MARK C. CHRISTIE
COMMISSIONER

JAMES C. DIMITRI
COMMISSIONER

JUDITH WILLIAMS JAGDMANN
COMMISSIONER

COMMONWEALTH OF VIRGINIA

JOEL H. PECK
CLERK OF THE COMMISSION
P.O. BOX 1197
RICHMOND, VIRGINIA 23218-1197

STATE CORPORATION COMMISSION

December 1, 2012

TO: The Honorable Robert F. McDonnell
Governor, Commonwealth of Virginia

The Honorable William J. Howell
Speaker, Virginia House of Delegates

The Honorable Walter A. Stosch
President Pro Tempore, Senate of Virginia

The Honorable John C. Watkins
Chairman, Senate Committee on Commerce and Labor

The Honorable Terry G. Kilgore
Chairman, House Committee on Commerce and Labor

The State Corporation Commission hereby transmits its report on the implementation of the Natural Gas Conservation and Ratemaking Efficiency Act, as required by Chapter 639 of the 2008 Virginia Acts of Assembly.

Respectfully submitted,

Mark C. Christie
Chairman

James C. Dimitri
Commissioner

Judith Williams Jagdmann
Commissioner

Commonwealth of Virginia

State Corporation Commission

Report to the Governor of the Commonwealth of Virginia, the Speaker of the House of Delegates, the President Pro Tempore of the Senate, and the Chairs of the Senate and House Committees on Commerce and Labor

Report: Implementation of
The Natural Gas Conservation and Ratemaking Efficiency Act

December 1, 2012

TABLE OF CONTENTS

GLOSSARY OF TERMS

ARRA	American Recovery and Reinvestment Act
Act	Natural Gas Conservation and Ratemaking Efficiency Act
C&I	commercial and industrial
CARE	conservation and ratemaking efficiency
Columbia	Columbia Gas of Virginia, Inc.
Commission	State Corporation Commission
DHCD	VA Department of Housing and Community Development
ECP	Energy Conservation Plan
GMA	group metered apartment
Natural Gas Conservation Act	Natural Gas Conservation and Ratemaking Efficiency Act
Participant Test	Participant Test
PA Test	Program Administrator Test
PBR	performance-based ratemaking
PGA	purchased gas adjustment
RAC	rate adjustment clause
RIM Test	Rate Impact Measure Test
RNA	revenue normalization adjustment
SCC	State Corporation Commission
TRC Test	Total Resource Cost Test
VNG	Virginia Natural Gas, Inc.
WGL	Washington Gas Light Company

EXECUTIVE SUMMARY

In 2008, the General Assembly enacted the Natural Gas Conservation and Ratemaking Efficiency Act ("Natural Gas Conservation Act" or "Act")[1] authorizing natural gas utilities to file conservation and ratemaking efficiency plans that are intended to promote improved energy efficiency and increased conservation and to implement ratemaking mechanisms that "decouple" the recovery of a utility's allowed distribution revenue (*i.e.*, its "non-gas" revenue) from the level of consumption of natural gas by its customers. The Natural Gas Conservation Act[2] also requires the State Corporation Commission ("SCC" or "Commission") to provide a report to the Governor, the Speaker of the House of Delegates, the President Pro Tempore of the Senate, and the Chairs of the Senate and House Committees on Commerce and Labor regarding the implementation of the Act by December 1, 2009, and annually by such date each year thereafter until December 1, 2013. This report is the fourth such report tendered by the Commission in compliance with this requirement.

Thus far, three natural gas utilities have received approval for conservation and ratemaking efficiency ("CARE") plans with the Commission. Virginia Natural Gas, Inc. ("VNG"), filed an application seeking approval of its plan on July 3, 2008. Columbia Gas of Virginia, Inc. ("Columbia"), and Washington Gas Light Company ("WGL") filed applications seeking approval of their plans on June 8, 2009, and September 29, 2009, respectively. VNG's proposed plan was approved with modifications, and VNG was permitted to place its proposed decoupling rate adjustment mechanism into effect on January 1, 2009. Columbia's plan was approved with modifications, and Columbia was permitted to place its proposed decoupling rate adjustment mechanism into effect on December 31, 2009. WGL's proposed plan was approved

[1] 2008 Va. Acts ch. 639.
[2] The Natural Gas Conservation and Ratemaking Efficiency Act is codified at Title 56, Chapter 25, § 56-600 *et seq.* of the Code of Virginia ("Code").

with modifications, and WGL was permitted to place its proposed decoupling rate adjustment mechanism into effect on May 1, 2010. VNG's plan ended December 31, 2011, and VNG has not sought approval to implement a new CARE plan. However, it has provided notice that it will be applying for a new CARE plan on or after December 3, 2012.

All three natural gas utilities evaluated their efficiency programs utilizing the Participant ("Participant"), Rate Impact Measure ("RIM"), Total Resource Cost ("TRC"), and Program Administrator ("PA") Tests. The Participant Test measures the impact of the program on those customers who are direct participants in a program; *i.e.*, the customers who actually receive the incentive or service. The RIM Test measures the net impact on the utility's customers as a whole, with no focus on the participants' direct benefits. The TRC Test measures the overall impact on both participants and non-participants in a given program. The PA Test estimates the impact on the utility in its administration of the program and its avoidance of alternative resource costs. In considering these tests, it should be noted that they rely on projections that are likely to vary from actual experience. Some estimates are difficult to predict with any significant degree of accuracy. Consequently, actual cost/benefit test results will likely vary, perhaps significantly, from the utilities' estimates. Further, cost/benefit tests do not consider any increases or decreases in a utility's non-gas revenue that might arise from the implementation of decoupling mechanisms.

Generally, the utilities' estimates indicate that for their proposed programs, cost/benefit results will show that costs exceed benefits under the RIM Test but that benefits will exceed costs under the other tests. Failure of the RIM Test indicates that customers who do not participate in the proposed programs will be negatively impacted by the proposed plans. These

negative impacts may be offset by benefits to participants to the extent that the programs pass the TRC Test.

All three utilities proposed decoupling rate adjustment clauses ("RACs") designed to produce average non-gas revenues[3] per customer equal to the average non-gas revenue per customer produced by the rates and test year conditions established in base rate proceedings in accordance with the Act's definition of "allowed distribution revenue." The Act's definition of "allowed distribution revenue," and the related requirement that this definition serve as the basis for decoupling RACs, effectively provides adjustments for changes in average weather-normalized usage that may be unrelated to the utilities' efficiency programs. Average weather-normalized usage and non-gas revenue are, in reality, impacted by a number of factors. These factors include changing customer lifestyles, customer demographics, housing sizes, furnace and appliance efficiencies, customer price and inflation elasticities, customer awareness, and other factors unrelated to the utilities' offerings of efficiency programs. As such, the decoupling RACs adjust for the aforementioned changes as well as those changes attributable to utility-sponsored efficiency programs.

In summary, Virginia's three largest natural gas utilities have implemented energy conservation plans that include the offering of various efficiency programs to customers. The preliminary results of these plans indicate that the Natural Gas Conservation Act has or will stimulate utility investment in energy and conservation programs.

Sufficient evidence does not yet exist to conclude that these investments are cost-effective under either the RIM or TRC Tests. Initial estimates indicate that these

[3] Non-gas revenues are those revenues that are intended to provide a return on utility investments and to recover non-purchased gas-related expenses that include depreciation expenses, operating and maintenance expenses, and taxes. The recovery of costs associated with purchasing natural gas supplies for resale to customers are not considered to be non-gas revenues.

investments will be beneficial from some perspectives, but the estimates also show that the utilities' efficiency plans may negatively impact non-gas rates paid by consumers and that non-participants in programs will be adversely impacted. Additionally, the cost/benefit results do not consider any revenue impact resulting from the implementation of decoupling mechanisms. Such revenue changes could significantly impact the costs and benefits of a utility's plan when viewed from a utility customer's perspective because under a decoupling mechanism, customers may, in effect, be required to pay the utility for reduced consumption even though the reduced consumption may not be attributable to the utility's CARE programs. When the costs of decoupling mechanisms are included, it is far more likely that CARE programs do not pass any of the cost-benefit tests.

Further, it is likely that the decoupling mechanisms adopted pursuant to the Act will increase utilities' non-gas revenues as compared to the revenues that the utilities would otherwise have received.[4] Such increases can be attributed to the Act's definition of "allowed distribution revenue" and the related requirement that this definition serve as the basis for decoupling mechanisms. To illustrate this point, the current actual results indicate that during the three-year period it was in effect, VNG's decoupling mechanism resulted in its residential customers compensating VNG approximately $13.4 million for energy reductions estimated to be approximately 21.7 million Ccfs.[5] However, VNG's own estimates indicate that its programs

[4] The Natural Gas Conservation Act allows gas utilities to propose plans and decoupling mechanisms outside the context of comprehensive rate proceedings in which all revenues are reviewed for reasonableness to consumers and fairness to utilities.

[5] Ccf is a measurement of natural gas volume equivalent to 100 cubic feet.

have generated *actual* reductions of approximately 2.5 million Ccfs.[6] The Commission will continue to monitor results of the utilities' efficiency plans and report to the Governor and General Assembly as directed.

[6] The results are similar for Columbia's and WGL's programs. Specifically, since its inception, Columbia's decoupling mechanism has enabled it to collect additional non-gas revenue of nearly $7.4 million based on assumed usage reductions of 31.8 million Ccfs. However, Columbia's engineering estimates indicate that its programs have generated actual reductions of approximately 1.6 million Ccfs. WGL's decoupling mechanism has enabled it to collect additional non-gas revenue of $5.3 million from ratepayers based on assumed usage reductions of approximately 7.9 million therms. WGL's engineering estimates indicate that its programs have generated actual reductions of approximately 113,509 therms.

I. INTRODUCTION

In 2008, the General Assembly enacted the Natural Gas Conservation Act authorizing natural gas utilities to file CARE plans, which are intended to promote improved energy efficiency and increased conservation, and authorizing the utilities to implement ratemaking mechanisms that "decouple" the recovery of a utility's allowed distribution revenue from the level of consumption of natural gas by its customers. The Natural Gas Conservation Act also requires the Commission to provide a report to the Governor, the Speaker of the House of Delegates, the President Pro Tempore of the Senate, and the Chairs of the Senate and House Committees on Commerce and Labor regarding the implementation of the Act by December 1, 2009, and annually by such date each year thereafter until December 1, 2013. This report is the fourth such report tendered by the Commission in compliance with this requirement.

II. THE NATURAL GAS CONSERVATION ACT

The Natural Gas Conservation Act authorizes natural gas utilities to file CARE plans that include: (i) a normalization component to remove the effect of weather from the determination of CARE results; (ii) a decoupling mechanism; (iii) cost-effective conservation and energy efficiency programs; (iv) provisions for the needs of low-income or low-usage residential consumers; and (v) provisions to ensure that rates and service to non-participating classes of customers are not adversely impacted. Such plans may include one or more residential, small commercial, or small general service classes but cannot apply to large commercial or large industrial customer classes. The SCC must allow a utility that implements a CARE plan to recover, through regulated rates, its costs associated with cost-effective conservation and energy efficiency programs. Utilities that demonstrate reductions in annualized, weather-normalized usage per customer have the opportunity to earn an incentive of up to a 15% share of the

independently verified net economic benefits created by the programs. The SCC is prohibited from reducing a utility's profit (as determined by its authorized return on equity capital) as a result of the implementation of a CARE plan.

The Natural Gas Conservation Act consists of §§ 56-600, 56-601, and 56-602 of the Code. These statutes respectively set forth definitions; describe the objectives of efficiency plans; and establish specific elements, conditions, and incentives for efficiency plans and decoupling proposals. Key definitions set forth in § 56-600 of the Code include:

> "Allowed distribution revenue" means the average annual, weather-normalized, nongas commodity revenue per customer associated with the rates in effect as adopted in the applicable utility's last Commission-approved rate case or performance-based regulation plan, multiplied by the average number of customers served.
>
> "Decoupling mechanism" means a rate, tariff design or mechanism that decouples the recovery of a utility's allowed distribution revenue from the level of consumption of natural gas by its customers, including (i) a mechanism that adjusts actual nongas distribution revenues per customer to allowed distribution revenues per customer, such as a sales adjustment clause, (ii) rate design changes that substantially align the percentage of fixed charge revenue recovery with the percentage of the utility's fixed costs, such as straight fixed variable rates, provided such mechanism includes a substantial demand component based on a customer's peak usage, or (iii) a combination of clauses (i) and (ii) that substantially decreases the relative amount of nongas distribution revenue affected by changes in per customer consumption of gas.
>
> "Fixed costs" means any and all of the utility's nongas costs of service, together with an authorized return thereon, that are not associated with the cost of the natural gas commodity flowing through and measured by the customer's meter.
>
> "Revenue-neutral" means a change in a rate, tariff design or mechanism as a component of a conservation and ratemaking efficiency plan that does not shift annualized allowed distribution revenue between customer classes, and does not increase or decrease the utility's average, weather-normalized nongas utility revenue per customer for any given rate class by more than

> 0.25 percent when compared to (i) the rate, tariff design or mechanism in effect at the time a conservation and ratemaking efficiency plan is filed pursuant to this chapter or (ii) the allocation of costs approved by the Commission in a rate case using the cost of service methodology set forth in § 56-235.2 or a performance-based regulation plan authorized by § 56-235.6, where a plan is filed in conjunction with such case.

Further, Chapter 821 of the 2012 Acts of Assembly, amended the definition of "Cost-effective conservation and energy efficiency program" in § 56-600 of the Code. The new definition enacted by the General Assembly is set forth below.

> "Cost-effective conservation and energy efficiency program" means a program approved by the Commission that is designed to decrease the average customer's annual, weather-normalized consumption or total gas bill, for gas and nongas elements combined, or avoid energy costs or consumption the customer may otherwise have incurred, and is determined by the Commission to be cost-effective upon consideration, among other factors, that the net present value of the benefits exceeds the net present value of the costs under the following four tests: the Total Resource Cost Test, the Program Administrator Test (also referred to as the Utility Cost Test), the Participant Test, and the Ratepayer Impact Measure Test. Such determination shall include an analysis of all four tests, and a program or portfolio of programs shall not be rejected based solely on the results of a single test. Without limitation, rate designs or rate mechanisms, customer education, customer incentives, and weatherization programs are examples of conservation and energy efficiency programs that the Commission may consider. Energy efficiency programs that provide measurable and verifiable energy savings to low-income customers or elderly customers may also be deemed cost-effective.

Section 56-601 A of the Code identifies the following objectives for alternative rate designs and other mechanisms, where feasible:

> 1. Provide utilities with better tools to work with customers to decrease the average customer's annual average weather-normalized consumption of natural gas;
>
> 2. Provide reasonable assurance of a utility's ability to recover costs of serving the public, including its cost-effective investments in conservation and energy efficiency as well as infrastructure needed to provide or maintain reliable service to the public;

> 3. Reward utilities for meeting or exceeding conservation and energy efficiency goals that may be established pursuant to the Virginia Energy Plan (§ 67-100 et seq.);
>
> 4. Provide customers with long-term, meaningful opportunities to more efficiently consume natural gas and mitigate their expenditures for the natural gas commodity, while ensuring that the rate design methodology used to set a utility's revenue recovery is not inconsistent with such conservation and energy efficiency goals;
>
> 5. Recognize the economic and environmental benefits of efficient use of natural gas; and
>
> 6. Preserve or enhance the utility bill savings that customers receive when they reduce their natural gas use.

Subdivision B of § 56-601 authorizes natural gas utilities to implement alternative rate designs and other mechanisms that:

> 1. Replace existing utility rate designs or other mechanisms that promote inefficient use of natural gas with rate designs or other mechanisms that ensure a utility's recovery of its authorized revenues is independent of the amount of customers' natural gas consumption;
>
> 2. Provide incentives for natural gas utilities to promote conservation and energy efficiency by granting recovery of the costs associated with cost-effective conservation and energy efficiency programs; and
>
> 3. Reward utilities that meet or exceed conservation and energy efficiency goals on a weather-normalized, annualized average customer basis through the implementation of cost-effective conservation and energy efficiency programs.

Section 56-602 of the Code contains key provisions regarding the filing and consideration of CARE plans and decoupling mechanisms. Among other things, these provisions:

- limit the applicability of decoupling RACs and CARE plans to residential, small commercial, and small general service customer classes;
- mandate that efficiency plans include:

> (i) a normalization component that removes the effect of weather from the determination of conservation and energy efficiency results; (ii) a decoupling mechanism; (iii) one or more cost-effective conservation and energy efficiency programs; (iv) provisions to address the needs of low-income or low-usage residential customers; and (v) provisions to ensure that the rates and service to non-participating classes of customers are not adversely impacted;[7]

- permit "phased or targeted implementation of rate or tariff design changes, if any, or conservation and energy efficiency programs";[8]

- require the Commission to allow natural gas utilities to recover their incremental costs associated with cost-effective conservation and energy efficiency programs;

- require participating utilities "to file annual reports showing the year over year weather-normalized use of natural gas on an average customer basis, by customer class, as well as the incremental, independently verified net economic benefits created by the utility's cost-effective conservation and energy-efficiency programs during the previous year";[9]

- require the Commission to grant a reasonable opportunity for participating utilities to earn performance based incentives of up to 15% of the independently verified net economic benefits resulting from their efficiency plans if target levels are met; and

- preserve the Commission's authority under §§ 56-234.2, 56-235.2, or 56-235.6 but provide that the Commission may not reduce an authorized return on common equity or other measure of utility profit as a result of the implementation of a natural gas CARE plan.

III. CARE PLANS FILED WITH THE COMMISSION

To date, three natural gas utilities have filed CARE plans with the Commission. VNG filed an application seeking approval of its plan on July 3, 2008. Columbia and WGL filed applications seeking approval of their plans on June 8, 2009, and September 29, 2009, respectively. These filings and additional amendments are described in greater detail as follows.

[7] Va. Code § 56-602 A.
[8] *Id*.
[9] Va. Code § 56-602 E.

1. VIRGINIA NATURAL GAS, INC.

A. Background

VNG filed its proposed CARE plan on July 3, 2008. In its filing, VNG proposed to spend $7.5 million to implement various efficiency and conservation programs for residential customers over a three-year period. These initiatives included the Community Outreach and Consumer Education Program, the Seasonal Check-up Program, the Low-Income Weatherization Program, the Pilot ENERGY STAR® Residential New Construction Program, and three other programs designed to promote installation of higher efficiency furnaces and water heaters.

VNG examined various efficiency programs utilizing the Participant, RIM, TRC, and PA Tests. These cost/benefit tests rely on a number of projections that are likely to vary from actual experience. Some of these estimates are difficult to predict with any significant degree of accuracy. It also is important to note that the cost/benefit tests do not consider increases or decreases in the utility's non-gas revenue that might arise as a result of the implementation of decoupling mechanisms. The results of VNG's analyses, as presented in its application, are summarized in the following table:

VNG's Estimated Program Results

Program	**Participant Test**	**RIM Test**	**TRC Test**	**PA Test**
	Benefit/Cost Ratio			
Seasonal Check-Up	2.43	0.86	2.10	6.39
Low-Income Weatherization	3.07	0.67	2.07	2.07
Tank Water Heater	2.09	0.66	1.37	1.92
Tankless Water Heater	2.29	0.69	1.58	2.21
Space Heating	1.88	0.73	1.38	2.77
ENERGY STAR® Pilot	2.52	0.90	2.26	8.82
Summary of All Programs	2.32	0.66	1.32	1.92

A benefit-to-cost ratio greater than 1.00 indicates that a program's expected benefits are greater than expected costs. Ratios less than 1.00 indicate that a program's expected costs

exceed its expected benefits. These results show that, for the efficiency measures examined, benefits exceeded costs for all tests except the RIM Test, which no program passed. The RIM test score indicated that VNG's non-participating customers would be negatively impacted by VNG's proposed CARE plan. VNG's estimates of the number of participating customers indicated that approximately 3.9% of its residential customers would benefit from the proposed programs in a given year while 96.1% of such customers would be adversely impacted by VNG's offering of these programs.

Based on VNG's estimates, all of the proposed programs passed the TRC Test. Consequently, it was expected that benefits to program participants would exceed the negative impacts on non-participants in the programs. VNG estimated that the proposed programs would produce net benefits to the company and its ratepayers of $39.5 million over a ten-year period.

VNG also proposed to implement a revenue decoupling adjustment, Rider D, in conjunction with its proposed programs. Applicable to VNG's residential rate schedules, Rider D would consist of monthly rate adjustments with an annual true-up. These rate adjustments were designed to produce average non-gas revenues per customer equal to the average non-gas revenue per customer produced by the rates and test-year conditions established in Case No. PUE-2005-00057.[10] VNG proposed to base the calculation of Rider D on actual changes in the non-gas revenues of all residential customers from those reflected in the test year used in that case, the twelve months ending March 2005. As such, VNG's decoupling mechanism essentially assumed that the only factor impacting the average weather-normalized usage and non-gas revenue per customer would be the efficiency programs it proposed. VNG

[10] This proceeding established VNG's performance-based regulation plan. *See Application of Virginia Natural Gas, Inc., For approval of a performance based rate regulation methodology pursuant to Virginia Code § 56-235.6, and General Rate Case Filing of Virginia Natural Gas, Inc., For investigation of justness and reasonableness of current rates, charges, and terms and conditions of service in compliance with prior Commission Order*, Case Nos. PUE-2005-00057 and PUE-2005-00062, 2006 S.C.C. Ann. Rept. 341, Order (July 24, 2006).

ignored changes in average weather-normalized usage that may have occurred since March 2005. In actuality, average weather-normalized usage and non-gas revenue are impacted by a number of factors including changing customer lifestyles, customer demographics, housing sizes, furnace and appliance efficiencies, customer price and inflation elasticities, customer awareness, and other factors unrelated to VNG's energy efficiency programs. As such, Rider D would adjust for the aforementioned changes as well as those changes actually driven by the company's energy efficiency programs.

VNG did not request an incentive share of the independently verified net economic benefits created by its conservation and energy efficiency programs. Such a request could be made in the future.

B. Final Order

On December 23, 2008, the Commission issued its Order approving VNG's CARE plan, with modifications, and authorizing VNG to implement its decoupling mechanism effective January 1, 2009.[11] The Commission's Order included specific discussion of numerous issues, including detailed discussion of two controversial elements of VNG's proposed plan: the impact on non-participants in the Energy Conservation Plan ("ECP") programs and the impact on VNG's recovery of non-gas revenues. In discussing the impact of VNG's plan on non-participants, the Commission's Order stated that the ECP passes all the tests except the RIM Test, which also is called the Non-Participant Test because it measures the rate impact on non-participating customers. The Commission also noted that the Natural Gas Conservation Act embodies the ratemaking premise that non-participating customers may pay more for service so

[11] *See Application of Virginia Natural Gas, Inc., For approval to implement a natural gas conservation and ratemaking efficiency plan including a decoupling mechanism and to record accounting entries associated with such mechanism*, Case No. PUE-2008-00060, 2008 S.C.C. Ann. Rept. 566, Order Approving Natural Gas Conservation and Ratemaking Efficiency Plan (Dec. 23, 2008).

that the utility can recoup revenue lost from those who participate and conserve, making it difficult for many programs to pass the RIM Test. With regard to VNG's proposed programs, the Commission found that the RIM Test results highlight the limited residential customer participation expected in the ECP and that "it is reasonably appropriate to consider the number of customers targeted, and the type of programs that they are targeted with, as part of the ECP."[12] Because of this concern, the Commission imposed two conditions on VNG's ECP:

> (1) that for the Plan to be cost-effective under the Act, the annual funds proposed by the Company should be allocated in a manner that appreciably increases the realistically possible number of participants in significant conservation measures; and (2) that this shall be accomplished by increasing the allocation of funds for the Programmable Thermostat Program . . . .[13]

In summary, the Commission's Order sought to mitigate the disparate impact of VNG's plan on participants and non-participants by broadening the scope of incentives such that a greater number of customers could participate in CARE programs.

The Order also addressed the impact of VNG's proposed decoupling mechanism on the company's non-gas revenues. The Commission recognized that in VNG's performance-based ratemaking ("PBR") plan, VNG's annual non-gas revenues should decrease by $9.83 million and that this reduction was not instituted on the condition that VNG construct a certain pipeline and freeze rates for five years. The Commission described this second condition as "a necessary and obviously critical component of our approval of that plan."[14] Next, the Commission explained that VNG's proposed Revenue Normalization Adjustment ("RNA") Rider, though not technically a rate increase under the Natural Gas Conservation Act, nevertheless functions as a rate increase because it increases rates to residential customers through a "sales adjustment" so

[12] *Id*. at 571. The Commission noted in footnote 20 that the Revised Stipulation likely would increase participation because it included a $4 coupon for air filters and a Programmable Thermostat Program with 5,000 expected participants.
[13] *Id*.
[14] *Id*. at 574.

that VNG's guaranteed revenue for the residential class can be collected regardless of volume of gas consumed by that class. The Commission approved VNG's plan but indicated that residential customers may ultimately pay a higher price for non-gas service than under the company's PBR plan.[15] Notably, the Natural Gas Conservation Act allows utilities to propose plans and decoupling mechanisms outside the context of comprehensive rate proceedings. Consequently, an increase in VNG's earnings could occur without a corresponding examination of the reasonableness of those earnings.

C. Plan Amendments

VNG initiated its plan and decoupling mechanism on January 1, 2009. VNG subsequently filed a request with the Commission on July 16, 2009, requesting permission to modify aspects of its conservation and energy efficiency programs for the first year of its three-year CARE plan. The requested modifications included: (i) expanding the eligibility requirements for the low-income weatherization program to match the eligibility requirements of VNG's partner agencies; (ii) shifting allocated dollars from the low-income weatherization program to the space heating program; (iii) combining the programmable thermostat rebate program with the free programmable thermostat program; (iv) shifting allocated dollars from the programmable thermostat program to the tankless water heater program; and (v) allowing for additional participation in the space heating and tankless water heater programs by shifting allocated dollars from the consumer outreach program, in addition to the dollars reallocated from the low-income weatherization and programmable thermostat programs. The request was approved by the Commission on November 10, 2009.[16]

[15] *Id*. at 574-75.
[16] *Application of Virginia Natural Gas, Inc., To modify its conservation and ratemaking efficiency plan*, Case No. PUE-2009-00070, 2009 S.C.C. Ann. Rept. 509, Final Order (Nov. 10, 2009).

VNG filed for a further amendment of its CARE plan on December 17, 2009. Generally, VNG sought authorization to further align its program eligibility requirements with those of partner agencies; to shift allocated dollars between already approved programs; to align rebates between programs and/or increase rebate amounts; to expand programs receiving reallocated dollars; to carry over any unused budgeted funds and administrative costs for a program from one year to that same program's budget and costs in future program years; and to allocate federal American Recovery and Reinvestment Act of 2009 ("ARRA")[17] funds among programs in a manner consistent with the guidelines for such funds.

The Commission denied this request by Order of April 14, 2010 ("April 14, 2010 Order"), out of concern that VNG's proposed funding reallocation would raise issues of creating potential savings for a smaller customer group, funded by a larger customer group. The Commission also provided modifications to VNG's amendment, including: no shifting of funds from the low-income weatherization program to VNG's space heating program; shifting only one-half of proposed dollars between programs with the remaining one-half of funds not expended; limiting the authority to shift funds between programs to, at most, 25% of that program's fund allocation; and declaring that funds not expended on programs during a CARE plan year not be spent, serving to lower overall CARE plan expenditures. The Commission further stated that VNG must file annual reports starting May 3, 2010, and on each May 1 thereafter for the duration of the CARE plan.[18]

On June 14, 2010, VNG filed an application to accept the Commission's modifications and to amend its CARE plan once again. In this compliance filing, VNG accepted the modifications of the Commission's April 14, 2010 Order. By Order dated July 23, 2010, the

[17] Pub. L. No. 111-5, 123 Stat. 115 (2009).
[18] *See Application of Virginia Natural Gas, Inc., For Authority to Amend its Conservation and Ratemaking Efficiency Plan*, Case No. PUE-2009-00139, 2010 S.C.C. Ann. Rept. 430, Final Order (Apr. 14, 2010).

Commission found that VNG's filing was in compliance with the findings and requirements of its April 14, 2010 Order. The Commission noted that since many of the CARE programs included amendments that had not been in effect for a full year, it would continue to review these programs' cost/benefit analyses, in part to determine whether these programs should be continued if VNG were to file to extend its CARE plan.[19]

D. VNG's 2011 Annual Report

On May 1, 2012, VNG filed its 2011 Annual Report of its CARE plan with the Commission. In its report, VNG: discussed the various aspects of its recent education and outreach efforts, provided the number of participants in each program, and estimated the savings associated with those programs.

Additionally, VNG performed cost/benefit analyses on its CARE programs based on 2011 participation. The results of the updated cost/benefit tests, as measured, are summarized in the following table:

Cost/Benefit Test Results

Program	**Participant Test**	**RIM Test**	**TRC Test**	**PA Test**
	Benefit/Cost Ratio			
Seasonal Check-Up	0.54	0.26	-----[20]	-----
Low-Income Weatherization	1.10	0.41	0.57	0.96
Tank Water Heater	4.28	0.40	2.17	1.00
Tankless Water Heater	0.69	0.49	0.48	1.80
Space Heating	1.40	0.54	1.16	2.46
ENERGY STAR Pilot	0.42	0.39	0.18	0.71
Programmable Thermostat	0.05	1.44	-----	-----
Summary of All Programs	0.90	0.61	0.65	1.06

[19] *See Application of Virginia Natural Gas, Inc., For Authority to Amend its Conservation and Ratemaking Efficiency Plan*, Case No. PUE-2009-00139, 2010 S.C.C. Ann. Rept. 432, Order Approving Modifications and Amended Application (July 23, 2010).

[20] A dashed line indicates that there were no benefits associated with this program under this particular cost/benefit test. Thus, a benefit/cost ratio could not be calculated and the program cannot be considered to have passed the test.

These results show that, in summary, VNG's CARE plan generally was not cost-effective in 2011, with a measure of 0.90 on the Participant Test, 0.65 on the TRC Test, 1.06 on the PA Test, and 0.61 on the RIM Test. Again, a benefit-to-cost ratio greater than 1.00 indicates that a program's expected benefits are greater than expected costs. Ratios less than 1.00 indicate that a program's expected costs exceed its expected benefits. As can be seen above, the Seasonal Check-Up and ENERGY STAR Pilot Programs did not pass any of the cost/benefit tests. The Low-Income Weatherization, Tankless Water Heater and Programmable Thermostat Programs each failed three of the four tests. None of the programs passed all of the tests.

Lastly, in its report VNG stated that 2011 marks the third and final year of the Company's initial CARE plan, which was approved effective January 1, 2009, for a three-year term. Thus, VNG's plan ended December 31, 2011. VNG has not sought approval to implement a new CARE plan. However, it has provided notice that it intends to file an application for a new plan on or after December 3, 2012.

E. Results of VNG's Plan: September through December 2011

Based on updated information submitted by VNG to the Commission Staff, the number of incentives provided to customers and the associated estimated annual natural gas usage reductions for September through December 2011 are shown below:

September – December 2011 Results

Program	Quantity	Ccf Savings per Rebate	Total Ccf Savings
Air Filter Coupons	1,445	12	17,340
Free Thermostat	5,616	109	612,144
Programmable Thermostat Rebate	139	109	15,151
Seasonal Check-Up	1,433	109	156,197
Space Heating	278	60	16,680
Tank Water Heater	42	43	1,806
Tankless Water Heater	7	100	700
Low-Income Weatherization	40	196	7,840
ENERGY STAR Pilot	10	93	930
TOTALS:	**9,010**		**811,448**

VNG also provided its program expenditures for this same time period. Those expenditures are as follows:

Program Expenditures Through December 2011

Program	Total Expenditures
Seasonal Check-Up	$71,650
Programmable Thermostat Rebates	$3,450
Low-Income Weatherization	$43,611
Tank Water Heater	$6,300
Tankless Water Heater	$4,000
Space Heating	$180,000
Free Thermostats	$124,507
Air Filter Coupons	$5,780
ENERGY STAR New Construction	$2,500
TOTAL	**$441,798**

Lastly, VNG continued its revenue decoupling mechanism. Based on VNG's monthly submittals related to this factor, the following information was compiled for the period of September 2011 through December 2011:

Comparison of Decoupling Mechanism Collections and Ccf Sales

	Revenue Deficiency Collected Through Adj. Factor	Targeted Sales Ccf	Est. Weather-Normalized Booked Sales Ccf	Sales Difference Ccf
Sep-11	$232,818	3,098,180	2,721,403	(376,777)
Oct	(7,460)	5,999,679	6,029,110	29,431
Nov	(537,258)	14,883,486	16,466,399	1,582,913
Dec	72,910	27,375,758	27,256,157	(119,601)
TOTAL	**$(238,990)**	**51,357,103**	**52,473,070**	**1,115,967**

This table shows that the operation of the decoupling mechanism resulted in an over-collection and subsequent credit to ratepayers of $238,990 from September through December 2011. The calculations supporting this over-collection effectively assume that VNG's customers consumed approximately 1.1 million Ccfs of natural gas more during these four months than during the same four months of the test period.

During the entire three years its CARE plan was in effect, VNG's decoupling mechanism compensated the company for usage reductions of approximately 21.7 million Ccfs and allowed it to collect additional non-gas revenue of nearly $13.4 million from its ratepayers. By contrast, VNG's engineering estimates indicate that the measures installed pursuant to its plan produced cumulative savings of approximately 2.5 million Ccfs.[21]

This result can be attributed to the use of a stale test year for establishing the "allowed distribution revenue" during the majority of the time VNG's CARE plan was in effect. Any utility's decoupling mechanism functions to decouple the recovery of allowed distribution revenue from that utility's customers' consumption of natural gas. Allowed distribution revenue is calculated based on the utility's rates adopted in its last SCC-approved rate case or PBR

[21] This includes reductions attributable to measures taken in 2009, 2010 and 2011 (2,052,089 Ccfs), in addition to 50% of the 811,448 Ccf reduction estimated for the current period.

plan,[22] which in VNG's case was the twelve months ending March 2005 for the majority of the time VNG's CARE plan was in effect. Specifically, VNG's allowed distribution revenue was based on a test year ending March 2005 from the time of the CARE plan's inception on January 1, 2009, until October 1, 2011. On October 1, 2011, the Company's test year was updated to reflect an increase in VNG's base rates approved in Case No. PUE-2010-00142.[23]

VNG's average normalized non-gas revenue per customer declined significantly since March 31, 2005, at least in part due to customer-initiated efficiency efforts. As noted above, VNG's decoupling mechanism resulted in its residential customers compensating the company for energy reductions estimated to be approximately 21.7 million Ccfs while VNG's own estimates indicate that its programs would generate reductions of approximately 2.5 million Ccfs. Thus, use of the specified non-gas revenue as required by the Natural Gas Conservation Act provided significant additional revenue to VNG above compensation needed to offset lost revenues attributable solely to VNG's efficiency efforts.

F. Cumulative Results of VNG's Plan

VNG's CARE plan commenced on January 1, 2009, and ended on December 31, 2011. A summary of results since the plan's inception through December 2011 follows.

January 2009 – December 2011 Results

January 2009 through December 2011 Program Results	
Program expenditures associated with customer rebates and other offerings	$5,952,726
Annual natural gas usage reductions associated with program expenditures	2,457,813 Ccfs
Revenue deficiency recovered through the revenue decoupling mechanism	$13,367,375
Usage reductions tied to collections under the revenue decoupling mechanism	21,690,391 Ccfs

[22] Va. Code § 56-600, definitions of "allowed distribution revenue" and "decoupling mechanism."
[23] *Application of Virginia Natural Gas, Inc. For an increase in base rates and authority to revise the terms and conditions applicable to natural gas service pursuant to Chapter 10 (§ 56-232 et seq.) of Title 56 of the Code of Virginia*, Case No. PUE-2010-00142, 2011 S.C.C. Ann. Rept. 407, Final Order (Dec. 20, 2011).

2. COLUMBIA GAS OF VIRGINIA, INC.

A. Background

On June 8, 2009, Columbia filed a proposed CARE plan to offer incentives to its residential and small commercial customers. Columbia estimated that its plan would save customers $41 million over twenty years and that individual participants could save from $90 to $350 annually. Columbia's proposed CARE plan was comprised of five principal components: (i) a variety of conservation and energy efficiency programs; (ii) provisions to address the needs of low-income residential customers; (iii) a mechanism to recover the costs associated with CARE programs on a timely basis; (iv) an annual performance-based incentive mechanism for the delivery of conservation and energy efficiency benefits through an adjustment to the company's Purchased Gas Adjustment ("PGA") mechanism; and (v) a natural gas decoupling mechanism in the form of a sales adjustment clause. Columbia proposed that its plan be approved for three calendar years (2010, 2011, and 2012) and requested an effective date for the plan of December 31, 2009.

Columbia's proposed plan included a portfolio of six conservation and energy efficiency programs, described below.

Education and Outreach. These efforts would include company employee and customer education, general community outreach programs, the "Utiliwize" program branding effort, customer bill presentation, and the coordination with state and local stakeholders of communication of common information. Specifically, Columbia proposed to create a web page to provide information about the programs and to utilize other communication tools to provide information to customers including periodic bill inserts, news releases, and direct information

provided to senior citizen organizations, faith-based organizations, and charitable organizations within its service territory.

Home Savings Program. This program would provide financial incentives to residential customers who purchase qualifying high-efficiency natural gas equipment for newly constructed or existing homes or who take certain steps to weatherize existing homes. The following measures were planned for the initial program offering:

- ENERGY STAR Natural Gas Storage Water Heater
- ENERGY STAR Natural Gas Tankless Water Heater
- ENERGY STAR Natural Gas Furnace
- High Efficiency Windows
- Increasing Attic Insulation
- Increasing Floor Insulation
- Performing Duct Sealing
- Performing Duct Insulation

Web-based Home Audit Program. Columbia proposed this program to provide an opportunity for residential customers, including low-income customers, to participate in home energy audits. The audit would be conducted electronically or via mail. Upon audit completion, the customer would receive a customized report recommending home improvements that could be implemented to reduce natural gas usage. Energy efficiency measures could include recommendations requiring little or no customer investment, those requiring an investment with savings sufficient to justify the investment, recommendations not expected to generate sufficient savings, and other energy efficiency tips. Examples of energy efficiency measures that could be recommended in the report include water heater blankets, low-flow showerheads, faucet aerators and hot water pipe insulation.

Business Savings Program. This proposed program would provide financial incentives to existing Columbia small general service customers purchasing qualifying high efficiency natural gas equipment for newly constructed (except where noted) or existing facilities, or to take steps

to improve efficiency of certain equipment. Among the measures proposed for the initial program offering were:

- Low-Flow Pre-Rinse Spray Valve (Retrofit Applications)
- High-Efficiency Coin-Op or Laundromat Clothes Washer
- ENERGY STAR Gas Storage or Tankless Water Heater
- Direct Contact Gas Water Heater
- High-Efficiency Gas Furnace
- Infrared Heater
- Boiler Tune-up
- Outside Air Reset Controls

Business Custom Program. This proposed program was intended to provide an avenue for small general service customers to propose projects and receive incentives for measures not contained in the Business Savings Program. Participants would provide submittals for a firm quantity of natural gas reduction through the installation of conservation and energy efficiency measures in return for a fixed rebate of $10 per Mcf[24] up to a 50% cap equal to a percentage of the eligible incurred project cost. Eligible projects would be installed at small general service customer facilities. The Business Custom Program required customers to submit to Columbia specific information for each project and to conduct energy engineering and savings verification at their own cost. This project information would be provided in two reports, one before installation and one after installation of the conservation and energy efficiency measures. Incentives would be paid directly to participating customers meeting program requirements.

Residential Low-Income Program. Columbia's proposed Residential Low-Income Program was designed to address the increases in funding levels provided for low-income home weatherization programs under the ARRA. Specifically, Columbia proposed to fund, in collaboration with the Virginia Department of Housing and Community Development ("DHCD") and other agencies, technical training for qualified energy auditors. Columbia would

[24] Mcf is a measurement of natural gas volume equivalent to 1,000 cubic feet.

then communicate information about the availability of low-income weatherization funding programs through its communication channels.[25] Columbia planned to utilize energy auditors trained through the DHCD-funded program to provide assessments for eligible customers.

Columbia examined its proposed efficiency programs utilizing various cost/benefit tests, the results of which are displayed in the following table.

Columbia's Estimated Program Results[26]

Program	**Participant Test**	**RIM Test**	**TRC Test**	**PA Test**
	Benefit/Cost Ratio			
Home Savings	2.3	0.8	1.0	1.2
Business Savings	2.3	0.9	1.0	1.4
Business Custom	5.9	1.0	1.3	1.5
Web-based Audit	30.1	1.3	3.3	2.8
Summary of All	2.9	0.8	1.0	1.2

Columbia's estimates indicated that four individual measures that are part of the Business Savings Program and one individual measure that is part of the Home Savings Program had TRC ratios of less than 1.00, indicating that the costs outweighed the benefits for these measures, though the Business Savings Program and the Home Savings Program as a whole each had TRC ratios of 1.00. Additionally, Columbia's estimates indicated that under the RIM Test costs for Columbia's plan as a whole would exceed benefits. As such, the plan would raise Columbia's average non-gas rates.

Columbia proposed a RAC that provides for class-specific estimates of its conservation and energy efficiency program costs to be applied as monthly surcharges to the bills of customers in the residential and small general service customer classes. The initial surcharge

[25] The DHCD maintains a list of weatherization providers located throughout Virginia with whom low-income customers may apply for weatherization benefits. *See* http://www.dhcd.virginia.gov/HousingPreservationRehabilitation/PDFs/weatherization_providers.pdf.

[26] Columbia did not perform cost/benefit analysis related to the Education and Outreach Program or the Residential Low-Income Program. Columbia stated that the costs associated with these programs are included in the analysis of the other proposed CARE programs and that the benefits of the other proposed CARE programs are sufficient to cover the costs of these two programs as well.

billing would begin with the proposed effective date of Columbia's CARE plan. Subsequent surcharge factors would be billed beginning with the first billing unit for January each year thereafter.

In addition, after the first year of the CARE plan, Columbia would compare actual program costs with the costs recovered via the RAC and calculate a true-up of the prior year's under- or over-recovered expenses. This amount would be added to or subtracted from the estimated costs for the next year. The total of the current estimated costs and the reconciliation, as determined by customer class, would be divided by the applicable customer class's estimated volumes for the applicable year to determine the rate adjustment factor for that year.

Columbia also proposed an RNA intended to align Columbia's annual actual billed non-gas distribution revenue with a pre-established level of annual distribution revenue. The pre-established annual distribution revenue was based on a revenue study derived from Columbia's most recent rate proceeding and was based upon average weather-normalized customer usage in calendar year 2005. As such, Columbia's proposed RNA would, like VNG's, adjust for changes in factors unrelated to its proposed efficiency programs. These other factors may include changing customer lifestyles, efficiency measures undertaken by customers on their own initiative, housing sizes, furnace and appliance efficiencies, and future natural gas prices.

Finally, Columbia requested an incentive equal to 15% of the net present value of the cumulative projected gas cost savings over the life of each program minus the net present value of the recovered CARE program costs. The proposed incentive would be a flat rate shared-savings mechanism intended to allow Columbia's shareholders to share in the net benefits created by the CARE programs.

B. Final Order

On December 4, 2009, the Commission issued its Final Order approving Columbia's plan as modified by the Stipulation.[27] Among other things, the Commission found that Columbia's CARE plan represents a revenue neutral plan and utilizes a decoupling mechanism consistent with the Natural Gas Conservation Act. The Commission further found that Columbia's CARE plan should be approved effective December 31, 2009.[28]

The Commission also considered the impact of the RNA decoupling mechanism on non-participating customers who engage voluntarily in conservation or energy efficiency measures outside of the CARE plan, stating that such customers would no longer see lower contributions to Columbia's distribution costs as a result of curtailing gas usage. The Commission further noted that, despite the uncertain nature of the natural gas price projections over the life of the CARE programs, the record reflected that the projected gas costs used to measure the company's CARE plan benefits were reasonable and the CARE programs were cost-effective, particularly given the contribution toward costs of ARRA funds.[29]

Notably, any reduction in benefits to non-participating customers who voluntarily engage in energy efficiency measures outside the CARE plan would increase Columbia's earnings. As previously noted, the Natural Gas Conservation Act allows utilities to propose plans and decoupling mechanisms outside the context of rate proceedings. Consequently, an increase in Columbia's earnings could occur without a corresponding immediate examination of the reasonableness of those earnings.

---

[27] *See Application of Columbia Gas of Virginia, Inc., For approval to implement a natural gas conservation and ratemaking efficiency plan including a decoupling mechanism*, Case No. PUE-2009-00051, 2009 S.C.C. Ann. Rept. 484, Final Order (Dec. 4, 2009).
[28] *Id*. at 486.
[29] *Id.* at 486-87.

C. Plan Amendments

On August 23, 2010, Columbia filed a proposed amendment to its CARE plan to suspend the free water heater insulation blanket measure that is part of the Web-Based Home Audit Program. This program's audit results include measures that customers can implement for free, including, among other things, water heater insulation blankets. Columbia's experience had revealed that customers would not likely install many of these blankets because this is a complex task and, once installed, requires ongoing maintenance. Columbia expressed potential safety concerns that could arise if the blankets were not properly installed.

Columbia proposed that the $1,926 spent for water heater blankets given to participants, as well as the cost of other water heater blankets the company had already purchased, would be absorbed by Columbia and would not be passed through to ratepayers. Columbia further represented that since up to 33.3% of funds budgeted for this measure could be reallocated to other CARE measures, the company planned to use these funds toward low-flow showerheads and free faucet aerators, two other options that are free to customers through the Web-Based Home Audit Program. Columbia stated it did not plan to spend the other funds related to the water heater blanket measure, saving ratepayers $75,250. The application for the amendment also included a revised Stipulation, signed by all original signatories, related to suspending the water heater blanket measure.

On December 15, 2010, the Commission entered a Final Order on Columbia's application to amend its CARE plan to suspend the free water heater insulation blanket measure.[30] **[**A copy of this Final Order is Attachment A to this Report. In its Final Order, the Commission approved Columbia's application, stating that the amendment did not affect the proposed decoupling

[30] *Application of Columbia Gas of Virginia, Inc., For authority to amend its natural gas conservation and rate making efficiency plan*, Case No. PUE-2010-00099, 2010 S.C.C. Ann. Rept. 603, Final Order (Dec. 15, 2010).

mechanism found to be revenue-neutral in Case No. PUE-2009-00051 and that the amendment is consistent with the Natural Gas Conservation Act.

D. 2012 Plan Amendments and Extension

On April 12, 2012, Columbia filed an application ("April 12, 2012 Application") requesting authority to amend and extend its CARE plan for an additional three years, through December 31, 2015. As previously discussed, Columbia's current CARE plan expires on December 31, 2012. In its April 12, 2012 Application, Columbia proposed to retain the six original programs approved by the Commission in Case No. PUE-2009-00051, and to implement a new program called the Residential Elderly Audit Program, which will provide free in-home audits and the installation of high-efficiency showerheads, faucet aerators, pipe insulation, and pre-programmed thermostats at no cost to qualified residential customers.[31] The Company's April 12, 2012 Application further proposed a number of amendments or modifications to the six original programs.

On April 27, 2012, the Commission issued an Order for Notice and Comment that, among other things, docketed the matter as Case No. PUE-2012-00013 and established a procedural schedule for the case. On July 13, 2012, Columbia and the Commission Staff submitted, for the Commission's consideration, a stipulation, that significantly modified the amended CARE plan proposed in the Company's April 12, 2012 Application ("Stipulation"). The Stipulation proposed to scale back the number of conservation and energy efficiency measures offered by the amended CARE plan and reduce the total cost of the amended CARE plan to Columbia's customers. These modifications were intended to address several concerns identified by the Commission's Staff in the process of its review of Columbia's amended CARE

[31] To qualify for the Residential Elderly Audit Program, a customer must be 65 years of age or older and have a gross annual income between 60% and 80% of the State Median Income Level.

plan. With these modifications, the Company and the Commission's Staff represented that the amended CARE plan was cost-effective and they recommended its approval by the Commission.

On August 6, 2012, the Commission issued its Final Order approving Columbia's amended CARE plan as modified by the Stipulation.[32]

E. Columbia's 2011 Annual Report

On May 1, 2012, Columbia filed its 2011 Annual Report of its CARE plan with the Commission. In its report, Columbia: discussed the education and outreach objectives of its conservation and energy efficiency programs, which it offers under the brand name Warm Wise; provided a summary of participation numbers in each program; and estimated the savings associated with those programs.

Additionally, Columbia performed cost/benefits analyses on its CARE programs based on 2011 participation. The results of the updated cost/benefit tests, as measured, are summarized in the following table:

Cost/Benefit Test Results

Program	**Participant Test**	**RIM Test**	**TRC Test**	**PA Test**
	Benefit/Cost Ratio			
Home Savings	2.2	0.9	1.1	1.3
Web-based Home Audit	30.1	1.3	3.3	2.8
Business Savings	2.8	1.0	1.2	1.5
Business Custom	5.9	1.0	1.3	1.5
Summary of All Programs	2.9	0.8	1.1	1.2

These results show that, for the efficiency measures examined, benefits exceeded costs with two exceptions. First, under the RIM Test, costs exceeded benefits for the Home Savings Program and for all of the programs combined. This indicates that CARE program

[32] *Application of Columbia Gas of Virginia, Inc., For authority to amend and extend its natural gas conservation and ratemaking efficiency plan*, Case No. PUE-2012-00013, Doc. Con. Cen. No. 120810136, Final Order (Aug. 6, 2012).

non-participants are negatively impacted by the programs. Second, results for the Education and Outreach and Residential Low-Income programs were not calculated. Columbia states that the costs associated with these programs are included in the analysis of the other programs and that the benefits of the other programs are sufficient to cover the costs of the Education and Outreach and Residential Low-Income programs. Additionally, Columbia believes that there will be direct and indirect benefits associated with these programs that can be quantified in the future, but not at present, and that the programs, in total, are cost-effective.

F. Performance-Based Incentive

As previously noted, Columbia's CARE plan provides for an annual performance-based incentive. Specifically, Columbia's CARE plan provides for an incentive of up to 15% of the independently verified net economic benefits created by Columbia's cost-effective conservation and efficiency programs. A performance incentive rate is used to determine the level of performance-based incentive earned, if any. The performance incentive rate is a function of cumulative usage reduction targets established in Columbia's CARE plan. The cumulative usage reduction targets for each of the three program years are as follows:

2010: 53,785 Mcf
2011: 123,192 Mcf
2012: 208,298 Mcf

The calculation of the performance-based incentive earned, if any, is based on the following metrics:

Performance Incentive Rate Metrics

Percentage of Usage Reduction Target Achieved	Performance Incentive Rate
Less than 50%	None
50% to 59%	5%
60% to 69%	10%
70% or greater	15%

Columbia's CARE plan did not achieve any net economic benefits in 2011. However, Columbia believes that the program was successful in increasing awareness and building momentum for the program, which should help its CARE plan achieve net economic benefits in the future. Columbia's performance incentive summary information is shown in the table below:

2011 Performance Incentive Summary

Category	2011 Results
2011 Program Economic Benefits	$268,708
2011 Program Costs	$318,490
2011 Net Economic Benefit	($49,782)
2011 Performance Incentive	$0

G. Results of Columbia's Plan: September 2011 through August 2012

Based on preliminary information submitted by Columbia to the Commission Staff, the number of CARE plan incentives provided to customers and the estimated annual natural gas usage reductions associated with those incentives from September 2011 through August 2012 are as follows:

Estimated Annual Usage Reductions by Measure

Measure	Quantity Installed	Est. Ccf Per Measure	Total Est. Ccf Sales
Furnace	761	70.2	53,422
Tank Water Heater	249	18.2	4,532
Tankless Water Heater	189	74.7	14,118
Insulation Floor	26	177.7	4,620
Insulation Attic	2,794	84.2	235,255
Windows (square feet)	92	71.6	6,587
Bathroom Faucet Aerators	11,332	0.8	9,066
Kitchen Faucet Aerators	5,626	5.0	28,130
Low Flow Showerheads	11,332	22.6	256,103
Pipe Insulation – 2 -3' Pieces	9,288	1.3	12,074
Duct Sealing	5	42.9	215
Duct Insulation	13	77.2	1,004
Business Pre-Rinse Spray Valve	198	61.3	12,137
Bus. High Eff. Gas Boiler > 300k BTU	5	1,354.0	6,770
Bus. Hi. Eff. Steam Gas Blr. > 300k BTU	1	693.5	694
92% Furnace Business	2	79.8	160
Tankless Wtr. Htr. < 200k BTU	2	71.6	143
TOTALS:	**41,915**		**645,030**

Columbia also provided program expenditures from September 2011 through August 2012, which are detailed in the following table:

Program Expenditures

Program	Total Expenditures
Education and Outreach	$282,160
Home Savings	1,674,098
Web-based Audit	242,321
Low-Income	150,000
Business Savings	80,489
Business Custom	263
TOTAL	**$2,429,330**

In addition to undertaking the CARE programs listed above, Columbia also continued its revenue decoupling mechanism. Based on Columbia's monthly submittals of its revenue decoupling

adjustment factor, the following information was compiled for the twelve-month period ending August 2012:

Comparison of Decoupling Mechanism Collections and Ccf Sales

	Revenue Deficiency Collected Through Adj. Factor	**Targeted Sales Ccf**	**Booked Sales Ccf**	**Sales Difference Ccf**
Sep-11	$184,747	6,300,474	5,415,615	(884,859)
Oct	285,652	8,012,655	6,861,883	(1,150,772)
Nov	26,794	15,082,949	14,959,864	(123,085)
Dec	84,630	30,395,418	29,872,569	(522,849)
2011 True-up[33]	(539,717)			
Jan-12	24,051	44,581,478	44,323,902	(257,576)
Feb	745,480	43,142,610	39,568,321	(3,574,289)
March	346,912	34,031,782	32,059,534	(1,972,248)
Apr	594,143	20,885,228	17,859,639	(3,025,589)
May	144,838	10,917,154	10,324,330	(592,824)
June	270,249	7,738,070	6,543,068	(1,195,002)
July	183,305	6,103,035	5,379,894	(723,141)
August	176,767	5,848,947	5,150,484	(698,463)
TOTAL	**$2,527,851**	**233,039,800**	**218,319,103**	**(14,720,697)**

This table shows that the operation of Columbia's decoupling mechanism has enabled Columbia to collect additional non-gas revenue of approximately $2.5 million from ratepayers from September 2011 through August 2012. The calculations supporting this collection assume that Columbia's energy efficiency efforts have produced usage reductions of approximately 14.7 million Ccfs during this period. By contrast, Columbia's engineering estimates indicate that the CARE measures installed pursuant to its plan produced savings of approximately 1.1 million Ccfs during this same time period.[34]

As with VNG, this result can be attributed to differences in the test year usage used for establishing the allowed distribution revenue and the actual weather normalized distribution

[33] Columbia compares its actual annual program costs with the program costs recovered through its decoupling mechanism and calculates an annual true-up or reconcilliation of the prior year's over- or under-recovery of program costs.

[34] This includes reductions attributable to measures taken in 2010 and 2011 (787,279 Ccfs), in addition to 50% of the 645,030 Ccfs of estimated reductions associated with the current period.

revenue. Any utility's decoupling mechanism functions to decouple the recovery of allowed distribution revenue from that utility's customers' consumption of natural gas. Allowed distribution revenue is calculated based on the utility's rates adopted in its last SCC-approved rate proceeding, which in Columbia's case was finalized on December 17, 2010.[35] Columbia's average normalized non-gas revenue per customer has declined since that time due, at least in part, to customer-initiated efficiency efforts. As noted above, Columbia's decoupling mechanism will result in its residential and small commercial customers compensating Columbia for energy reductions estimated to be approximately 14.7 million Ccfs while Columbia's *own* estimates indicate that its programs generated reductions of 1.1 million Ccfs during that same time period. As such, use of the specified non-gas revenue as required by the Natural Gas Conservation Act provides significant additional revenue to Columbia above compensation needed to offset lost revenues attributable solely to Columbia's efficiency efforts.

H. Cumulative Results of Columbia's CARE Plan

The Commission approved Columbia's CARE plan effective as of December 31, 2009, and Columbia began offering incentives under its plan in April 2010. A summary of results since the plan's inception through August 2012 follows.

January 2010 – August 2012 Results

January 2010 through August 2012 Program Results	
Program expenditures associated with customer rebates and other offerings	$5,236,770
Annual natural gas usage reductions associated with program expenditures	1,580,021 Ccfs
Revenue deficiency recovered through the revenue decoupling mechanism	$7,426,257
Usage reductions tied to collections under the revenue decoupling mechanism	31,821,319 Ccfs

[35] *See Application of Columbia Gas of Virginia, Inc., For authority to increase rates and charges and to revise the terms and conditions applicable to gas service*, Case No. PUE-2010-00017, 2010 S.C.C. Ann. Rept. 475, Final Order (Dec. 17, 2010).

3. WASHINGTON GAS LIGHT COMPANY

A. Background

On September 29, 2009, WGL filed a proposed CARE plan to offer conservation incentives to its residential customers, small commercial and industrial customers, and small group metered apartment customers. WGL estimated that its plan would save customers $12.8 million over three years and that individual residential customers participating in the various measures could save $106 annually. WGL's proposed CARE plan was comprised of four principal components: (i) a portfolio of conservation and energy efficiency programs; (ii) a mechanism to recover the costs associated with those programs on a timely basis; (iii) an annual performance-based incentive mechanism associated with the delivery of conservation and energy efficiency benefits through an adjustment to the company's PGA mechanism; and (iv) a natural gas decoupling mechanism in the form of a sales adjustment clause to adjust actual non-gas distribution revenues per customer to allowed distribution revenues per customer. WGL proposed that its plan be approved for three years and requested the plan be effective the first day of the billing cycle month immediately after Commission approval.

WGL's proposed plan consisted of a portfolio of eight conservation and energy efficiency programs, as described below.

Energy Efficiency Education Program. This program would raise awareness of the importance of energy conservation among WGL customers and teach customers how they could take advantage of program offerings to conserve natural gas and lower their energy bills.

Heating System Check-up Program with Programmable Thermostat Option. This program would provide residential customers with a $30 incentive towards either the cost of a seasonal check-up of their heating system or a credit towards a programmable thermostat and its

installation. The check-up would provide customers with information on low-cost and easily implemented energy efficiency measures.

Boiler/Furnace Replacement Program. This program would provide residential customers with a $250 incentive to cover part of the incremental cost for the installation of a high-efficiency natural gas boiler with an efficiency of 85% or greater or a $500 incentive for the installation of a high-efficiency natural gas boiler with an efficiency of 90% or greater.

Water Heater Replacement Program. This program would provide residential customers with an incentive to replace existing water heaters with more energy efficient natural gas water heaters. WGL would provide a $50 incentive for the installation of a natural gas water heater with an energy factor of 0.62 or greater and a $250 incentive for the installation of a high-efficiency natural gas water heater with an energy factor of 0.82 or greater.

Natural Gas New Homes Program with ENERGY STAR. This program was proposed to encourage residential customers to install ENERGY STAR-rated natural gas equipment in new residential construction. In addition to the water heater and natural gas furnace incentives, an additional $250 would be applied towards the cost of the ENERGY STAR inspections, testing, and modeling.[36]

Commercial Efficiency Program. This program would provide commercial customers with incentives to offset the costs of weatherization and high-efficiency equipment installation. An incentive of up to $10,000 would be provided to commercial customers' energy efficiency proposals meeting a certain standard. Examples of qualifying energy efficiency measures include high-efficiency natural gas equipment, including water heaters, booster heaters, food

[36] The ENERGY STAR home construction standard provides for a home that is at least 15% more efficient, or uses 15% less energy than the same home built under the 2003 International Energy Conservation Code.

service equipment, and hydronic heaters. Other measures could include installation of attic/roof insulation, windows, duct sealing, and other weatherization.

Low-Income Energy Assistance Program. Under this proposed program, WGL would provide funding to a state agency that administers the federal weatherization assistance programs, Community Housing Partners Corporation, who had indicated the need to develop and increase the number of energy auditors working with the low-income population. WGL's funds would be used for activities such as the training of energy efficiency auditors.

Residential Essential Service Program. WGL proposed to spend $100,000 to assist low-income residential customers with winter gas bills by providing a credit to eligible customers during the months of November through April.

WGL examined its efficiency programs utilizing various cost/benefit tests, and the results are summarized below.

WGL's Estimated Program Results[37]

Program	**Participant Test**	**RIM Test**	**TRC Test**	**PA Test**
	Benefit/Cost Ratio			
Seasonal Check-up	1.9	0.6	1.2	2.8
Water Heater (.62 EF)	2.0	0.6	1.2	2.3
Water Heater (.82 EF)	1.9	0.6	1.1	2.2
Boiler / Furnace (.85 EF)	2.0	0.6	1.3	2.5
Boiler / Furnace (.90 EF)	1.7	0.6	1.0	2.0
New Home	3.6	0.6	2.2	2.2
Summary of All Programs	2.0	0.6	1.2	2.3

WGL's estimates indicate that under the RIM Test costs for WGL's plan as a whole would exceed benefits. As such, the plan would raise WGL's average non-gas rates.

[37] WGL did not perform cost/benefit analysis related to the Energy Efficiency Education Program or the Low-Income Energy Assistance Program. WGL stated that the costs associated with these programs are included in the analysis of the other proposed CARE programs and that the benefits of the other proposed CARE programs are sufficient to cover the costs of these two programs as well.

WGL proposed a RAC that provides for class-specific estimates of the company's conservation and energy efficiency program costs to be applied to customers' bills as monthly surcharges applicable separately to the residential class, small customers within the commercial and industrial class, and small customers within the group metered apartment class. The initial surcharge billing would begin with the proposed effective date of WGL's plan. Subsequent surcharges would be billed on a monthly basis thereafter.

In addition, WGL proposed that after the first year of its CARE plan, it would compare actual program costs with the costs recovered via the RAC and calculate a true-up of the prior year's under- or over-recovered expenses. This amount would be added to or subtracted from the estimated costs for the next year.

WGL also proposed a decoupling mechanism intended to align WGL's annual actual billed non-gas distribution revenue with a pre-established level of annual distribution revenue. This level was based on a revenue study calculated in WGL's most recent rate proceeding and was based upon average weather-normalized customer usage in calendar year 2005.[38] As such, WGL's proposed decoupling mechanism would, like VNG's and Columbia's, adjust for changes in factors unrelated to WGL's proposed efficiency programs.

Finally, WGL requested an incentive of 15% of the net present value of the net economic benefits (defined as the difference between WGL's costs to offer the CARE programs and customer savings) in the first year. The proposed incentive would be a flat rate shared-savings mechanism intended to allow WGL's shareholders to share in the net benefits created by its energy efficiency programs.

[38] *Application of Washington Gas Light Company, For a general increase in rates, fees, charges and revisions to the terms and conditions of service as well as approval of a performance-based rate regulation methodology under Va. Code § 56-235.6*, Case No. PUE-2006-00059, 2007 S.C.C. Ann. Rept. 315, Final Order (Sept. 19, 2007), modified by 2007 S.C.C. Ann. Rept. 320, Order Granting Petition for Reconsideration (Oct. 5, 2007).

B. Final Order

On March 26, 2010, the Commission issued its Order approving WGL's plan as modified and recommended by the Hearing Examiner.[39] Among other things, the Commission rejected the Residential Essential Service Program and the Commercial Efficiency Program and approved the Boiler/Furnace Replacement Program with only a $250 incentive for equipment with an efficiency of at least 85%.[40]

The Commission's Order also discussed the impact of WGL's plan on non-participating customers who engage voluntarily in conservation or energy efficiency measures outside the CARE plan, stating that such customers would no longer see lower contributions to WGL's distribution costs as a result of curtailing gas usage. The Commission found, however, that WGL's decoupling mechanism meets the standards of § 56-602 A of the Code and therefore approved it.[41] The Commission also ordered WGL to file reports each year the CARE plan is in effect, starting August 1, 2011.[42]

C. Plan Amendment

On July 22, 2010, WGL filed an application to amend its CARE plan to allow it to extend its CARE plan to small commercial and industrial ("C&I") customers and group metered apartment ("GMA") customers using 30,000 therms[43] of gas or less per month.[44] WGL's proposed CARE plan for these customers consisted of four main components: (1) a portfolio of

[39] *Application of Washington Gas Light Company, For approval of natural gas conservation and ratemaking efficiency plan including a decoupling mechanism*, Case No. PUE-2009-00064, 2010 S.C.C. Ann. Rept. 354, Order Approving Natural Gas Conservation and Ratemaking Efficiency Plan (Mar. 26, 2010).
[40] *Id*. at 359.
[41] *Id*.
[42] *Id*. at 358.
[43] A "therm" is a unit of heating value equivalent to 100,000 British thermal units (Btu).
[44] Section 56-602 A of the Code provides that a CARE plan "shall not apply to large commercial or large industrial classes of customers." Since the Company does not have any separate rate schedules segregating any specific "large commercial or large industrial classes of customers," WGL proposed that its CARE plan apply only to its C&I and GMA customers using 30,000 therms of gas or less per month.

seven rebate programs, a Commercial Custom Program, and a Community Outreach and Education Program to encourage conservation and the efficient use of natural gas; (2) a CARE ratemaking adjustment that would adjust the actual non-gas distribution revenues per customer to the allowed level of distribution revenues per customer approved in WGL's most recent rate case;[45] (3) a CARE cost adjustment that would allow WGL to recover the costs of its proposed CARE plan through a monthly surcharge to customers' bills; and (4) a performance-based incentive mechanism.

On November 18, 2010, the Commission issued an Order[46] denying WGL's application to amend its CARE plan, citing as the threshold issue whether WGL's proposed CARE plan amendment meets the requirements of § 56-602 A, which allows CARE plan participants to "include one or more residential, small commercial, or small general service classes" but excludes "large commercial or large industrial classes of customers." The Commission explained that WGL's approved tariff does not currently include separate rate schedules for "small" and "large" C&I and GMA classes of customers and that the class cost of service study and revenue apportionment performed in WGL's last rate case did not account for separate "small" and "large" commercial rate classes. The Commission noted that WGL can amend its tariff to include distinctive "small" and "large" commercial customer classes and perform a class cost of service study including these rate classes in its next general rate case.[47]

---

[45] *Application of Washington Gas Light Company, For a general increase in rates, fees, charges and revisions to the terms and conditions of service as well as approval of a performance-based rate regulation methodology under Va. Code § 56-235.6*, Case No. PUE-2006-00059, 2007 S.C.C. Ann. Rept. 315, Final Order (Sept. 19, 2007).

[46] *Application of Washington Gas Light Company, For authority to amend its natural gas conservation and ratemaking efficiency plan*, Case No. PUE-2010-00079, 2010 S.C.C. Ann. Rept. 573, Order on Application to Amend Conservation and Ratemaking Efficiency Plan (Nov. 18, 2010).

[47] *See supra* note 34, 2007 S.C.C. Ann. Rept. at 318-19. As noted in the Final Order, the February 1, 2011 filing must include a class cost of service study already, so it should not be burdensome to the Company to perform such a study including the "small" and "large" class designations.

On January 31, 2011, WGL filed an application for a general increase in rates and to revise its terms and conditions for gas service, effective October 1, 2011. WGL's application included a proposal to implement distinctive "small" and "large" rate schedules for its C&I and GMA customers. The Commission docketed the matter as Case No. PUE-2010-00139. On July 2, 2012, the Commission issued an order in the case which, among other things, granted WGL's request to implement distinctive "small" and "large" rate schedules for its C&I and GMA customers.[48] As of the date of this filing, WGL has not filed an application to amend its CARE plan to include its newly defined "large" C&I customers and GMA customers.

D. WGL's 2011 Annual Report

On August 1, 2012, WGL filed its 2011 Annual Report of its CARE plan with the Commission. In its report, WGL: summarized its recent marketing activities; provided the number of participants and costs associated with each program; and estimated the savings associated with each program.

Additionally, WGL performed cost/benefit analyses on its CARE programs based on 2011 participation. The results of the updated cost/benefit tests, as measured, are summarized in the following table:

WGL's Estimated Program Results

Program	**Participant Test**	**RIM Test**	**TRC Test**	**PA Test**
	Benefit/Cost Ratio			
Seasonal Check-up	1.67	0.53	0.97	2.16
Standard Water Heater	2.27	0.59	1.17	3.37
Tankless Water Heater	1.80	0.69	1.72	22.85
Boiler Replacement	1.81	0.55	1.10	1.75
New Homes	9.35	0.75	10.91	10.91
Summary of All Programs	2.99	0.69	2.82	2.97

[48] *Application of Washington Gas Light Company, For a general increase in rates and charges and to revise its terms and conditions for gas service*, Case No. PUE-2010-00139, Doc. Con. Cen. No. 120710015, Order (July 2, 2012).

These results show that for the efficiency measures examined, benefits exceeded costs with two exceptions. First, under the RIM Test, costs exceeded benefits for all of the WGL's programs. This indicates that CARE program non-participants are negatively impacted by the programs. Second, costs narrowly exceeded the benefits of the Seasonal Check-up program under the TRC Test. Additionally, results for the Energy Efficiency Education and Low-Income programs were not calculated. WGL maintains that the cost associated with these programs are included in the analysis of the other programs and that the benefits of the other programs are sufficient to cover the costs of the Energy Efficiency Education and Low-Income programs. Additionally, WGL believes that there will be direct and indirect benefits associated with these programs that can be quantified in the future, but not at present, and that the programs in total are cost-effective.

Lastly, the results show that several of the cost/benefit ratios have changed significantly from those calculated and reviewed in the Company's application for approval of its CARE plan in Case No. PUE-2009-00064. The benefit/cost ratios shown in the table above are as reported by WGL, and have not been reviewed by this Commission.

E. Results of WGL's Plan: September 2011 through August 2012

Based on preliminary information submitted by WGL to the Commission Staff, the number of CARE plan incentives provided to customers and the estimated annual natural gas usage reductions associated with those incentives from September 2011 through August 2012 are as follows:

Estimated Annual Usage Reductions by Program

Program	Quantity	Est. Therms Per Measure	Total Est. Therms Sales
Seasonal Check-up & Programmable Thermostat	1052	98	103,096
Boiler w/ ≥ than .85 EF	13	49	637
Water Heater w/ ≥ than .62 EF	640	12	7,680
Water Heater w/ ≥ than .85 EF	186	54	10,044
Natural Gas New Homes	269	40	10,760
TOTALS:	**2,160**		**132,217**

WGL also provided program expenditures for the period of September 2011 through August 2012, which are detailed in the following table:

Program Expenditures

Program	Total Expenditures
Seasonal Check-up & Programmable Thermostat	$31,560
Boiler w/ ≥ than .85 EF	$5,375
Water Heater w/ ≥ than .62 EF	$15,800
Water Heater w/ ≥ than .85 EF	$46,500
Natural Gas New Homes	$67,250
Low Income Energy Assistance	$165,000
Promotional and Educational	$292,530
Administration	$96,015
TOTAL	**$720,030**

In addition to undertaking the CARE programs listed above, WGL also continued its revenue decoupling mechanism. Based on WGL's monthly submittals of its revenue decoupling adjustment factor, the following information was compiled for the twelve-month period ending August 2012:

Comparison of Decoupling Mechanism Collections and Therm Sales

	Revenue Deficiency Collected Through Adj. Factor	Targeted Sales Therms	Estimated Adjusted Booked Sales Therms	Sales Difference Therms
Sep-11	$251,455	6,366,307	5,822,150	(544,157)
Oct	278,809	8,140,381	7,303,496	(836,885)
Nov	307,367	20,210,523	19,292,894	(917,629)
Dec	557,388	44,714,096	43,040,089	(1,674,007)
Jan-12	(440,157)	71,619,805	72,941,521	1,321,716
Feb	223,681	68,197,923	67,532,734	(665,189)
March	1,203,332	56,389,046	52,797,641	(3,591,405)
Apr	(342,478)	34,480,427	35,510,902	1,030,475
May	867,841	15,913,604	13,322,637	(2,590,967)
June	371,624	9,304,928	8,529,904	(775,024)
July	(870,465)	7,068,343	8,883,703	1,815,360
August	220,817	6,252,517	5,792,002	460,515
TOTAL	**$2,629,214**	**348,657,900**	**340,769,672**	**(7,888,228)**

This table shows that the operation of WGL's decoupling mechanism has enabled WGL to collect additional non-gas revenue of approximately $2.6 million from ratepayers. The calculations supporting this collection assume that WGL's energy efficiency efforts have produced usage reductions of approximately 7.9 million therms from September 2011 through August 2012. By contrast, WGL's estimates indicate that the measures installed pursuant to its plan would produce annual savings of approximately 97,709 therms.[49]

As with VNG and Columbia, this result can be attributed to differences in the test year usage for establishing the "allowed distribution revenue" and the actual weather normalized distribution revenue. Any utility's decoupling mechanism functions to decouple the recovery of allowed distribution revenue from that utility's customers' consumption of natural gas. Allowed distribution revenue is calculated based on the utility's rates adopted in its last SCC-approved rate case or performance-based regulation plan,[50] which in WGL's case was the twelve months

[49] This includes reductions attributable to measures taken in 2010 (31,600 therms), in addition to 50% of the 132,217 therms of estimated reductions associated with the current period.
[50] Va. Code § 56-600, definitions of "allowed distribution revenue" and "decoupling mechanism."

ending September 30, 2010.[51] WGL's average normalized non-gas revenue per customer has declined significantly since that time due, at least in part, to customer-initiated efficiency efforts. As noted above, WGL's decoupling mechanism will result in its residential customers compensating WGL for energy reductions estimated to be approximately 7.9 million therms while WGL's *own* estimates indicate that its programs have generated reductions of approximately 97,709 therms. As such, use of the specified non-gas revenue as required by the Natural Gas Conservation Act provides significant additional revenue to WGL above compensation needed to offset lost revenues attributable solely to WGL's efficiency efforts. In accordance with the Act, WGL proposed its plan and decoupling mechanism outside of the context of a rate proceeding in which the Commission examines the justness and reasonableness of a utility's revenues and earnings.

F. Cumulative Results of WGL's Plan

The Commission approved WGL's CARE plan effective as of May 1, 2010, and WGL began offering incentives under its plan November 1, 2010. A summary of results since the plan's inception through August 2012 follows:

May 2010 – August 2012 Results

May 2010 through August 2012 Program Results	
Program expenditures associated with customer rebates and other offerings	$1,109,664
Annual natural gas usage reductions associated with program expenditures	113,509 therms
Revenue deficiency recovered through the revenue decoupling mechanism	$5,287,959
Usage reductions tied to collections under the revenue decoupling mechanism	15,921,144 therms

[51] *See Application of Washington Gas Light Company, For a general increase in rates and charges and to revise its terms and conditions for gas service*, Case No. PUE-2010-00139, Doc. Con. Cen. No. 120710015, Order (July 2, 2012).

CONCLUSION

The Commonwealth's three largest natural gas utilities have developed and implemented CARE plans that include offering various efficiency programs to customers in conjunction with decoupling mechanisms pursuant to the Natural Gas Conservation Act. The results so far indicate that the Natural Gas Conservation Act will in fact stimulate utility investment in energy and conservation programs. Sufficient evidence does not yet exist to conclude that these investments are cost-effective under either the RIM or TRC Tests. Estimates generally indicate that these investments will be beneficial from some perspectives. However, these same estimates indicate that the natural gas utility CARE plans may negatively impact the non-gas rates paid by natural gas consumers and that non-participants in the programs offered pursuant to these CARE plans will be negatively impacted. Additionally, the cost/benefit results do not consider any revenue impact that might be attributable to the implementation of decoupling mechanisms. Such revenue changes could significantly impact the costs and benefits of a utility's overall conservation plan when viewed from a utility customer's perspective.

Further, initial results indicate that the utilities' decoupling mechanisms have increased the utilities' non-gas revenues as compared to the revenues that the utilities would otherwise have received. Such increases can be attributed to the Natural Gas Conservation Act's definition of "allowed distribution revenue" and the related requirement that this definition must serve as the basis for decoupling mechanisms. The Commission will continue to monitor actual results of the utilities' CARE plans and report to the Governor and General Assembly as directed.