126		2015	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$129		2016	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$132		2017	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$135		2018	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$139		2019	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$142		2020	\$12.50	\$150.00	150	423	35,46%	10.00%	\$59
	\$145		2021	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$149		2022	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$152		2023	\$12.50	\$150.00	150	423	35.46%	10.00%	\$59
	\$156		2024	\$12.50	\$150.00	150	423	35,48%	10.00%	\$59
	\$160		2025	\$12.50	\$150.00	150	423	35,46%	10.00%	\$59

1

# Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 Residential Appliance Retention 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
2002	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$452.55	\$593
2003	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2004	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2005	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2006	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2007	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2008	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2009	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2010	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2011	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2012	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2013	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2014	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2015	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2016	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2017	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2018	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2019	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2020	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$2.55	\$143
2021	\$93	\$141	\$53	\$287	\$141	\$0	\$0	\$452.55	\$593

Present Value of Benefits

\$2,813

Present Value of Costs

\$1,920

Benefit/Cost	
Ratio	1.47

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing 2006 **Residential Appliance Retention Program RIM Test - Calculated Data**

3.30% 3.30% 3,60% 3.90%

Appliance Type
Tankless Water Heating

 Therms
 Base Rate

 150
 \$0,6175

 150
 \$0,6175

 150
 \$0,6175

 150
 \$0,6175

 150
 \$0,6175

 150
 \$0,8175

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 \$0,8175

 150
 \$0,8175

Revenue - Energy Cha	rge	Revenue - Cost o
Table 1		Table 1a
O&M Escalator	2.4%	Depreciation Rate - Meter
Gas Customer Charge Escalator	0%	Depreciation Rate - Service Line
Gas Energy Charge Escalator	0%	Depreciation Rate - Development Main
Fuel Rate Escalator	2.4%	Depreciation Rate - Supply Main

.

1	Revenue - Cos 2	4	2*3
<u>`</u>	2	••••	23
Year	Therms	Fuel Rate	Total Cha
2006	150	\$0.9382	\$141
2007	150	\$0,9382	\$141
2008	150	\$0.9382	\$141
2009	150	\$0.9382	\$141
2010	150	\$0,9382	\$141
2011	150	\$0,9382	\$141
2012	150	\$0,9382	\$141
2013	150	\$0.9382	\$141
2014	150	\$0,9382	\$141
2015	150	\$0,9382	\$141
2016	150	\$0,9362	\$141
2017	150	\$0.9382	\$141
2018	150	\$0.9382	\$141
2019	150	\$0.9382	\$141
2020	150	\$0.9382	\$141
2021	150	\$0.9382	\$141
2022	150	\$0,9382	\$141
2023	150	\$0.9382	\$141
2024	150	\$0.9382	\$141
2025	150	\$0,9382	\$141

	Re	venue - Custom	er Charge	
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Customer	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2006	\$12.50	\$150.00	35.46%	\$53
2007	\$12.50	\$150.00	35.46%	\$53
2008	\$12.50	\$150.00	35.46%	\$53
2009	\$12,50	\$150.00	35.46%	\$53
2010	\$12.50	\$150.00	35.46%	\$53
2011	\$12.50	\$150.00	35.48%	\$53
2012	\$12,50	\$150.00	35.45%	\$53
2013	\$12.50	\$150.00	35.48%	\$53
2014	\$12.50	\$150.00	35.46%	\$53
2015	\$12.50	\$150.00	35.46%	\$53
2016	\$12.50	\$150.00	35.48%	\$53
2017	\$12.50	\$150.00	35.46%	\$53
2018	\$12,50	\$150.00	35.46%	\$53
2019	\$12.50	\$150.00	35.46%	\$53
2020	\$12.50	\$150.00	35.46%	\$53
2021	\$12.50	\$150.00	35.46%	\$53
2022	\$12.50	\$150.00	35.46%	\$53
2023	\$12.50	\$150.00	35,46%	\$53
2024	\$12.50	\$150.00	35.46%	\$53
2025	\$12,50	\$150.00	35,46%	\$53

			line	vestment C	arrying Cost	8		
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
2006	\$0	\$0	\$0	\$0	\$0	8.60%	35,46%	\$0
2007	\$0	\$0	\$0	\$0	\$0	8,60%	35.46%	\$0
2008	\$0	\$0	\$0	\$0	\$0	8,60%	35,46%	\$0
2009	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2010	\$0	\$0	\$0	\$0	\$0	8.60%	35,46%	\$0
2011	\$0	\$0	\$0	\$0	\$0	8,60%	35.46%	\$0
2012	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2013	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2014	\$0	\$0	\$0	\$0	\$0	8.60%	35,46%	\$0
2015	\$0	\$0	\$0	\$0	\$0 S	8.60%	35,46%	\$0
2016	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2017	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	50
2018	\$0	\$0	\$0	\$0	\$0	8,60%	35.46%	\$0
2019	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2020	\$0	\$0	\$0	\$0	\$0	8.60%	35,46%	\$0
2021	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2022	\$0	\$0	\$0	\$0	\$0	8,60%	35.46%	\$0
2023	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2024	\$0	\$0	\$0	\$0	\$0	8.60%	35.46%	\$0
2025	\$0	50	\$0	\$0	50	8.60%	35.45%	\$0

			Incre	mental Cust	omer Cos	ts		
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annuai	Ratio Therms To	Annual Ratio	Annuai	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
2006	\$0.00	\$0	35.46%	\$0	\$0	35,46%	\$0	\$0
2007	\$0.00	\$0	35.46%	\$0	\$0	35.46%	\$0	\$0
2008	\$0.00	\$0	35.46%	\$0	\$0	35,46%	\$0	\$0
2009	\$0.00	\$0	35,46%	\$0	\$0	35.46%	\$0	\$0
2010	\$0.00	\$0	35.46%	\$0	\$0	35.46%	\$0	\$0
2011	\$0.00	\$0	35.46%	\$0	\$0	35,46%	\$0	\$0
2012	\$0.00	\$0	35,46%	\$0	\$0	35.46%	\$0	\$0
2013	\$0.00	\$0	35.46%	\$0	\$0	35,46%	\$0	\$0
2014	\$0.00	\$0	35.46%	\$0	\$0	35.46%	\$0	\$0
2015	\$0.00	\$0	35.46%	\$0	\$0	35.46%	\$0	\$0
2016	\$0.00	\$0	35.46%	\$0	\$0	35.46%	\$0	\$0
2017	\$0.00	\$0	35.46%	\$0	\$0	35,46%	\$0	\$0
2018	\$0.00	\$0	35.46%	\$0	\$0	35.46%	\$0	\$0
2019	\$0.00	\$0	35.46%	\$0	\$0	35,46%	\$0	\$0
2020	\$0.00	\$0	35,46%	\$0	\$0	35.46%	\$0	\$0
2021	\$0.00	\$0	35.48%	\$0	\$0	35.46%	\$0	\$0
2022	\$0,00	\$0	35.48%	\$0	\$0	35.46%	\$0 -	\$0
2023	\$0.00	\$0	35.48%	\$0	\$0	35.45%	\$0	\$0
2024	\$0.00	\$0	35.48%	\$0	\$0	35.46%	\$0	\$0
2025	\$0.00	\$0	35,46%	\$0	\$0	35.46%	\$0	\$0

	Gas C	Costs	
1	2	3	2*3
	Therms	Gas Supply	Gas Suppl
Year		Rate	Cost
2006	150	0.9382	\$141
2007	150	\$0,9382	\$141
2008	150	\$0,9382	\$141
2009	150	\$0.9382	\$141
2010	150	\$0.9382	\$141
2011	150	\$0,9382	\$141
2012	150	\$0.9382	\$141
2013	150	\$0.9382	\$141
2014	150	\$0.9382	\$141
2015	150	\$0.9382	\$141
2016	150	\$0.9382	\$141
2017	150	\$0,9382	\$141
2018	150	\$0.9382	\$141
2019	150	\$0.9382	\$141
2020	150	\$0.9382	\$141
2021	150	\$0.9382	\$141
2022	150	\$0.9382	\$141
2023	150	\$0.9382	\$141
2024	150	\$0,9382	\$141
2025	150	\$0.9382	\$141

רווער ובאנמווע ד אhibit A ב

Corporation Florida Division Chesapeake Utilities servation Program Energy Con<sub>3</sub>mber, 2006 Dece

ance Retention Program Residential Appliarticipants Test Results

For

Heating Systems

# Chesapeake Utilities Corporation Florida Division - Energy Inservation Filing 2006CcResidential Appliance Retention ProgmraiParticipants Test - Cost Effective Restsult

Appliance Type

Heating System

		Benefits	· · · · · · · · · · · · · · · · · · ·					Costs				
Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	(Appliance ) & M	Gas Supply Cost	Gas Energy Charge	Gas Customeßas , Charge (	TOTAL COSTS
	Table 1								Table 2	Table 3	Table 4	
2	3	4	5	3 thru 6	7	8	9	10	11	12	13	7 thru 13
1	\$353	\$350	\$192	\$895	\$2,052	(\$3,850)	\$1,648	§192	\$184	\$121	\$66 ;	\$413
2	\$358	0	\$197	\$555	0	0	0	\$197	\$188	\$121	\$66	\$572
3	\$363	0	\$201	\$564	0	0	0	\$201	\$193	\$121	\$66	\$581
4	\$368	0	\$206	\$574	0	0	0	\$206	\$197	\$121	\$66 :	\$591
5	\$372	0	\$211	\$583	0	0	0	\$211	\$202	\$121	\$66	\$600
6	\$377	0	\$216	\$593	0	0	0	\$216	\$207	\$121	\$66 :	\$610
7	\$382	0	\$221	\$603	0	0	0	\$221	\$212	\$121	\$66	\$620
8	\$386	0	\$227	\$613	0	0	0	\$227	\$217	\$121	\$66	\$631
9	\$391	0	\$232	\$623	0	0	0	\$232	\$222	\$121	\$66	\$641
10	\$396	0	\$238	\$633	0	0	0	\$238	\$227	\$121	\$66	\$652
11	\$400	0	\$243	\$644	0	0	0	\$243	\$233	\$121	\$66	\$663
12	\$405	0	\$249	\$654	0	0	0	\$249	\$238	\$121	\$66	\$675
13	\$410	0	\$255	\$665	0	0	0	\$255	\$244	\$121	\$66	\$687
14	\$414	0	\$261	\$676	0	0	0	\$261	\$250	\$121	\$66	\$699
15	\$419	350	\$268	\$1,037	2,929	(5,495)	2,352	\$268	\$256	\$121	\$66	\$497
16	\$424	0	\$274	\$698	0	0	0	\$274	\$262	\$121	\$66	\$723
17	\$428	0	\$281	\$709	0	0	0	\$281	\$268	\$121	\$66	\$736
18	\$433	0	\$287	\$720	0	0	0	\$287	\$275	\$121	\$66	\$749
19	\$438	0	\$294	\$732	0	0	0	\$294	\$282	\$121	\$66	\$763
20	\$442	0	\$301	\$744	0	0	0	\$301	\$288	\$121	\$66	\$777

Present Value \$6,475

of Benefits

\$6,028

\_

Benefit/Cost 1.07 Ratio

Present Value

of Costs

#### Chesapeake Utilities Corporation Florida Division - Energy Conservatioling 2006 Residential Appliance Retention Program Participants Test - Data

e Type System

E G Fuel Rates 2.4%

WH Cost - Tab	le 1		L	Gas S	pply Cost -	Table 2			Gas E	nergy Charge	- Table 3				G	Gas Custome	r Charge -	Table 4		
Annual KWH	Tax Rate	Electric Cost	Year	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Year	Rate Per Therm	Annual Therms	Tax Rate	Gas Cost	Year	Monthiy Customer Charge	Annuel Customer Charge	Appliance Annual Therms	Total Annual Thems	Ratio - Appliance to Total	Tax	Pro-Rated Customer Charg
с	D	B*C*(1+D)	A	В	c	D	B*C*(1+D)	A	B	c	D	B*C*(1+D)	A	В	с	D	E	D/E		C*(D/E)*(1+Z)
3,150	10.00%	\$353	2006	\$0.9382	178	10.00%	\$184	2006	\$0.6175	178	10.00%	\$121	2006	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$358	2007	\$0.9607	178	10.00%	\$188	2007	\$0.6175	178	10.00%	\$121	2007	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$363	2008	\$0,9838	178	10.00%	\$193	2008	\$0.6175	178	10.00%	\$121	2008	\$12.50	\$150,00	178	443	40.18%	10.	\$66
3,150	10.00%	\$368	2009	\$1.0074	178	10.00%	\$197	2009	\$0,6175	178	10.00%	\$121	2009	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$372	2010	\$1.0316	178	10.00%	\$202	2010	\$0.6175	178	10.00%	\$121	2010	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$377	2011	\$1.0563	178	10.00%	\$207	2011	\$0.6175	178	10.00%	\$121	2011	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$382	2012	\$1.0817	178	10.00%	\$212	2012	\$0.6175	178	10.00%	\$121	2012	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10,00%	\$386	2013	\$1.1076	178	10.00%	\$217	2013	\$0.6175	178	10.00%	\$121	2013	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10,00%	\$391	2014	\$1.1342	178	10.00%	\$222	2014	\$0.6175	178	10.00%	\$121	2014	\$12.50	\$150.00	178	443	40.18%	10	\$66
3,150	10.00%	\$396	2015	\$1.1614	178	10.00%	\$227	2015	\$0.6175	178	10.00%	\$121	2015	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$400	2016	\$1.1893	178	10.00%	\$233	2016	\$0.6175	178	10.00%	\$121	2016	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$405	2017	\$1.2179	178	10.00%	\$238	2017	\$0.6175	178	10.00%	\$121	2017	\$12.50	\$150.00	178	443	40.18%	10	\$66
3,150	10.00%	\$410	2018	\$1.2471	178	10.00%	\$244	2016	\$0.6175	178	10.00%	\$121	2018	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$414	2019	\$1,2770	178	10.00%	\$250	2019	\$0.6175	178	10.00%	\$121	2019	\$12.50	\$150.00	178	443	40.18%	10	\$66
3,150	10,00%	\$419	2020	\$1,3077	178	10.00%	\$256	2020	\$0.6175	178	10.00%	\$121	2020	\$12.50	\$150.00	178	443	40.18%	10	\$66
3,150	10.00%	\$424	2021	\$1,3390	178	10.00%	\$262	202	\$0.6175	178	10.00%	\$121	2021	\$12.50	\$150.00	178	443	40.18%	10.	\$66
3,150	10.00%	\$428	2022	\$1,3712	178	10,00%	\$268	2022		178	10.00%	\$121	2022	\$12.50	\$150.00	178	443	40.18%	10	\$66
3,150	10.00%	\$433	2023	\$1,4041	178	10.00%	\$275	2023		178	10.00%	\$121	2023	\$12.50	\$150.00	178	443	40.18%	10	\$66
3,150	10.00%	\$438	2024	\$1,4378	178	10.00%	\$282	2024	• • • • • •	178	10.00%	\$121	2024	\$12.50	\$150.00	178	443	40.18%	10	\$66
3,150	10.00%	\$442	2024	\$1,4723	178	10.00%	\$288	202		178	10.00%		2025	\$12.50	\$150.00	178	443	40,18%	10	\$66

#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Fil2006 Residential Appliance Retention Program RIM Test - Calculated Data



Fuel Rat 2.4% Gas Ene 0% Gas Cus 0% O&M Es 2.4% Table 1

1:\*3

Depreciation Rate - Supply Main Depreciation Rate - Development Main Depreciation Rate - Service Une Depreciation Rate - Meter 3.30% 3.30% 3.60% 3.90%

	Revenue - Cos		
t	2		2*3
	_		
Year 2006	Therms 178	Fuel Rate	Total Charge
2008	178	\$0.9382	\$167
2007	178	\$0,9607	\$171
		\$0.9838	\$175
2009	178	\$1.0074	\$179
2010	178	\$1.0316	\$184
2011	178	\$1.0563	\$188
2012	178	\$1,0817	\$193
2013	178	\$1,1076	\$197
2014	178	\$1.1342	\$202
2015	178	\$1.1614	\$207
2016	178	\$1.1893	\$212
2017	178	\$1,2179	\$217
2018	178	\$1.2471	\$222
2019	178	\$1.2770	\$227
2020	178	\$1,3077	\$233
2021	178	\$1.3390	\$238
2022	178	\$1.3712	\$244
2023	178	\$1,4041	\$250
2024	178	\$1,4378	\$256
2025	178	\$1,4723	\$262

T	ible 2				
		R	evenue - Cu	er Charge	
	1	2	3	4	4'3
		Monthly		Ratio Therms	
		Customer	Annual Cus	To Total	Prorated Annual
	Year	Charge	Charge	Consumed	Customer Charge
	2006	\$12,50	\$150.0	40.18%	\$60
	2007	\$12.50	\$150.0	40,18%	\$60
	2008	\$12.50	\$150.0	40.18%	\$60
	2009	\$12.50	\$150.0	40,18%	\$60
	2010	\$12.50	\$150.0	40.18%	\$60
	2011	\$12,50	\$150.0	40.18%	\$60
	2012	\$12.50	\$150.0	40,18%	\$60
	2013	\$12,50	\$150.0	40,18%	560
	2014	\$12,50	\$150.0	40,18%	\$60
	2015	\$12.50	\$150.0	40.18%	\$60
	2016	\$12,50	\$150.0	40.15%	\$60
	2017	\$12,50	\$150.0	40.18%	\$60
	2018	\$12,50	\$150.0	40.18%	\$60
	2019	\$12,50	\$150,0	40.16%	\$60
	2020	\$12,50	\$150.0	40.18%	\$60
	2021	\$12.50	\$150.0	40.18%	\$60
	2022	\$12,50	\$150.0	40.18%	\$60
	2023	\$12.50	\$150.0	40.18%	\$60
	2024	\$12.50	\$150.0	40,18%	\$60
	2025	\$12.50	\$150.0	40.18%	\$60

Gas Cost

In	vestment C	arrying Cost	5		
14	5	8	7	8	6-7-8
vice		Total	Cost	Ratio of Therms	Investment
Yeinø	Meter	Investment	of Debi	Consumed To Total	Carrying Cos
2060	\$0	\$0	8.60%	40.18%	\$0
2060	\$0	\$0	8.60%	40.18%	\$0
2060	\$0	\$0	8.60%	40,18%	\$0
2050	\$0	\$0	8.60%	40.18%	\$0
20\$0	\$0	\$0	8.60%	40.18%	\$0
20\$0	\$0	\$0	6.60%	40.18%	\$0
20\$0	\$0	\$0	8.60%	40.18%	\$0
2050	\$0	\$0	8.60%	40.18%	\$0
20\$0	\$0	\$0	8.60%	40.18%	\$0
20\$0	\$0	\$0	8,60%	40,18%	\$0
20\$0	\$0	\$0	8.60%	40.18%	\$0
20\$0	\$0	\$0	8.60%	40.18%	\$0
2050	\$0	\$0	8.60%	40,18%	\$0
20\$0	\$0	\$0	8.60%	40.18%	\$0
2050	\$0	\$0	8,60%	40,18%	\$0
20\$0	\$0	\$0	8.60%	40,18%	\$0
20\$0	\$0	\$0	8.60%	40.18%	\$0
20\$0	\$0	\$0	6,60%	40,18%	\$0
20\$0	\$0	\$0	8.60%	40,18%	\$0
2050	\$0	\$0	8.60%	40,18%	\$0

			Incre	emental Cusi	tomer Cos	s		
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therr	Annual Ratio	Total Incrementa
Year	Adm, Cosl	Adm. Cost	Total Consumed	Adm. Cast	O&M Cost	Total Cons	O&M Cost	Adm. & O&M Cost
2006	\$0.00	\$0	40.18%	\$0	\$0	40.185	\$0	\$0
2007	\$0.00	\$0	40,18%	\$0	\$0	40,189	\$0	\$0
2008	\$0.00	\$0	40.18%	\$0	\$0	40,189	\$0	\$0
2009	\$0.00	\$0	40.18%	\$0	\$0	40.189	\$0	\$0
2010	\$0.00	\$0	40.18%	\$0	\$0	40,185	\$0	\$0
2011	\$0.00	\$0	40.18%	\$0	\$0	40,189	\$0	\$0
2012	\$0.00	\$0	40.18%	\$0	\$0	40.181	\$0	\$0
2013	\$0.00	\$0	40.18%	\$0	\$0	40,189	\$0	\$0
2014	\$0.00	\$0	40.18%	\$0	\$0	40,189	\$0	\$0
2015	\$0.00	\$0	40.18%	\$0	\$0	40,185	\$0	\$0
2016	\$0.00	\$0	40.18%	\$0	\$0	40.189	\$0	\$0
2017	\$0.00	\$0	40.18%	\$0	\$0	40.189	\$0	\$0
2018	\$0.00	\$0	40,18%	\$0	\$0	40,189	\$0	\$0
2019	\$0.00	\$0	40.18%	\$0	\$0	40,189	\$0	\$0
2020	\$0,00	\$0	40.18%	\$0	\$0	40,181	\$0	50
2021	\$0,00	\$0	40.18%	\$0	\$0	40.189	\$0	\$0
2022	\$0.00	\$0	40.18%	\$0	\$0	40.18%	\$0	\$0
2023	\$0.00	\$0	40.18%	\$0	\$0	40.189	\$0	\$0
2024	\$0.00	\$D	40,18%	\$0	\$0	40.18	\$0	\$0
2025	\$0,00	\$0	40.18%	\$0	\$0	40,189	\$0	\$0

	Gas	Cost	
1	2		2*3
	Therms	Gains To ly	Gas Supply
Year		umed	Cost
2008	178	06	\$167
2007	178	\$6	\$171
2008	178	\$6	\$175
2009	178	\$6	\$179
2010	178	\$6	\$184
2011	178	56	\$188
2012	178	56	\$193
2013	178	56	\$197
2014	178	\$6	\$202
2015	178	54	\$267
2016	178	\$6	\$212
2017	178	\$6	\$217
2018	178	\$6	\$222
2019	178	54	\$227
2020	178	\$%	\$233
2021	178	\$6	\$238
2022	178	56	\$244
2023	178	\$4	\$250
2024	178	\$6	\$256
2025	178	56	\$262

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# sapeake Utilities Corporation Florida Division - Energy Colervation Filing 2006 Residential Appliance Retention Program RIM Test - Results

се Туре

System

nental	Incremental	Incremental	Total	Gas	Investment	Incrental			e
enue	Revenue	Revenue	Gas	Supply	Carrying	Cuner	Program	Total	s
Charge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	(ts	Cost	Costs	2
le 1	Table 1A	Table 2		Table 5	Table 3	Ta 4			a
2	3	4	2 thru 4	6	7		9	6 thru 9	- -
10	\$167	\$60	\$337	\$167	\$0		\$352.67	\$520	-
10	\$171	\$60	\$341	\$171	\$0		\$2.67	\$174	
10	\$175	\$60	\$345	\$175	\$0		\$2.67	\$178	
10	\$179	\$60	\$350	\$179	\$0		\$2.67	\$182	
10	\$184	\$60	\$354	\$184	\$0		\$2.67	\$186	
10	\$188	\$60	\$358	\$188	\$0		\$2.67	\$191	
10	\$193	\$60	\$363	\$193	\$0		\$2.67	\$195	
10	\$197	\$60	\$367	\$197	\$0		\$2.67	\$200	
10	\$202	\$60	\$372	\$202	\$0		\$2.67	\$205	
10	\$207	\$60	\$377	\$207	\$0		\$2.67	\$209	
10	\$212	\$60	\$382	\$212	\$0		\$2.67	\$214	
10	\$217	\$60	\$387	\$217	\$0		\$2.67	\$219	
10	\$222	\$60	\$392	\$222	\$0		\$2.67	\$225	
10	\$227	\$60	\$397	\$227	\$0		\$2.67	\$230	
10	\$23 <b>3</b>	\$60	\$403	\$233	\$0		\$352.67	\$585	
10	\$238	\$60	\$409	\$238	\$0		\$2.67	\$241	
10	\$244	\$60	\$414	\$244	\$0		\$2.67	\$247	
10	\$250	\$60	\$420	\$250	\$0		\$2.67	\$253	
10	\$256	\$60	\$426	\$256	\$0		\$2.67	\$259	
10	\$262	\$60	\$432	\$262	\$0		\$2.67	\$265	

Present Value of Benefits

\$3,625

Present ue \$2,415 of Costs Ben/Cost 1.50 lio

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Rat

# RIM Test and Participants Test Results Exhibit A

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

# Residential Appliance, Retention, Program

For

**Cooking Appliances** 

#### Chesapeake Utilities Corporation Florida Division - Energy >nservation Filing 2006 Cc **Residential Appliance Retention Progm** rai Participants Test - Cost Effective Rests ult

**Appliance Type** 

Cooking

		Benefits						Costs				1	
Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	Gippliance & M	Gas Supply Cost	Gas Energy Charge	Gas Customeras Charge (	S	TOTAL COSTS
	Table 1								Table 2	Table 3	Table 4		
2	3	4	5	3 thru 6	7	8	9	10	11	12	13	-	7 thru 13
1	\$147	\$100	\$36	\$283	\$449	(\$574)	\$200	336	\$46	\$31	\$17	1	\$205
2	\$149	0	\$37	\$186	0	0	0	\$37	\$46	\$31	\$17	1	\$131
3	\$151	0	\$38	\$189	0	0	0	\$38	\$46	\$32	\$17	5	\$133
4	\$153	0	\$39	\$191	0	0	0	\$39	\$46	\$33	\$17	\$	\$135
5	\$155	0	\$40	\$194	0	0	0	\$40	\$46	\$34	\$17	\$	\$136
6	\$157	0	\$41	\$197	0	0	0	641	\$46	\$34	\$17	\$	\$138
7	\$159	0	\$42	\$200	0	0	0	\$42	\$46	\$35	\$17	1	\$140
8	\$161	0	\$43	\$203	0	0	0	\$43	\$46	\$36	\$17	٩	\$142
9	\$163	0	\$44	\$206	0	0	0	<b>544</b>	\$46	\$37	\$17	1	\$144
10	\$165	0	\$45	\$209	0	0	0	\$45	\$46	\$38	\$17	5	\$146
11	\$166	0	\$46	\$212	0	0	0	\$46	\$46	\$39	\$17	ę	\$148
12	\$168	0	\$47	\$215	0	0	0	<b>\$47</b>	\$46	\$40	\$17	٤	\$150
13	\$170	0	\$48	\$218	0	0	0	\$48	\$46	\$41	\$17	\$	\$152
14	\$172	100	\$49	\$321	626	(800)	279	\$49	\$46	\$42	\$17	:	\$258
15	\$174	0	\$50	\$224	O	0	0	\$50	\$46	\$43	\$17	ť	\$156
16	\$176	0	\$51	\$228	0	0	0	\$51	\$46	\$44	\$17	ţ	\$158
17	\$178	0	\$53	\$231	0	0	0	\$53	\$46	\$45	\$17	:	\$160
18	\$180	0	\$54	\$234	0	0	0	\$54	\$46	\$46	\$17	:	\$163
19	\$182	0	\$55	\$237	0	0	0	\$55	\$46	\$47	\$17	;	\$165
20	\$184	0	\$56	\$240	0	0	0	<b>\$</b> 56	\$46	\$48	\$17	:	\$168

Present Value

of Benefits

Present Value of Costs

\$1,504

1.41

Benefit/Cost Ratio

\$2,126

#### Chesapeake Utilities Corporation Florida Division - Energy Conservationing 2006 Residential Appliance Retention Program Participants Test - Data

е Тур	e	
ing		
E		
o	Fuel rates	2.4%
E		

(WH Cost - Ta	ble 1				Gas Su	pply Cost -	Table 2				Gas Energy (	Charge -	Table 3				G	as Customer	Charge - T	able 4		
Annual KWH	Tax Rate	Electric Cost		Year	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Ye	ar Ratu The		nuai Irms	Tax Rate	Gas Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appliance Annual Therms	Total Annual Thems	Ratio - Appliance to Total	Tax F	Pro-Rated Customer Charge
C	, p	B*C*(1+D)		Α	В	с	D	B*C*(1+D)			9	c	D	B*C*(1+D)	A	в	с	D	E	D/E	G	C*(D/E)*(1+Z)
1,310	10.00%	\$147	2	2006	\$0.9382	45	10.00%	\$46	20	<b>36 \$</b> 0.6	175 4	5	10.00%	\$31	2006	\$12.50	\$150,00	45	443	10.16%	10.04	\$17
1,310	10.00%	\$149	2	2007	\$0,9382	45	10.00%	\$46	20	07 <b>\$0</b> .6	323 4	5	10.00%	\$31	2007	\$12.50	\$150.00	45	443	10.16%	10.0H	\$17
1,310	10.00%	\$151	2	2008	\$0.9382	45	10.00%	\$46	20	08 \$0.6	475 4	5	10.00%	\$32	2008	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$153	2	2009	\$0.9382	45	10.00%	\$46	20	09 <b>\$0</b> .6	630 4	5	10.00%	\$33	2009	\$12,50	\$150,00	45	443	10,16%	10.0	\$17
1,310	10.00%	\$155	2	2010	\$0.9382	45	10.00%	\$46	20	10 \$0.6	789 4	5	10.00%	\$34	2010	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10,00%	\$157	2	2011	\$0.9382	45	10.00%	\$46	20	11 \$0.6	952 4	5	10.00%	\$34	2011	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$159	2	2012	\$0.9382	45	10.00%	\$46	20	12 \$0.7	119 4	5	10.00%	\$35	2012	\$12.50	\$150.00	45	443	10.16%	10,0	\$17
1,310	10.00%	\$161	2	2013	\$0.9382	45	10.00%	\$46	20	13 \$0.7	290 4	5	10.00%	\$36	2013	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$163	2	2014	\$0.9382	45	10.00%	\$46	20	14 \$0.7	465 4	5	10.00%	\$37	2014	\$12.50	\$150.00	45	443	10,16%	10.0	\$17
1,310	10.00%	\$165	2	2015	\$0.9382	45	10.00%	\$46	20	15 \$0.7	644 4	5	10.00%	\$38	2015	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$166	1	2016	\$0.9382	45	10.00%	\$46	20	16 \$0.7	828 4	5	10.00%	\$39	2016	\$12,50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$168	2	2017	\$0.9382	45	10.00%	\$46	20	17 \$0.8	016 4	5	10.00%	\$40	2017	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$170		2018	\$0.9382	45	10.00%	\$46	20	18 \$0.8	208 4	5	10.00%	\$41	2018	\$12.50	\$150.00	45	443	10,16%	10.0	\$17
1,310	10.00%	\$172		2019	\$0,9382	45	10.00%	\$46	20	19 \$0.8	405 4	15	10.00%	\$42	2019	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$174		2020	\$0.9382	45	10.00%	\$46	20	20 \$0.8	607 4	5	10.00%	\$43	2020	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$176		2021	\$0.9382	45	10.00%	\$46	20	21 \$0.8	813 4	15	10.00%	\$44	2021	\$12,50	\$150.00	45	443	10.16%	10,0	\$17
1,310	10.00%	\$178		2022	<b>\$</b> 0.9382	45	10.00%	\$46	20	22 <b>\$0</b> .9	1025	15	10.00%	\$45	2022	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$180		2023	\$0.9382	45	10.00%	<b>\$4</b> 6	20	23 <b>\$</b> 0.9	1241 4	15	10.00%	\$46	2023	\$12.50	\$150.00	45	443	10.16%	10.0	\$17
1,310	10.00%	\$182		2024	\$0.9382	45	10,00%	\$46	20	24 \$0.9	463 4	15	10.00%	\$47	2024	\$12.50	\$150.00	45	443	10,16%	10,0	\$17
1,310	10.00%	\$184		2025	\$0.9382	45	10.00%	\$46	20	25 \$0.9	690 4	15	10.00%	\$48	2025	\$12,50	\$150.00	45	443	10.16%	10.0	\$17

# peake Utilities Corporation Florida Division - Energy Conswation Filing 2006 Residential Appliance Retention Program RIM Test - Results

## се Туре

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Incremental	Incremental	Incremental	Total	Gas	Investment	Increment		
Revenue	Revenue	Revenue	Gas	Supply	Carrying	Custome	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		
2	3	4	2 thru 4	6	7	8	9	6 thru 9
\$28	\$42	\$15	\$85	\$42	\$0	\$0	\$100.68	\$143
\$28	\$43	\$15	\$86	\$43	\$0	\$0	\$0.68	\$44
\$28	\$44	\$15	\$87	\$44	\$0	\$0	\$0.68	\$45
\$28	\$45	\$15	\$88	\$45	\$0	\$0	\$0.68	\$46
\$28	\$46	\$15	\$89	\$46	\$0	\$0	\$0.68	\$47
\$28	\$48	\$15	\$91	\$48	\$0	\$0	\$0.68	\$48
\$28	\$49	\$15	\$92	\$49	\$0	\$0	\$0.68	\$49
\$28	\$50	\$15	\$93	\$50	\$0	\$0	\$0.68	\$51
\$28	\$51	\$15	\$94	\$51	\$0	\$0	\$0.68	\$52
\$28	\$52	\$15	\$95	\$52	\$0	\$0	\$0.68	\$53
\$28	\$54	\$15	\$97	\$54	\$0	\$0	\$0.68	\$54
\$28	\$55	\$15	\$98	\$55	\$0	\$0	\$0.68	\$55
\$28	\$56	\$15	\$99	\$56	\$0	\$0	\$0.68	\$57
\$28	\$57	\$15	\$100	\$57	\$0	\$0	\$100.68	\$158
\$28	\$59	\$15	\$102	\$59	\$0	\$0	\$0.68	\$60
\$28	\$60	\$15	\$103	\$60	\$0	\$0	\$0.68	\$61
\$28	\$62	\$15	\$105	\$62	\$0	\$0	\$0.68	\$62
\$28	\$63	\$15	\$106	\$63	\$0	\$0	\$0.68	\$64
\$28	\$65	\$15	\$108	\$65	\$0	\$0	\$0.68	\$65
\$28	\$66	\$15	\$109	\$66	\$0	\$0	\$0.68	\$67

Present Value of Benefits

\$916

Present Value of Costs

\$627

Benefit/C 1.46 Ratio

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#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Filing)6 Residential Appliance Retention Program **RIM Test - Calculated Data**



Fuel Rate 2.4% Gas Enen 0% Gas Custi 0% O&M Esc 2.4%

1 2\*3

202:50

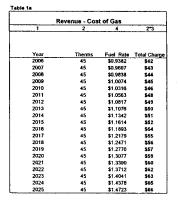
\$0

\$0

Table 1

Depreciation Rate - Supply Main Depreciation Rate - Development Main Depreciation Rate - Service Line Depreciation Rate - Meter

3.30% 3.30% 3.60% 3.90%



able 2				
	Re	venue - Cust	otharge	
1	2	3	4	4"3
	Monthly		lo Therms	
	Customer	Annual Custor	nío Total	Prorated Annual
Year	Charge	Charge	unsumed	Customer Charge
2006	\$12.50	\$150.00	10,16%	\$15
2007	\$12.50	\$150.00	10.16%	\$15
2008	\$12.50	\$150.00	10,16%	\$15
2009	\$12.50	\$150.00	10,16%	\$15
2010	\$12.50	\$150.00	10.16%	\$15
2011	\$12.50	\$150.00	10,16%	\$15
2012	\$12,50	\$150,00	10.16%	\$15
2013	\$12,50	\$150.00	10,16%	\$15
2014	\$12.50	\$150.00	10.16%	\$15
2015	\$12.50	\$150.00	10 16%	\$15
2016	\$12.50	\$150.00	10.16%	\$15
2017	\$12.50	\$150.00	10 16%	\$15
2018	\$12.50	\$150.00		\$15
2019	\$12.50	\$150.00	10.16%	\$15
2020	\$12.50	\$150.00	10.16%	\$15
2021	\$12.50	\$150.00	10 16%	\$15
2022	\$12.50	\$150.00		\$15
2023		\$150.00		\$15
2024	\$12.50	\$150.00		\$15
				\$15
	Year 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023	Ro           1         2           Monthly         Monthly           2006         \$12.50           2007         \$12.50           2009         \$12.50           2010         \$12.50           2011         \$12.50           2012         \$12.50           2013         \$12.50           2014         \$12.50           2015         \$12.50           2016         \$12.50           2017         \$12.50           2018         \$12.50           2019         \$12.50           2018         \$12.50           2020         \$12.50           2021         \$12.50           2011         \$12.50           2012         \$12.50           2013         \$12.50           2014         \$12.50           2021         \$12.50           2021         \$12.50           2021         \$12.50           2021         \$12.50           2021         \$12.50           2022         \$12.50           2023         \$12.50	Revenue - Cust           1         2         3           Monthly         Customer         Annual Custo           Customer         Annual Custo         Charge           2006         \$12.50         \$150.00           2007         \$12.50         \$150.00           2008         \$12.50         \$150.00           2010         \$12.50         \$150.00           2011         \$12.50         \$150.00           2012         \$12.50         \$150.00           2013         \$12.50         \$150.00           2014         \$12.50         \$150.00           2015         \$12.50         \$150.00           2016         \$12.50         \$150.00           2017         \$12.50         \$150.00           2018         \$12.50         \$150.00           2019         \$12.50         \$150.00           20118         \$12.50         \$150.00           2016         \$12.50         \$150.00           20218         \$12.50         \$150.00           20219         \$12.50         \$150.00           20219         \$12.50         \$150.00           20211         \$12.50         \$150.00	Revenue - Cutstotharge           1         2         3         4           Monthly         Io Thems           Cutarge         Charge         Statumor 2 of the status of th

Table 5

Inv	estment C.	arrying Costs			
1 4	5	6	7	8	6*7*8
rvice		Total	Cost	Ratio of Therms	Investment
Yealine	Meter	Investment	of Debt	Consumed To Total	Carrying Cost
20050	\$0	\$0	8.60%	10.16%	\$0
200750	\$0	\$0	8.60%	10.16%	\$0
20080	\$0	\$0	8.60%	10,16%	\$0
200\$\$0	\$0	\$0	8.60%	10,16%	\$0
201050	\$0	\$0	8.60%	10,16%	\$0
201150	\$0	\$0	8.60%	10.16%	\$0
201350	\$0	\$0	8,60%	10.16%	\$0
20130	\$0	\$0	8.60%	10.16%	\$0
201450	\$0	\$0	8.60%	10.16%	\$0
201550	\$0	\$0	8.60%	10.16%	\$0
2016\$0	\$0	\$0	8.60%	10.16%	\$0
20130	\$0	50	8.60%	10.16%	\$0
201850	\$0	\$0	8.60%	10.16%	\$0
201\$\$0	\$0	\$0	8.60%	10.16%	\$0
202(\$0	\$0	\$0	8,60%	10.16%	\$0
202 \$0	\$0	\$0	8.60%	10.16%	\$0
202:\$0	\$0	\$0	8.60%	10,16%	\$0
202:\$0	\$0	\$0	8.60%	10.16%	\$0
202450	\$0	\$0	8.60%	10.16%	\$0

8.60%

10.16%

\$8

			Incre	mental Cus	tomer Cos	ts		
1	2	3	4	5=3*4	6	7	8=6*7	5+8
	Monthly	Annual	Ratio Therms To	Annual Ratio	Annual	Ratio Therms	Tnual Ratio	Total incrementa
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consum	e&M Cost	Adm, & O&M Cos
2008	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2007	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2008	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2009	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2010	\$0.00	\$0	10.16%	\$0	\$0	10,16%	\$0	\$0
2011	\$0.00	\$0	10.16%	\$0	\$0	10,16%	\$0	\$0
2012	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2013	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2014	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2015	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2016	\$0.00	\$0	10,16%	\$0	\$0	10.16%	\$0	\$0
2017	\$0.00	\$0	10.16%	\$0	\$0	10.18%	\$0	\$0
2018	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2019	\$0.00	\$0	10.16%	\$0	\$0	10,16%	\$0	\$0
2020	\$0.00	\$0	10,16%	\$0	\$0	10,16%	\$0	\$0
2021	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2022	\$0.00	\$0	10,16%	\$0	\$0	10,16%	\$0	\$0
2023	\$0.00	\$0	10,16%	\$0	\$0	10,16%	\$0	\$0
2024	\$0.00	\$0	10.16%	\$0	\$0	10.16%	\$0	\$0
2025	\$0.00	\$0	10.16%	\$0	50	10.16%	\$0	50

	Gas (	Costs	
1	2	3	2*3
	Therms	Gas Supple	An Gas Supply
Year		Rate d	O Cost
2006	45	0,9382	\$42
2007	45	\$0,9607	\$43
2008	45	\$0,9838	\$44
2009	45	\$1.0074	\$45
2010	45	\$1.0316	\$46
2011	45	\$1.0563	\$48
2012	45	\$1,0817	\$49
2013	45	\$1,1076	\$50
2014	45	\$1.1342	\$51
2015	45	\$1,1814	\$52
2016	45	\$1,1893	\$54
2017	45	\$1.2179	\$55
2018	45	\$1.2471	\$56
2019	45	\$1.2770	\$57
2020	45	\$1.3077	\$59
2021	45	\$1,3390	\$60
2022	45	\$1.3712	\$62
2023	45	\$1,4041	\$63
2024	45	\$1.4378	\$65
2025	45	\$1.4723	\$66



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#### **Residential Annliance Retention Program**

## Exhibit A

## Chesapeake Utilities Corporation Florida Division Energy Conservation Program December, 2006

RIM Test and Participants Test Results

For

**Clothes Drying Appliances** 

#### Chesapeake Utilities Corporation Florida Division - Energy (nservation Filing 2006 Co **Residential Appliance Retention Progm** an Participants Test - Cost Effective Resis ult

## Appliance Type

**Clothes Drying** 

		Benefits						costs				(
Year Number	Avoided Electric KWH Cost	Gas Rebate	Avoided Electric Appliance O&M	TOTAL BENEFITS	Gas Equipment Cost	Electric Equipment & Installation Cost	Gas Installation Cost	(Appliance ) & M	Gas Supply Cost	Gas Energy Charge	Gas Custom <del>e</del> r Charge	as ( (TOTAL COSTS
	Table 1								Table 2	Table 3	Table 4	
2	3	4	5	3 thru 6	7	8	9	10	11	12	13	7 thru 13
1	\$164	\$100	\$36	\$300	\$379	(\$454)	\$150	\$36	\$52	\$34	\$19	\$215
2	\$167	0	\$37	\$203	0	0	0	\$37	\$53	\$34	\$19	\$142
3	\$169	0	\$38	\$207	0	0	0	\$38	\$54	\$34	\$19	\$144
4	\$171	0	\$39	\$210	0	0	0	\$39	\$55	\$34	\$19	\$147
5	\$173	0	\$40	\$213	0	0	0	\$40	\$57	\$34	\$19	\$149
6	\$175	0	\$41	\$216	0	0	0	\$41	\$58	\$34	\$19	\$151
7	\$177	0	\$42	\$219	0	0	0	\$42	\$59	\$34	\$19	\$154
8	\$180	0	\$43	\$222	0	0	0	\$43	\$61	\$34	\$19	\$156
9	\$182	0	\$44	\$225	0	0	0	\$44	\$62	\$34	\$19	\$158
10	\$184	0	\$45	\$229	0	0	0	\$45	\$64	\$34	\$19	\$161
11	\$186	0	\$46	\$232	0	0	0	\$46	\$65	\$34	\$19	\$164
12	\$188	0	\$47	\$235	0	0	0	\$47	\$67	\$34	\$19	\$166
13	\$191	100	\$48	\$338	516	(618)	204	\$48	\$69	\$34	\$19	\$271
14	\$193	0	\$49	\$242	0	0	0	\$49	\$70	\$34	\$19	\$172
15	\$195	0	\$50	\$245	0	0	0	\$50	\$72	\$34	\$19	\$175
16	\$197	0	\$51	\$248	0	0	0	\$51	\$74	\$34	\$19	\$178
17	\$199	0	\$53	\$252	0	0	0	\$53	\$75	\$34	\$19	\$181
18	\$201	0	\$54	\$255	0	0	0	\$54	\$77	\$34	\$19	\$184
19	\$204	0	\$55	\$259	0	0	0	\$55	\$79	\$34	\$19	\$187
20	\$206	0	\$56	\$262	0	0	0	\$56	\$81	\$34	\$19	\$190

Present Value	
of Benefits	\$2,315

Present Value of Costs

\$1,648

1.40

Benefit/Cost

Ratio

#### Chesapeake Utilities Corporation Florida Division - Energy Conservatioling 2006 Residential Appliance Retention Program Participants Test - Data

e Type	
Drying	
E	
с	Fuel Rates

2.4%

	uel Rates	2.4%																				
KWH Cost - Ta	ble 1		[		Gas St	pply Cost -	Table 2				Gas Ene	ergy Charge	- Table 3				G	as Customer	Charge - Ti	able 4		
Annual KWH	Tax Rate	Electric Cost		Year	Cost Per Therm	Annual Therms	Tax Rate	Gas Cost	Y	ear	Rate Per Therm	Annual Themns	Tax Rate	Gas Cost	Year	Monthly Customer Charge	Annual Customer Charge	Appilance Annual Therms	Total Annual Therms	Ratio - Appliance to 1 Total	te	Pro-Rated Customer Charge
с	D	B*C*(1+D)		A	8	с	D	B*C*(1+D)		A	B	с	D	B*C*(1+D)	A	В	c	D	E	D/E		C*(D/E)*(1+Z)
1,465	10.00%	\$164		2006	\$0.9382	50	10.00%	\$52	2	006	\$0.6175	50	10.00%	\$34	2006	\$13	\$150.00	50	443	11.29%	6	\$19
1,465	10.00%	\$167		2007	\$0.9607	50	10.00%	\$53	2	007	\$0.6175	50	10.00%	\$34	2007	\$12.50	\$150.00	50	443	11.29%	6	\$19
1,465	10.00%	\$169		2008	\$0.9838	50	10.00%	\$54	2	800	\$0.6175	50	10.00%	\$34	2008	\$12.50	\$150.00	50	443	11.29%	6	\$19
1,465	10.00%	\$171		2009	\$1.0074	50	10.00%	\$55	2	009	\$0.6175	50	10.00%	\$34	2009	\$12.50	\$150.00	50	443	11.29%	6	\$19
1,465	10.00%	\$173		2010	\$1.0316	50	10.00%	\$57	2	010	\$0.6175	50	10.00%	\$34	2010	\$12.50	\$150.00	50	443	11.29%	6	\$19
1,465	10.00%	\$175		2011	\$1.0563	50	10.00%	\$58	2	011	\$0.6175	50	10,00%	\$34	2011	\$12.50	\$150.00	50	443	11.29%	6	\$19
1,465	10.00%	\$177		2012	\$1.0817	50	10.00%	\$59	2	012	\$0.6175	50	10.00%	\$34	2012	\$12.50	\$150.00	50	443	11.29%	4	\$19
1,465	10.00%	\$180		2013	\$1.1076	50	10.00%	\$61	2	013	\$0.6175	50	10.00%	\$34	2013	\$12.50	\$150.00	50	443	11.29%	- 4	\$19
1,465	10.00%	\$182		2014	\$1.1342	50	10.00%	\$62	2	014	<b>\$</b> 0.6175	50	10.00%	\$34	2014	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$184		2015	\$1.1614	50	10.00%	\$64	2	015	\$0.6175	50	10.00%	\$34	2015	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$186		2016	\$1.1893	50	10.00%	\$65	2	016	\$0.6175	50	10.00%	\$34	2016	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$188		2017	\$1.2179	50	10.00%	\$67	2	017	\$0.6175	50	10.00%	\$34	2017	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$191		2018	\$1.2471	50	10.00%	\$69	2	018	\$0,6175	50	10.00%	\$34	2018	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$193		2019	\$1.2770	50	10.00%	\$70	2	019	\$0.6175	50	10.00%	\$34	2019	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$195		2020	\$1.3077	50	10.00%	\$72	2	020	\$0.6175	50	10.00%	\$34	2020	\$12.50	\$150.00	50	443	11,29%	*	\$19
1,465	10.00%	\$197		2021	\$1,3390	50	10.00%	\$74	2	021	\$0.6175	50	10.00%	\$34	2021	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$199		2022	\$1.3712	50	10.00%	\$75	2	022	\$0.6175	50	10.00%	\$34	2022	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$201		2023	\$1.4041	50	10.00%	\$77	2	023	\$0.6175	50	10.00%	\$34	2023	\$12.50	\$150.00	50	443	11.29%	%	\$19
1,465	10.00%	\$204		2024	\$1.4378	50	10.00%	\$79	2	024	\$0.6175	50	10,00%	\$34	2024	\$12.50	\$150,00	50	443	11.29%	%	\$19
1,465	10.00%	\$206		2025	\$1.4723	50	10.00%	\$81	2	025	\$0.6175	50	10.00%	\$34	2025	\$12.50	\$150.00	50	443	11.29%	%	\$19

# © Utilities Corporation Florida Division - Energy Conservath Filing 2006 Residential Appliance Retention Program RIM Test - Results

App	
Clotł_	

ai	Incremental	Incremental	Total	Gas	Investment	Incremental		
;	Revenue	Revenue	Gas	Supply	Carrying	Customer	Program	Total
irge	Cost of Gas	Cust. Charge	Revenue	Cost	Costs	Costs	Cost	Costs
	Table 1A	Table 2		Table 5	Table 3	Table 4		
	3	4	2 thru 4	6	7	8	9	6 thru 9
20	\$47	\$17	\$95	\$47	\$0	\$0	\$100.75	\$148
2(	\$48	\$17	\$96	\$48	\$0	\$0	\$0.75	\$49
2(	\$49	\$17	\$97	\$49	\$0	\$0	\$0.75	\$50
2(	\$50	\$17	\$98	\$50	\$0	\$0	\$0.75	\$51
2(	\$52	\$17	\$99	\$52	\$0	\$0	\$0.75	\$52
21	\$53	\$17	\$101	\$53	\$0	\$0	\$0.75	\$54
21	\$54	\$17	\$102	\$54	\$0	\$0	\$0.75	\$55
21	\$55	\$17	\$103	\$55	\$0	\$0	\$0.75	\$56
21 21	\$57	\$17	\$105	\$57	\$0	\$0	\$0.75	\$57
2' 2'	\$58	\$17	\$106	\$58	\$0	\$0	\$0.75	\$59
	\$59	\$17	\$107	\$59	\$0	\$0	\$0.75	\$60
2	\$61	\$17	\$109	\$61	\$0	\$0	\$0.75	\$62
2	\$62	\$17	\$110	\$62	\$0	\$0	\$100.75	\$163
2	\$64	\$17	\$112	\$64	\$0	\$0	\$0.75	\$65
2	\$65	\$17	\$113	\$65	\$0	\$0	\$0.75	\$66
2	\$67	\$17	\$115	\$67	\$0	\$0	\$0.75	\$68
2	\$69	\$17	\$116	\$69	\$0	\$0	\$0.75	\$69
2	\$69 \$70	\$17	\$118	\$70	\$0	\$0	\$0.75	\$71
2		\$17	\$120	\$72	\$0	\$0	\$0.75	\$73
2	\$72 \$74	\$17	\$120	\$74	\$0	\$0	\$0.75	\$74

Present Value of Benefits

\$1,018

Present Value

of Costs

\$686

9090

Benefit/Cost Ratio 1.49 \_--

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#### Chesapeake Utilities Corporation Florida Division - Energy Conservation Fili006 Residential Appliance Retention Program **RIM Test - Calculated Data**



Fuel Rate 2.4% Gas Enerç 0% Gas Custe 0% O&M Esc: 2.4%

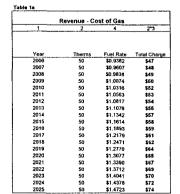
1 213

202431 202531

Table 1

Depreciation Rate - Supply Main Depreciation Rate - Development Main Depreciation Rate - Service Line Depreciation Rate - Meter

3.30% 3.30% 3.60% 3,90%



able 2				
	Re	venue - Cus	r Charge	
1	2	3	4	4*3
	Monthly		Ratio Therms	
	Customer	Annual Cust	To Total	Prorated Annual
Year	Charge	Charge	Consumed	Customer Charge
2006	\$12.50	\$150.00	11.29%	\$17
2007	\$12.50	\$150.00	11.29%	\$17
2008	\$12.50	\$150.00	11.29%	\$17
2009	\$12,50	\$150.00	11.29%	\$17
2010	\$12.50	\$150.00	11.29%	\$17
2011	\$12.50	\$150.00	11.29%	\$17
2012	\$12,50	\$150.00	11.29%	\$17
2013	\$12.50	\$150.00	11.29%	\$17
2014	\$12.50	\$150.00	11.29%	\$17
2015	\$12.50	\$150.00	11.29%	\$17
2016	\$12,50	\$150.00	11.29%	\$17
2017	\$12.50	\$150.00	11.29%	\$17
2018	\$12.50	\$150.00	11.29%	\$17
2019	\$12.50	\$150.00	11,29%	\$17
2020	\$12.50	\$150.00	11.29%	\$17
2021	\$12.50	\$150.00	11.29%	\$17
2022	\$12.50	\$150.00	11.29%	\$17
2023	\$12.50	\$150.00	11.29%	\$17
2024	\$12.50	\$150.00	11.29%	\$17
2025	\$12.50	\$150.00	11.29%	\$17

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	Costs	
 2		2-3
Therms	Gas 5s To	Gas Su
	Ramed	Cos
50	0.9;	\$47
50	\$0.5	\$48
50	\$0.5	\$49
50	\$1.6	\$50
50	\$1.6	\$52
50	\$1.6	\$53

Table 5

Inve	stment Ca	rrying Costs			
14	5	6	7	8	6*7*8
irvica		Total	Cost	Ratio of Therms	Investment
readine	Meter	Investment	of Debt	Consumed To Total	Carrying Cost
2006\$0	\$0	\$0	8,60%	11.29%	\$0
200;\$0	\$0	\$0	8.60%	11.29%	\$0
200(\$0	\$0	\$0	8.60%	11.29%	\$0
2001\$0	\$0	\$0	8,60%	11.29%	\$0
201(\$0	\$0	\$0	8,60%	11.29%	\$0
201-\$0	\$0	\$0	8.60%	11.29%	\$0
201:\$0	\$0	\$0	8.60%	11.29%	\$0
201:\$0	\$0	\$0	8,60%	11.29%	\$0
201,\$0	\$0	50	8.60%	11.29%	\$0
201:\$0	\$0	\$0	8,60%	11.29%	\$0
201450	\$0	\$0	6,60%	11.29%	\$0
201 \$0	\$0	\$0	8,60%	11.29%	\$0
201:\$0	\$0	\$0	8.60%	11.29%	\$0
201:50	\$0	\$0	8.60%	11.29%	\$0
202: \$0	\$0	\$0	8.60%	11.29%	\$0
202 \$0	\$0	\$0	8.60%	11.29%	\$8
202:\$0	\$0	\$0	8.60%	11.29%	\$0
202 \$0	\$0	\$0	8.60%	11.29%	\$0
202.50	\$0	\$0	8.60%	11.29%	\$0
202 \$0	\$0	\$0	8.60%	11.29%	\$0

			Increa	nental 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 Them	Annual Ratio	Total incremental
Year	Adm. Cost	Adm. Cost	Total Consumed	Adm. Cost	O&M Cost	Total Consu	O&M Cost	Adm. & O&M Cost
2006	\$0.00	\$0	11.29%	\$0	<b>\$</b> 0	11.29%	\$0	\$0
2007	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$8
2008	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2009	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2010	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2011	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2012	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2013	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2014	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2015	\$0,00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2016	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2017	\$0.00	\$0	11.29%	\$0	\$0	11.299	\$0	\$0
2018	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2019	\$0.00	\$0	11,29%	\$0	\$0	11.29%	\$0	\$0
2020	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2021	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2022	\$0.00	\$0	11.29%	\$0	\$0	11.29%	\$0	\$0
2023	\$0.00	\$0	11.29%	\$0	\$0	11.299	\$0	\$0
2024	\$0.00	\$0	11.29%	\$0	\$0	11.299	\$0	\$0
2025	\$0.00	50	11.29%	\$0	\$0	11.299	20	\$0

Gas Costs			
1	2		2*3
1	Therms	Gas Sis To	Gas Supply
Year		Ramed	Cost
2006	50	0.9;	\$47
2007	50	\$0.5	\$48
2008	50	\$0.5	\$49
2009	50	\$1.G	\$50
2010	50	\$1.G	\$52
2011	50	\$1.6	\$53
2012	50	\$1.4	\$54
2013	50	\$1.5	\$55
2014	50	\$1.5	\$57
2015	50	\$1.5	\$58
2016	50	\$1.5	\$59
2017	50	\$1.5	\$61
2018	50	\$1.5	\$62
2019	50	\$1,2	\$64
2020	50	\$1.5	\$65
2021	50	\$1,5	\$67
2022	50	\$1.4	\$69
2023	50	\$1.4	\$70
2024	50	\$1.6	\$72
2025	50	\$1.6	\$74

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