

Daniel Clearfield  
717.237.7173  
dclearfield@eckertseamans.com

June 4, 2010

*ORIGINAL  
VERIFICATION  
TO COME*

**Via Hand Delivery**

Rosemary Chiavetta, Secretary  
PA Public Utility Commission  
PO Box 3265  
Harrisburg, PA 17105-3265

Re: Philadelphia Gas Works' Petition to Modify Its Universal Service and Energy Conservation Plans With Respect To The Customer Responsibility Program,  
Docket No. P-2010-217861 CORRECTED FILING

Dear Secretary Chiavetta:

*P-2010-2178610*

On June 3, 2010, Philadelphia Gas Works ("PGW") filed its Petition to Modify its Universal Services and Energy Conservation Plans with Respect to the Customer Responsibility Program along with supporting Testimony of Cristina Coltro. During the production process, two lines were dropped from page 7 of the Petition. Accordingly, please replace what was filed yesterday with the entire package that is enclosed with this letter. My apologies for the inconvenience.

Very truly yours,



Daniel Clearfield

DC/lww  
Enclosure

cc: Cert. of Service w/enc.  
David Mick, BCS w/enc.

**RECEIVED**  
**2010 JUN -4 AM 11:17**  
**SECRETARY'S BUREAU**

**BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION**

Philadelphia Gas Works' Petition to Modify :  
Its Universal Service and Energy :  
Conservation Plans With Respect To The : Docket No. P-2010-  
Customer Responsibility Program :  
:

RECEIVED  
2010 JUN -4 AM 11:17  
PA PUC  
SECRETARY'S BUREAU

---

**PHILADELPHIA GAS WORKS' PETITION TO MODIFY  
ITS UNIVERSAL SERVICES AND ENERGY  
CONSERVATION PLANS WITH RESPECT TO THE  
CUSTOMER RESPONSIBILITY PROGRAM**

---

Philadelphia Gas Works ("PGW") hereby petitions the Pennsylvania Public Utility Commission ("PUC" or "Commission") pursuant to 66 Pa. C.S. § 703(g), 52 Pa. Code § 62.4 and 52 Pa. Code §§ 69.261-267, as well as the PUC's October 23, 2009 Order at M-00072021, to modify its Customer Responsibility Program ("CRP") in two ways. PGW proposes to amend its Universal Services and Energy Conservation Plans<sup>1</sup> and its existing CRP tariff provisions to reflect these changes.

First, PGW seeks to modify its CRP to more fully address the mandated changes in the application of Low Income Home Energy Assistance Program Cash Grants ("LIHEAP" and "LIHEAP Cash Grants") to the accounts of CRP customers ordered last year by the Department of Public Welfare ("DPW"). PGW previously amended its CRP to make changes required by DPW for application to the 2009-2010 LIHEAP heating season. At that time, it was contemplated by PGW that more changes would be made to CRP<sup>2</sup> in order to more fairly balance

---

<sup>1</sup> The requested amendments would impact the remainder of Universal Services and Energy Conservation Plan for 2008-2010 and the upcoming Plan for 2011-2013.

<sup>2</sup> The Commission approved Settlement authorized the prior changes and authorized PGW to make a separate filing to propose further changes to its CRP Program. *Re: Philadelphia Gas Works Universal Service and Energy Conservation Plan; Joint Petition for Interlocutory Review, Answer to a Material Question and Approval of a Settlement, M-00072021 (Opinion and Order entered October 23, 2009) at 4.*

CRP support and burdens in light of the DPW changes. To that end, this Petition proposes to set the CRP support levels so that customers will realize the PUC-recommended targeted energy burdens after taking into account the effect of the LIHEAP Cash Grants which are now applied to individual CRP recipients' asked to pay bills. In making this change, PGW would create a positive incentive for CRP customers to apply for available LIHEAP grants.

Second, PGW proposes to modify CRP by adding a "conservation incentive" program element. This addition would create a positive incentive for CRP customers to reduce their natural gas usage, which would, in turn, reduce the subsidy paid by non-CRP ratepayers.

PGW submits that these proposed changes will result in a more reasonable and balanced CRP which will provide crucially important support for low income customers at appropriate levels. At the same time, the changes will result in more reasonable burdens on non-CRP firm customers who are required to pay the CRP subsidy through PGW's Universal Service and Energy Conservation Charge ("USC").

In support of this Petition, PGW states as follows:

## **I. BACKGROUND**

1. CRP is a low-income payment assistance program available to residential customers with gross household income at or below 150% of the federal poverty level ("FPL"). PGW has no restrictions on the number of customers who can enroll in CRP. *See* Appendix "A," the Testimony of Cristina Coltro, at 2.

2. CRP was designed to: (i) provide low income customers with an affordable payment plan that avoids loss of service; (ii) improve the payment behavior of CRP participants; and (iii) reduce collection costs while minimizing monetary burdens transferred to other (non-CRP) customers. *See* Appendix "A," the Testimony of Cristina Coltro, at 2.

3. CRP customers pay a fixed monthly amount (i.e. the asked to pay bill) which is based on their household income. CRP customers pay eight, nine or ten percent (8%, 9%, or 10%) of their household income, plus Five Dollars (\$5) towards any pre-program arrears. Customers on the eight percent (8%) type CRP agreement must pay at least a minimum monthly payment amount is Twenty Five Dollars (\$25) (plus Five Dollars (\$5) towards any pre-program arrears). Customers who have pre-CRP enrollment arrearages are eligible for forgiveness of 1/36 of that arrearage each month that the asked to pay bill is paid in full and on time. Thus over a three year period, a CRP customer who pays conscientiously would eliminate all pre-CRP enrollment arrearages. These payment amounts are designed to as much as possible to reflect the Commission's determined "energy burdens" that low income customers should be required to bear. *See Appendix "A," the Testimony of Cristina Coltro, at 2-3.*

4. The difference between a CRP customer's monthly "asked to pay" bill and the full bill for the customer's actual usage (sometimes referred to as the "CAP credit") is funded through a charge on remaining customers via the USC. The USC is imposed on all firm customers (other than those in CRP), including firm commercial and industrial sales customers. Computation of the USC is made in accordance with the automatic adjustment procedures under 66 Pa. C.S. § 1307(f), and the USC is adjusted quarterly in accordance with section 1307(f) quarterly adjustment procedures. PGW Service Tariff No. 2, Thirty-Second Revised Page No. 81. *See Appendix "A," the Testimony of Cristina Coltro, at 3.*

5. Prior to the change in DPW's policies, the CAP credit was reduced by crediting LIHEAP Cash Grants against the CAP credit imposed on non-CRP recipients, as was specifically authorized by the PUC policy statement on customer assistance programs.<sup>3</sup>

---

<sup>3</sup> 52 Pa. Code §§ 69.265(9)(ii-iii).

6. In 2009 (prior to the 2009-2010 heating season), DPW changed its policies for PGW. These changes required that PGW cease crediting LIHEAP Cash Grants against the CAP credit or subsidy. Rather, DPW required PGW to apply LIHEAP Cash Grants against the relevant individual CRP recipient's "asked-to-pay" bill amounts. See Appendix "A," the Testimony of Cristina Coltro, at 3.

7. On July 8, 2009, PGW filed a petition with the Commission, at Docket No. M-00072021 (the "LIHEAP Filing"), in which it sought amendment to its 2008-2010 Plan in order to make DPW required changes in the way in which it applied LIHEAP Cash Grants to the accounts of CRP customers. By Order dated October 23, 2009, the Commission approved a Settlement Agreement ("LIHEAP Settlement") in the LIHEAP Filing which authorized amendment to the 2008-2010 Plan to comply with DPW's requirements for the 2009-2010 LIHEAP season.<sup>4</sup> See Appendix "A," the Testimony of Cristina Coltro, at 3-4.

8. As part of the LIHEAP Settlement, PGW agreed to make a separate filing to modify its CRP to make additional changes that, in PGW's view, were necessitated by the new DPW policy.<sup>5</sup> In accordance with the terms of the LIHEAP Settlement, PGW has met with Office of the Consumer Advocate ("OCA"), Office of Trial Staff ("OTS") and Tenant Union Representative Network ("TURN") seeking input regarding the changes to CRP that should be

---

<sup>4</sup> *Re: Philadelphia Gas Works Universal Service and Energy Conservation Plan; Joint Petition for Interlocutory Review, Answer to a Material Question and Approval of a Settlement*, M-00072021 (Opinion and Order entered October 23, 2009). The Commission subsequently suspended Sections 69.265(9)(ii-iii) of its Policy Statement on Customer Assistance Programs ("CAP Policy Statement") in order to allow utilities to comply with DPW's requirements regarding the application of Grants to CAP accounts. *Re: Customer Assistance Program Policy Statement Suspension and Revision*, M-00920345, April 9, 2010.

<sup>5</sup> This filing was originally due by January 31, 2010. PGW, OCA, OTS and TURN agreed to extend the filing date. This Petition serves as the CRP modification filing required by the LIHEAP Settlement.

proposed in light of the DPW mandate and/or the conservation incentive. PGW has attempted to address some of the concerns of these parties to the extent practicable, and to the extent that those suggestions are consistent with PGW's paramount concern to properly balance the interests of CRP and non-CRP customers. *See* Appendix "A," the Testimony of Cristina Coltro, at 4, 18.

9. Additionally, as a condition of the Joint Petition for Settlement ("Rate Case Settlement") filed at Docket Nos. R-2009-2139884 and P-2009-2097639, PGW agreed to include a proposal to create a positive incentive to encourage conservation by CRP participants in this filing.<sup>6</sup> This filing also fulfills that promise. *See* Appendix "A," the Testimony of Cristina Coltro, at 4.

## **II. REDESIGN OF CRP WITH GRANT APPLICATION INCENTIVE**

10. PGW believes that the fact that the CRP customer now receives the LIHEAP Cash Grant directly necessitates a redesign of CRP. DPW's change has increased the total energy assistance being provided to low income customers (because the CRP customer now has the LIHEAP Cash Grant to further reduce their PGW charges for which they are responsible). In turn, this change has increased the CAP credit, and thus the subsidy that non-CRP ratepayers are being asked to pay. *See* Appendix "A," the Testimony of Cristina Coltro, at 5. Using 2009 data, non-CRP customers are paying almost \$29.00 more per year due to the DPW-mandated change. *Id.*

11. The financial effect of this change will be magnified by increases in the CRP participation rate. As CRP participation grows, the subsidy imposed on other ratepayers generally will increase. Many of these ratepayers are lower income consumers who may be

---

<sup>6</sup> *Pa PUC v. PGW*, R-2009-2139884, Joint Petition for Settlement, ¶ 25. The proposed conservation incentive provision was shared with Office of Small Business Advocate.

unable to shoulder an increasing subsidy burden. *See* Appendix “A,” the Testimony of Cristina Coltro, at 6.

12. The DPW change results in CRP recipients having a net household energy burden that is lower than the targeted percentages of income burdens that PGW’s CRP plan targeted and which are suggested by the PUC in its Policy Statement. *See* Appendix “A,” the Testimony of Cristina Coltro, at 5.

13. The DPW change also eliminates the ability of CRP customers to have an unvaried monthly bill (based on an affordable household energy burden), which was one of the benefits of CRP as originally designed. *See* Appendix “A,” the Testimony of Cristina Coltro, at 5.

14. In August 2009, PGW retained the Applied Public Policy Research Institute for Study and Evaluation (“Apprise”) to perform an analysis and evaluation of CRP and to recommend modifications to CRP. Apprise presented three (3) possible new CRP models in its final report (the “Apprise Report”), which is Exhibit “CC-1” to Appendix “A,” the Testimony of Cristina Coltro. *See* Appendix “A,” the Testimony of Cristina Coltro, at 7-8.

15. Based on the findings of the Apprise Report and input from other parties, PGW has concluded that it should adopt the Modified Model to the benefit of PGW and all of its customers.<sup>7</sup> The proposed Modified Model is explained in greater detail in the attached Testimony from Cristina Coltro (Appendix “A”). *See* Appendix “A,” the Testimony of Cristina Coltro, at 10, 18.

16. The proposed Modified Model (as described in more detail in Appendix A) would adjust customer asked to pay amounts by the amount of a projected, non-customer specific,

---

<sup>7</sup> A comparison of the CRP customer’s monthly asked to pay amount under each of the three models (without the Cash Grant Adjustment) is set forth in the Apprise Report on page 58.

LIHEAP related credit based on the total LIHEAP Cash Grants that PGW projects will be obtained by CRP customers (the “Cash Grant Adjustment”). The adjustment will result in CRP customers being asked to pay a post LIHEAP Cash Grant net energy burden that is more consistent with PGW’s existing goals and the PUC Policy Statement (i.e., approximately 8, 9 and 10% of income). *See*, Apprise Report (Exhibit CC-1 to Appendix A hereto) at 59A (Table VII-3B, Model 1, Current CRP). *See also* Appendix “A,” the Testimony of Cristina Coltro, at 10-12.

17. The Modified Model proposes to calculate the Cash Grant Adjustment by assuming that, for any LIHEAP season, the same percentage of CRP customers will apply for and receive a LIHEAP Cash Grant as applied and received LIHEAP grants in the prior season.<sup>1</sup> PGW’s proposed approach does not discriminate against or distinguish among those who actually receive a LIHEAP Cash Grant and those who do not receive a Grant. CRP Customers who do not assign a LIHEAP Cash Grant to PGW will have to pay a higher net energy burden (effectively, a higher percentage of that customer’s income) than the currently approved CRP requires. However, the customer can avoid this burden by applying for and receiving a LIHEAP Grant. *See* Appendix “A,” the Testimony of Cristina Coltro, at 8.

18. The attached testimony provides data showing how PGW’s proposal compares to the existing and previous CRP structures. *See*, Appendix “A” the Testimony of Cristina Coltro at 13, Table 1. This analysis shows that a typical CRP customer, whose income falls in the 51% to 100% of the FPL income range for example, and whose targeted energy burden is 9% of income was paying \$135.00/month prior to the DPW changes and now pays \$126.67 (net of the LIHEAP Cash Grant) as a result of the DPW change. Under PGW’s proposal, this customer

---

<sup>1</sup> As explained in greater detail in Appendix A, the actual dollar amount of the Cash Grant will be determined using the DPW determination of the dollar amount of the grants it projects it will distribute for the upcoming LIHEAP season.

would pay \$130.84 after receipt of the LIHEAP Cash Grant, or an energy burden of 8.72% of income. A summary of this data, along with the resulting energy burdens, is as follows:

### CRP Payment Comparison

	Monthly CRP Charge	Energy Burden
CRP Payment Before DPW	135.00	9%
CRP Payment After DPW (net of grant)	126.67	8.44%
CRP Payment Under PGW Modified Method (w/out grant)	139.17	9.27%
CRP Payment Under PGW Modified Method (net of grant)	130.84	8.72%

19. PGW believes that the proposed Modified Model is just and reasonable. PGW further believes that the proposed Modified Model will create a positive incentive for CRP customers to apply for available LIHEAP Cash grants and will more fairly balance the financial effect of the DPW requirements on non-CRP ratepayers. *See* Appendix “A,” the Testimony of Cristina Coltro, at 10.

### III. CREATION OF A CONSERVATION INCENTIVE

20. Currently, CRP customers are eligible to receive free conservation services through PGW’s Conservation Works Program (“CWP”)<sup>2</sup> (or the Enhanced Low Income Retrofit Program - once the Commission approves the Rate Case Settlement) (collectively, “weatherization services”).<sup>3</sup> As evidenced by these programs and PGW’s other DSM programs, PGW is committed to both providing cost-effective weatherization programs for CRP customers

<sup>2</sup> CRP customers are eligible to receive free conservation services through PGW’s CWP. In the past, PGW has relied primarily on the CWP, specifically tied to CRP, as the primary means of advocating CRP customer energy conservation and reduction of consumption. CWP has generally been viewed as cost-effective and successful.

<sup>3</sup> Under PGW’s five (5) year Demand Side Management (“DSM”) plan --if approved in the Rate Case Settlement – PGW will provide expanded conservation services to CRP customers through the Enhanced Low Income Retrofit Program.

and encouraging all customers to conserve energy. *See* Appendix “A,” the Testimony of Cristina Coltro, at 14.

21. PGW believes it would be beneficial to motivate CRP customers to conserve energy, particularly since their conservation efforts will reduce the CAP credit subsidy borne by other ratepayers. In fact, PGW agreed as part of the Rate Case Settlement to include in this filing “a proposal to create a positive incentive to encourage conservation by CRP participants.”<sup>4</sup> *See* Appendix “A,” the Testimony of Cristina Coltro, at 14-15.

22. In order to stimulate CRP customers to reduce energy consumption, thus reducing the subsidy borne by non-CRP customers, PGW would provide CRP customers with a conservation incentive (“Incentive”), as follows:

(i) CRP customers who did not receive PGW weatherization services between the prior November through April but reduced their weather normalized gas usage by ten percent (10%) or more during the current November through April (compared to the weather normalized usage) would receive a One Hundred Dollar (\$100) Incentive credit on their bill; and

(ii) CRP customers who received PGW weatherization services between the prior November through April and reduced their weather normalized gas usage by twenty percent (20%) or more during the current November through April would receive a One Hundred Dollar (\$100) Incentive credit on their bill.

*See* Appendix “A,” the Testimony of Cristina Coltro, at 16.

23. PGW would promote the Incentive at CRP enrollment and re-certification, as well as through advertising campaigns. The Incentive results would be tracked and monitored to ensure that the Incentive achieves the goals of reducing CRP customer gas usage while maintaining the affordability of gas service to the participants. *See* Appendix “A,” the Testimony of Cristina Coltro, at 16-17.

---

<sup>4</sup> Rate Case Settlement, ¶ 25. PGW believes that the Incentive (described in this Petition) will help alleviate the concerns of some of the parties to the rate case proceeding that CRP recipients were not sufficiently incentivized to conserve natural gas. *See* Appendix “A,” the Testimony of Cristina Coltro, at 15.

24. PGW believes that the Incentive is the most just and reasonable means of encouraging conservation by CRP customers. *See* Appendix “A,” the Testimony of Cristina Coltro, at 15.

#### **IV. REPORTING COMMITMENTS**

25. PGW is willing to provide certain CRP data to the statutory parties with its Universal Service and Energy Conservation Plan filings starting in 2013. Upon written request and execution of a confidentiality agreement provided by PGW, PGW will provide statutory parties with three years of CRP customer data, collected on a fixed date each year for customers who have been on CRP for the entire year, as follows:

- (i) CRP usage data; (ii) year of enrollment in CRP and whether there was a senior citizen (i.e. over age 62) or child (i.e. under age 18) in the household at the time of enrollment or last re-certification; (iii) the CRP asked to pay amount billed for the year; (iv) the CRP subsidy amount for the year; (v) the difference between the subsidy amount and \$840; and (vi) the difference between the subsidy amount and \$1000.

*See* Appendix “A,” the Testimony of Cristina Coltro, at 17-18.

#### **V. CONCLUSION**

26. Much of the current CRP structure would not be changed by this Petition. A detailed explanation and support for the changes requested by PGW are set forth in Appendix A, the Testimony of Cristina Coltro.

27. PGW has requested an extension of the deadline for filing its proposed Universal Services and Energy Conservation Plan for 2011-2013, at Docket No. P-2010-2178610, until this Petition is resolved. PGW proposes to file its 2011-2013 Universal Services Plan within thirty (30) days of the entry of an order resolving this Petition. PGW also proposes to file revised tariff pages, following a final Order of the Commission on the requested amendments. The tariff pages would be filed as a compliance filing to the Commission’s order. Proposed tariff pages are attached as Exhibit “CC-2” to the Testimony from Cristina Coltro (Appendix “A”).

WHEREFORE, Philadelphia Gas Works hereby respectfully requests that the Pennsylvania Public Utility Commission:

1. Authorize the changes set forth in this Petition, as more fully set out in Appendix A, concerning the application of LIHEAP Cash Grants to the accounts of CRP customers, effective with the 2010-2011 LIHEAP Season and thereafter as in the public interest;
2. Authorize the changes set forth in this Petition and Appendix A hereto concerning the Modified Model, effective upon implementation by PGW, for the 2011-2013 period and thereafter as in the public interest;
3. Authorize the changes set forth in this Petition and Appendix A hereto concerning the conservation Incentive, effective upon implementation, for the 2011-2013 period;
4. Direct PGW to file modifications to its tariff setting forth its CRP program, as set forth in Exhibit CC-2 to Appendix A hereto, as a compliance tariff within fifteen (15) days of the entry of the Commission's order; and
5. Grant other such relief as is just, proper and in the public interest.

Of Counsel:  
Denise Adamucci  
Senior Attorney  
Philadelphia Gas Works  
800 W. Montgomery Avenue, 4<sup>th</sup> Floor  
Philadelphia, PA 19122  
Phone (215) 684-6745  
Fax (215) 684-6798

Respectfully Submitted,

  
\_\_\_\_\_  
Daniel Clearfield, Esq.  
(PA Atty. I.D. No. 26183)  
Edward G. Lanza, Esq.  
(PA Atty. I.D. No. 81081)  
Eckert Seamans Cherin & Mellott, LLC  
213 Market St., 8<sup>th</sup> Fl.  
Harrisburg, PA 17101  
Phone (717) 237-7173  
Fax (717) 237-6019

*Counsel for Philadelphia Gas Works*

Dated: June 3, 2010

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

TESTIMONY OF

CRISTINA COLTRO

ON BEHALF OF  
PHILADELPHIA GAS WORKS

Philadelphia Gas Works' Petition to Modify Its Universal  
Service and Energy Conservation Plans With Respect To  
The Customer Responsibility Program

DOCKET NO. P-2010-\_\_\_\_\_

June 2010

1 **I. QUALIFICATIONS AND PURPOSE OF TESTIMONY**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Cristina Coltro and my business address is 800 W. Montgomery Avenue,  
4 Philadelphia, PA 19122.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am employed by the Philadelphia Gas Works (“PGW” or the “Company”) as the Vice  
7 President-Customer Affairs.

8 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**  
9 **BACKGROUND.**

10 A. I received a Masters Degree in Energy Management and Policy from the University of  
11 Pennsylvania in 1995, and a Bachelor's Degree in Economics from Hunter College, City  
12 University of New York in 1992. My professional experience includes more than 15  
13 years of working in the field of low-income energy programs and regulatory compliance.

14 **Q. WHAT ARE YOUR CURRENT RESPONSIBILITIES AS VICE PRESIDENT-**  
15 **CUSTOMER AFFAIRS?**

16 A. My principal responsibilities include the oversight of PGW’s Call Center Operations,  
17 Credit and Collections, Customer Service Centers, Account Management Department,  
18 Billing System, Bill Preparation & Mail Receipts, Regulatory Compliance (Universal  
19 Services, PUC Complaints, Dispute Resolution, and Training), and Commercial Resource  
20 Center.

21 **Q. HAVE YOU EVER PROVIDED TESTIMONY TO THIS COMMISSION**  
22 **BEFORE?**

23 A. Yes, I have testified before the Commission in the Company's prior base rate requests (in  
24 2001 at R-00006042, in 2002 at R-00027034, in 2006 at R-00061931, in 2008 at R-2008-

1 2073938 in 2009 in R-2009-2139884) as well as the Restructuring Proceeding (M-  
2 00021612) and the Consolidated Investigation (P-00042090).

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

4 A. I am providing this testimony in support of approval of PGW's Petition to modify its  
5 Customer Responsibility Program.

6 **II. CUSTOMER RESPONSIBILITY PROGRAM ("CRP")**

7 **Q. PLEASE PROVIDE AN OVERVIEW OF PGW'S CURRENT CRP.**

8 A. CRP is a low-income payment assistance program available to residential customers with  
9 gross household income at or below 150% of the federal poverty level ("FPL"). PGW  
10 has no restrictions on the number of customers who can enroll in CRP.

11 CRP was designed to: (i) provide low income customers with an affordable  
12 payment plan that avoids loss of service; (ii) improve the payment behavior of CRP  
13 participants; and (iii) reduce collection costs while minimizing monetary burdens  
14 transferred to other (non-CRP) customers.

15 CRP customers pay a fixed monthly amount (i.e. the asked to pay bill) which is  
16 based on their household income. CRP customers pay eight, nine or ten percent (8%,  
17 9%, or 10%) of their household income, the minimum amount being Twenty Five (\$25)  
18 per month. In addition, Five Dollars (\$5) is requested towards any pre-program arrearages.  
19 Customers who have pre-CRP enrollment arrearages are eligible for forgiveness of 1/36  
20 of that arrearage each month in which the asked to pay bill is paid in full and on time.  
21 Thus, over a three year period, a CRP customer who pays conscientiously would  
22 eliminate all pre-CRP enrollment arrearages. These payment amounts are designed, to

1 the extent possible, to reflect the Commission’s determined “energy burdens” that low  
2 income customers should be required to bear.

3 The difference between a CRP customer’s monthly “asked to pay” bill and the  
4 full bill for the customer’s actual usage (sometimes referred to as the “CAP credit”) is  
5 funded through a charge on remaining customers via the Universal Service Charge  
6 (“USC”). The USC is imposed on all firm customers (other than those in CRP),  
7 including firm commercial and industrial sales customers. Computation of the USC is  
8 made in accordance with the automatic adjustment procedures under 66 Pa. C.S. §  
9 1307(f), and the USC is adjusted quarterly in accordance with section 1307(f) quarterly  
10 adjustment procedures.<sup>1</sup>

11 **Q. WHY IS PGW PROPOSING MODIFICATIONS TO THE CRP AT THIS TIME?**

12 A. The Pennsylvania Department of Public Welfare (“DPW”) is the Commonwealth agency  
13 which administers Low-Income Home Energy Assistance Program (“LIHEAP”) cash and  
14 crisis benefits, including LIHEAP Cash Grants. In 2009 (prior to the 2009-2010 heating  
15 season), DPW changed its policies for PGW and required that PGW cease crediting  
16 LIHEAP Cash Grants against the CAP credit or subsidy. Rather, DPW required PGW to  
17 apply LIHEAP Cash Grants against the relevant individual CRP recipient’s “asked-to-  
18 pay” bill amounts only.

19 On July 8, 2009, PGW filed a petition with the Commission, at Docket No.  
20 00072021 (the “LIHEAP Filing”), in which it sought amendment to its 2008-2010 Plan in  
21 order to make DPW required changes in the way in which it applied LIHEAP Cash  
22 Grants to the accounts of CRP customers. By Order dated October 23, 2009, the

---

<sup>1</sup> PGW Service Tariff No. 2, Thirty-Second Revised Page No. 81.

1 Commission approved a Settlement Agreement (“LIHEAP Settlement”) in the LIHEAP  
2 Filing which authorized amendment to the 2008-2010 Plan to comply with DPW’s  
3 requirements for the 2009-2010 LIHEAP season.<sup>2</sup>

4 As part of the LIHEAP Settlement, PGW agreed to make a separate filing to  
5 modify its CRP to make additional changes that, in PGW’s view, were necessitated by  
6 the new DPW policy. Additionally, as a condition of the Joint Petition for Settlement  
7 (“Rate Case Settlement”) filed at Docket Nos. R-2009-2139884 and P-2009-2097639,  
8 PGW agreed to include a proposal to create a positive incentive to encourage  
9 conservation by CRP participants in this filing.<sup>3</sup> The Petition which this testimony is  
10 supporting also fulfills that promise.

11 **Q. WHAT MODIFICATIONS ARE BEING PROPOSED BY PGW IN THE**  
12 **PETITION?**

13 A. While much of the current CRP structure would not be changed by this Petition, PGW is  
14 seeking to make two modifications to CRP. These modifications would: (i) redesign  
15 CRP to recognize the effects of the DPW-mandated change in the application of LIHEAP  
16 Cash Grants to a CRP customer’s asked to pay amount bill; and (ii) add a “conservation  
17 incentive” program element to provide a positive incentive for CRP customers to reduce  
18 usage, thereby reducing the subsidy paid by non-CRP customers.

---

<sup>2</sup> *Re: Philadelphia Gas Works Universal Service and Energy Conservation Plan; Joint Petition for Interlocutory Review, Answer to a Material Question and Approval of a Settlement*, M-00072021 (Opinion and Order entered October 23, 2009). The Commission subsequently suspended Sections 69.265(9)(ii-iii) of its Policy Statement on Customer Assistance Programs (“CAP Policy Statement”) in order to allow utilities to comply with DPW’s requirements regarding the application of Grants to CAP accounts. *Re: Customer Assistance Program Policy Statement Suspension and Revision*, M-00920345, April 9, 2010.

<sup>3</sup> *Pa PUC v. PGW*, R-2009-2139884, Joint Petition for Settlement, ¶ 25.

1 **III. REDESIGN OF CRP WITH GRANT APPLICATION INCENTIVE**

2 **Q. WHAT IMPACT HAS THE DPW CHANGE HAD ON PGW'S CRP?**

3 A. DPW's changes have had a significant impact on PGW's CRP. Importantly, DPW's  
4 change has increased the total energy assistance being provided to low income customers  
5 (because the CRP customer now has the LIHEAP Cash Grant to further reduce their  
6 PGW charges for which they are responsible). In turn, this change increases the CAP  
7 credit, and thus the subsidy that non-CRP ratepayers are being asked to pay.

8 I would also note the following additional concerns stemming from DPW's  
9 changes: CRP customers who assign a grant to PGW have a household energy burden  
10 that is lower than the income burdens targeted by CRP (these burdens were established in  
11 accordance with the Commission's Customer Assistance Program ("CAP") Policy  
12 Statement); and CRP customers no longer have an unvaried monthly bill (and monthly  
13 payment obligation), which was one of the benefits of CRP as originally designed.

14 I should note that these concerns are not caused by the level of PGW's gas  
15 charges -- but by the relative burdens imposed on CRP and non-CRP customers both  
16 before and after the DPW-mandated changes in application of the LIHEAP Cash Grants.  
17 The DPW change resulted in CRP customers receiving greater net support than had been  
18 provided --and authorized by the PUC -- than they were receiving before the mandated  
19 change, with a correspondingly greater burden on non-CRP customers who are asked to  
20 pay the subsidy.

21 **Q. ARE THE DPW CHANGES SIGNIFICANT?**

22 A. Yes. Based on the DPW change in the application of LIHEAP Cash grants to the  
23 accounts of CRP customers, the average non-CRP residential customer billing in Fiscal

1 Year (“FY”)<sup>4</sup> 2009 would have increased by \$28.41 per customer - if the change had  
2 applied in FY 2009.

3 The financial effect of DPW’s change will be magnified by increases in the CRP  
4 participation rate. As CRP participation grows, the subsidy imposed on other ratepayers  
5 generally will increase. CRP participation has increased over the past five years. Given  
6 the current economy, participation is expected to further increase. Applied Public Policy  
7 Research Institute for Study and Evaluation (“Apprise”) Report, page 1.<sup>5</sup> Between FY  
8 2004 and FY 2009, PGW saw an average annual CRP participation increase of seven  
9 percent (7%).<sup>6</sup> Apprise Report, pages 6-7. During the same time period, the average  
10 annual cost of the subsidy increased sixteen percent (16%).<sup>7</sup> While it is true that this  
11 increase has been partially offset by decreases in the cost of natural gas, which is passed  
12 through to non-CRP firm customers, the impact remains substantial.

13 Many of these non-CRP ratepayers are lower income consumers who may be  
14 unable to shoulder an increasing subsidy burden or even low income customers below  
15 150% of poverty who, for a variety of reasons, do not participate in CRP. Under the  
16 current design of CRP the provision of an affordable utility payment for low income

---

<sup>4</sup> PGW’s FY runs September 1 through August 31.

<sup>5</sup> A copy of the “Apprise Report” is attached hereto as Exhibit CC-1. The Apprise Report analyzes CRP with the goal of recommending possible changes to the program.

<sup>6</sup> FY 2005 – 5% increase; FY 2006 – 16% increase; FY 2007 – 9% increase; FY 2008 – 1% increase; FY 2009 – 4% increase. Report, page 7, Table II-3. Thus there has been a slowing of growth more recently, with a slight upturn last Fiscal Year. Apprise Report, page 16. If the outlier 16% of FY 2005 through FY 2006 is removed, the average increase is 5% *Id.* at 31.

<sup>7</sup> FY 2005 – 21% increase; FY 2006 - 39% increase; FY 2007 – 1% decrease; FY 2008 - 0% increase; FY – 2009 21% increase. Apprise Report, at 7, Table II-4.

1 customers is balanced against the burden placed on the customers who subsidize the  
2 program. Apprise Report, page 17. Because, among other reasons, CRP has a high  
3 participation rate (51% versus an average of 41% for other gas utilities) and a large  
4 percentage of PGW customers are low-income (32% versus an average of 14% for other  
5 gas utilities), the CRP portion of the USC per customer already averages \$220 per year  
6 (versus \$40 for other gas utilities).<sup>8</sup> Apprise Report, pages 17 and 25.

7 **Q. WHAT IS PGW'S RESPONSE TO THESE CHANGES?**

8 A. Due to concern over the cost of the CRP subsidy as well as the impact of the DPW  
9 required changes on the subsidy, PGW has re-examined CRP and believes that the fact  
10 that the CRP customer now receives the LIHEAP Cash Grant directly necessitates a  
11 redesign of CRP. With the lower burden for CRP customers resulting from the DPW  
12 change, there is some ability to attempt to mitigate the growing burden on those who pay  
13 the subsidy.

14 **Q. DID PGW CONDUCT A STUDY OF POTENTIAL MODIFICATIONS TO ITS**  
15 **CRP?**

16 A. Yes. To better determine the most reasonable and appropriate way in which to modify  
17 CRP changes, PGW retained Apprise in August 2009, to perform an analysis and  
18 evaluation of CRP and to recommend modifications to CRP. As a result of its  
19 investigation, Apprise provided PGW with the Apprise Report.

20 **Q. DID THE APPRISE REPORT MAKE ANY RECOMMENDATIONS ON THE**  
21 **REDESIGN OF CRP?**

---

<sup>8</sup> Thus, as an example, had the DPW change applied in FY 2009, the average non-CRP customer billing (for CRP) would have increased to \$248.41.

1 A. Yes. Apprise presented three (3) possible CRP models in its Report: (i) a modified  
2 version of CRP called the Current CRP Model (the “Modified Model”); (ii) the Targeted  
3 Energy Burden Model; and (iii) the Bill Discount Model.

4 **Q. PLEASE BRIEFLY DESCRIBE THE MODIFIED MODEL.**

5 A. The Modified Model would add a projected, non-customer specific, LIHEAP related  
6 credit to the monthly CRP asked to pay bills. The Modified Model assumes that CRP  
7 customers would apply for and receive a LIHEAP Cash Grant in the same proportion as  
8 has occurred in the immediately preceding year and does not discriminate or distinguish  
9 against those who actually receive a Grant and those who do not receive a Grant.  
10 Customers who do not assign a LIHEAP Grant to PGW will have to pay a higher net  
11 energy burden (effectively, a higher percentage of that customer’s income) than the  
12 currently approved CRP requires.

13 **Q. PLEASE DESCRIBE THE TARGETED ENERGY BURDEN MODEL?**

14 A. The Targeted Energy Burden Model targets a customer’s post-LIHEAP energy burden  
15 (percentage of their income) to a certain level and provides the customer with a related  
16 monthly credit on his/her bill. Apprise Report, page 39. As described in the Apprise  
17 Report, pages 40-41:

18 If PGW decided to target a burden of eight percent, the calculation would be done  
19 as follows:

20  
21 *Annual Household Income \* 8% = Targeted Net Energy Bill (\$10,000 \* 8%=\$800)*  
22 *Current Gas Burden = Annual Gas Bill – LIHEAP Benefit (\$2,200 - \$350 = \$1850)*  
23 *CAP pays the difference: \$1850 - \$800 = \$1050*  
24 *Monthly credit = \$1050/12 = \$87.50*  
25

26 Note: The numbers utilized in the above formula are for illustration purposes only.  
27

1 In comparison with the Modified Model, the Targeted Energy Burden Model does  
2 not result in equal monthly payments and is the most administratively complex of the  
3 three models examined. Apprise Report, pages 40, 57-59. PGW has rejected this model  
4 as too complicated for customers and too administratively burdensome.

5 **Q. PLEASE BRIEFLY DESCRIBE THE BILL DISCOUNT MODEL?**

6 A. The Bill Discount Model provides a discount on the energy bill. Apprise Report, page  
7 43. A utility could apply a discount in various ways, such as on the full gas bill or one  
8 type of charge, or up to a certain threshold or on all usage. Apprise Report, page 43. If  
9 the cost of gas increases, the increase would be shared by CRP participants and other  
10 ratepayers through the CRP customer's portion of the bill and the other ratepayers  
11 discounted portion of the bill.

12 However, the Bill Discount Model does not result in equal monthly payments and  
13 does not target a specific monthly percentage of income payment for a customer.  
14 Apprise Report, page 43. While it does encourage conservation, Apprise considers this  
15 model inefficient: in that some customers would receive a discount that is lower than  
16 needed (not generous enough considering their income level) and some customers would  
17 receive a discount that is higher than needed (too generous). Apprise Report, pages 43  
18 and 59. If the discount is set to keep 90% of CRP participants within the PUC's targeted  
19 percentages of income, the subsidy paid by non-CRP customers would be higher than the  
20 subsidy under the Modified Model. Apprise Report, page 47, Table VI-20. In contrast, if  
21 the discount is set to match the subsidy costs under the Modified Model, it becomes more  
22 inefficient - the asked to pay bills are too low for the lower low-income groups and too  
23 high for the higher low-income groups. Apprise Report, page 54, Table VI-29.

1 Therefore, PGW has determined that the Bill Discount Model is less practical and  
2 effective than the Modified Model.

3 **Q. IS PGW PROPOSING THE USE OF THE MODIFIED MODEL?**

4 A. Yes. PGW agrees with Apprise that the Modified Model is just and reasonable and  
5 would provide the most benefit to PGW's customers.<sup>9</sup> Apprise Report, page 61. The  
6 Targeted Energy Burden Model and the Bill Discount Model are less practical and  
7 effective than the Modified Model.

8 **Q. HOW WILL PGW'S MODIFIED MODEL WORK?**

9 A. As proposed by PGW, the Modified Model would adjust customer asked to pay amounts  
10 by the amount of a projected, non-customer specific, LIHEAP related credit based on the  
11 total LIHEAP Cash Grants that PGW projects will be received by CRP customers (the  
12 "Cash Grant Adjustment"). The adjustment will result in CRP customers being asked to  
13 pay a post LIHEAP Cash Grant net energy burden that is more consistent with PGW's  
14 existing goals and the PUC Policy Statement (i.e., approximately 8, 9 and 10% of  
15 income). See, Apprise Report, at 59A (Table VII-3B, Model 1, Current CRP and Table  
16 1, below).

17 **Q. PLEASE EXPLAIN HOW THE CUSTOMER "ASKED TO PAY" AMOUNTS**  
18 **WOULD BE ADJUSTED UNDER PGW'S PROPOSAL.**

19 A. Currently, CRP uses a formula which requires a monthly payment based on the  
20 customer's household income. Thus, a customer who pays an eight percent (8%) of  
21 income energy burden pays as follows:

---

<sup>9</sup> A comparison of the CRP customer's monthly asked to pay amount under each of the three models (without the Cash Grant Adjustment) is set forth in the Apprise Report on page 58. A comparison of the costs of the three models is set forth in the Apprise Report on page 60.

1  $Monthly\ CRP\ Payment = [.08 * Annual\ Household\ Income] /12$

2 In contrast, as shown on page 34 of the Apprise Report, the basic formula of the  
3 Modified Model would add a projected LIHEAP Cash grant, based on the annual  
4 Pennsylvania LIHEAP Benefit Amount Table<sup>10</sup> (by household size and income), over the  
5 twelve (12) month payment period as follows:

6  $Monthly\ CRP\ Payment = \{ [.08 * Annual\ Household\ Income] /12 \} + [LIHEAP/12]$

7 This modification would provide an incentive for the customer to apply for a  
8 Grant and the addition of projected grants would offset an increase in the subsidy which  
9 has resulted from the DPW required change. Apprise Report, page 34. Further, LIHEAP  
10 Cash Grants assigned to PGW would be applied to the bill over a twelve (12) month  
11 period, thus ensuring a consistent monthly bill for those who obtain a Grant. Apprise  
12 Report, page 37.

13 **Q. WHAT ABOUT CUSTOMERS WHO DO NOT OBTAIN A GRANT?**

14 A. It is important to remember that every CRP customer may not obtain a LIHEAP Cash  
15 Grant and of those who do receive one, not all of them will assign the Grant to PGW.  
16 Thus, PGW proposes that the amount used to calculate the monthly CRP payment, while  
17 LIHEAP related, not be connected to an individual's actual LIHEAP Cash Grant or  
18 expected Grant. Instead, each year PGW will examine the prior year's level of LIHEAP  
19 Cash Grant receipts from CRP customers and adjust the amounts credited to each  
20 customer (the "Adjustment") based on the percent of CRP customers who had assigned a

---

<sup>10</sup> For an example, see the 2009-2010 LIHEAP Season Benefit Amount Table at <http://www.dpw.state.pa.us/ServicesPrograms/LIHEAP/003671828.aspx>

1 Grant to PGW in that prior year (multiplied by the annual Pennsylvania LIHEAP Benefit  
2 Amount Table calculation set forth in the base formula above).

3 The addition of an Adjustment will result in the CRP support level being adjusted  
4 to reflect the best information available as to what the level of grants will be – the prior  
5 year’s level of grant receipts. Apprise Report, page 34. However, (i) a CRP customer  
6 who does not assign a LIHEAP Grant to PGW will only bear the cost of a percentage of  
7 an assumed averaged Grant, with the remainder paid through the subsidy; and (ii) CRP  
8 customers who assign a LIHEAP Grant to PGW will reduce their monthly payment  
9 obligations, thus incenting them to continue applying for Grants in future years.<sup>11</sup>

10 **Q. CAN YOU PROVIDE AN EXAMPLE OF HOW THE ADJUSTMENT WOULD**  
11 **WORK?**

12 A. Yes. Page 34 of the Apprise Report provides the following example:

13 [To make the Adjustment, PGW would] partially adjust the [CRP] payment by  
14 adding a fraction of the projected LIHEAP [Cash] grant, based on the historical  
15 percentage of CRP participants who receive LIHEAP. For example [purposes  
16 only], if 55 percent of CRP participants receive LIHEAP, the formula could be  
17 adjusted as follows:

18  
19 
$$\text{Monthly CRP Payment} = \{ [.08 * \text{Annual Household Income}] / 12 \} +$$
  
20 
$$.55 * \{ \text{LIHEAP} / 12 \}$$
  
21

22 The percentage LIHEAP factor could be adjusted as the percent of CRP participants  
23 who receive LIHEAP changes. This percentage is expected to increase over time as  
24 participants learn how the new calculation and LIHEAP crediting process affects  
25 their gas bills.  
26

27 **Q. CAN YOU PROVIDE EXAMPLES OF HOW THE MODIFIED MODEL WILL**  
28 **CHANGE THE ASKED TO PAY AMOUNTS AND ENERGY BURDENS FOR**  
29 **CRP CUSTOMERS?**

---

<sup>11</sup> It could be expected that as more CRP customers become aware of the DPW related change in Grant application, more CRP customers will assign their Grants to PGW since the Grant will reduce their monthly payment obligation.

1 A. Yes. The following chart shows examples of the changes in asked to pay amount and  
 2 energy burdens for CRP customers with a family of four:

3 Table 1

<b>Modified Model Examples With Adjustment for a household with four people And Comparison with Unmodified Models</b>			
	8% CRP	9% CRP	10% CRP
Monthly Income	\$ 800	\$1,500	\$2,000
Yearly Income	\$9,600	\$18,000	\$24,000
Yearly LIHEAP Matrix Amount	\$ 252	\$ 100	\$ 100 <sup>12</sup>
Monthly LIHEAP Matrix Amount	\$ 21	\$ 8.33	\$ 8.33
Monthly LIHEAP adjustment (Matrix Grant * 50%)	\$ 10.50 <sup>13</sup>	\$ 4.17	\$ 4.17
Monthly CRP amount with LIHEAP Adjustment Prior to Receipt of Cash Grant	\$ 74.50	\$ 139.17	\$ 204.17
<b>Modified Model Monthly CRP amount with LIHEAP Adjustment After Receipt of Cash Grant</b>	<b>\$ 53.50</b>	<b>\$ 130.84</b>	<b>\$ 195.84</b>
<b>Modified Model Monthly Energy Burden with LIHEAP Adjustment After Receipt of Cash Grant</b>	<b>6.69 %</b>	<b>8.72 %</b>	<b>9.79 %</b>
Monthly CRP amount prior to the DPW changes And modification to CRP	\$ 64.00	\$ 135.00	\$ 200.00
Monthly CRP amount with DPW changes and prior to Modification to CRP (CURRENTLY used formula -Net of Cash Grant)	\$ 43.00	\$ 126.67	\$ 191.67
Monthly Energy Burden with DPW changes and prior to Modification to CRP (CURRENTLY used formula -Net of Cash Grant)	5.38%	8.44%	9.58 %

4  
 5  
 6 This analysis shows that a typical CRP customer, whose income falls in the 51% to 100% of the  
 7 FPL income range for example, and whose targeted energy burden is 9% of income was paying  
 8 \$135.00/month prior to the DPW changes and now pays \$126.67 (net of the LIHEAP Cash

<sup>12</sup> This amount would have been the minimum grant amount for this customer for 2009-2010 which, upon information and belief, DPW did not set forth on-line since this information was considered repetitive.

<sup>13</sup> The lowest of the lower income customers receive more significant LIHEAP Cash Grants, so their incremental CRP LIHEAP adjustment will unavoidably be greater due to the nature of the design. However, in the end they will pay less than under the unmodified CRP program since their Grant amounts are substantial.

1 Grant) after the DPW change was implemented. Under PGW's proposal, this customer would  
2 pay \$130.84 after receipt of the LIHEAP Cash Grant, or an energy burden of 8.72% of income.

3  
4 **Q. WILL PGW NEED TO AMEND ITS UNIVERSAL SERVICE PLAN FOR 2010-**  
5 **2011?**

6 A. Yes. To account for the new application of LIHEAP Grants, PGW proposes to amend its  
7 Universal Service Plan as follows, with respect to the 2010-2011 LIHEAP grant season  
8 and thereafter:

9 LIHEAP Cash Grants are applied to CRP accounts as follows: when the grant  
10 payment is received, it is applied to the account similarly to regular payments. It  
11 reduces the CRP balance and arrears.

12  
13 I have attached proposed tariff pages as Exhibit CC-2 to reflect this proposed amendment  
14 to the CRP provisions of the tariff.

15  
16 I have been advised by counsel that the Commission has suspended sections  
17 69.265(9)(ii-iii) of the CAP Policy Statement until further notice. 52 Pa. Code §§  
18 69.265.(9)(ii-iii). Therefore, this proposed change is consistent with Commission policy.

19 **Q. DOES PGW INTEND TO MODIFY ITS UNIVERSAL SERVICE PLAN FOR**  
20 **2011-2013 WITH RESPECT TO CRP?**

21 A. Yes. Based on the Apprise Report, PGW proposes that its Universal Service Plan for  
22 2011-2013 include the following provisions:

23 There shall be a calculation for CRP agreements as follows:

- 24  
25 1. The monthly payment for Customers with household income of  
26 (i) 0-50% of FPL shall be based on a payment of 8% of gross income,  
27 with a minimum payment of \$25 per month (plus \$5 towards any  
28 preprogram arrears); (ii) 50-100% of FPL shall be based on a payment  
29 of 9% of gross income (plus \$5 towards any preprogram arrears); and  
30 (iii) 100-150% of FPL shall be based on a payment of 10% of gross  
31 income (plus \$5 towards any preprogram arrears). Thus, the

1 calculation shall be the relevant percent of income multiplied by the  
2 annual household income, divided over twelve (12) months.

3  
4 E.g. for a customer in the 0-50% category:

$$5 \quad [08 * \text{Annual Household Income}] / 12$$

- 6  
7  
8 2. A LIHEAP Cash Grant amount based on the annual Pennsylvania  
9 LIHEAP Benefit Amount Table (by household size and income) will  
10 be added to this calculation, and spread over the twelve (12) month  
11 payment period.

12  
13 E.g. for a customer in the 0-50% category:

$$14 \quad \{[.08 * \text{Annual Household Income}] / 12\} + [\text{LIHEAP}/12\}$$

15  
16 This amount shall be adjusted each year to reflect the prior year's  
17 percentage of CRP customers who assigned a LIHEAP Cash Grant to  
18 PGW.

19  
20 E.g. for a customer in the 0-50% category:

$$21 \quad \{[.08 * \text{Annual Household Income}] / 12\} +$$
$$22 \quad [\text{percentage who assigned a LIHEAP Cash Grant}] * [\text{LIHEAP}/12\}$$

23  
24 Thus, if 55 percent of CRP recipients assigned a LIHEAP Cash Grant  
25 to PGW the prior year, the formula for a CRP customer in the 0-50%  
26 category the next year would be:

$$27 \quad \text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + .55 * [\text{LIHEAP}/12\}$$

28  
29 I have attached proposed tariff pages as Exhibit CC-2 to reflect this proposed amendment.  
30  
31  
32  
33

#### 34 **IV. THE CONSERVATION INCENTIVE**

##### 35 **Q. DOES PGW ENCOURAGE CRP CUSTOMERS TO CONSERVE ENERGY?**

36 A. Yes. Currently, CRP customers are eligible to receive free conservation services through  
37 PGW's Conservation Works Program ("CWP")<sup>14</sup> (or the Enhanced Low Income Retrofit

---

<sup>14</sup> In the past, PGW has relied primarily on the CWP, specifically tied to CRP, as the primary means of advocating CRP customer energy conservation and reduction of consumption. CWP has generally been viewed as cost-effective and successful.

1 Program - once the Commission approves the Rate Case Settlement) (collectively,  
2 “weatherization services”).<sup>15</sup> As evidenced by these programs and PGW’s other DSM  
3 programs, PGW is committed to both providing cost-effective weatherization programs  
4 for CRP customers and encouraging all customers to conserve energy.

5 **Q. IS PGW PROPOSING A CONSERVATION INCENTIVE FOR CRP**  
6 **CUSTOMERS?**

7 A. Yes. PGW believes it would be beneficial to further motivate CRP customers to  
8 conserve energy, particularly since their conservation efforts will reduce the CAP credit  
9 subsidy borne by other ratepayers. In fact, PGW agreed as part of the Rate Case  
10 Settlement to include in this filing “a proposal to create a positive incentive to encourage  
11 conservation by CRP participants.”<sup>16</sup>

12 **Q. DID PGW CONDUCT A STUDY OF POTENTIAL CONSERVATION**  
13 **INCENTIVES?**

14 A. Yes. As part of the Apprise Report, two (2) types of conservation motivators – a penalty  
15 mechanism and a positive incentive mechanism were examined. Apprise Report, pages  
16 37-38. As an example of a penalty mechanism, PGW would cap the amount of CRP  
17 credit (subsidy) a customer could receive, or could charge the customer a set amount for  
18 exceeding his/her prior year’s usage. However, many CRP participants have limited  
19 ability to reduce usage due to the condition of their homes, inability to pay for efficiency  
20 improvements, or lack of control of their rental property. Turning down the thermostat

---

<sup>15</sup> Under PGW’s five (5) year Demand Side Management (“DSM”) plan, if approved in the Rate Case Settlement, PGW will provide expanded conservation services to CRP customers through the Enhanced Low Income Retrofit Program.

<sup>16</sup> Rate Case Settlement, ¶ 25. PGW believes that the Incentive (described herein and in the subject Petition) will help alleviate the concerns of some of the parties to the rate case proceeding that CRP recipients were not sufficiently incentivized to conserve natural gas.

1 may threaten occupants with chronic or serious illness. Also, increasing bill payments  
2 could impose unaffordable bills on these customers. Apprise Report, pages 37-38. An  
3 incentive mechanism is a more reasonable, as well as a positive, means of encouraging  
4 reduced consumption.

5 **Q. PLEASE DESCRIBE PGW'S PROPOSAL FOR A CONSERVATION**  
6 **INCENTIVE?**

7 A. In order to stimulate CRP customers to reduce energy consumption, thus reducing the  
8 subsidy borne by non-CRP customers, PGW would provide CRP customers with a  
9 conservation incentive ("Incentive"), as follows:

10 (i) CRP customers who did not receive PGW weatherization services between the  
11 prior November through April but reduced their weather normalized gas usage by  
12 ten percent (10%) or more during the current November through April (compared  
13 to the weather normalized usage) would receive a One Hundred Dollar (\$100)  
14 Incentive credit on their bill; and

15 (ii) CRP customers who received PGW weatherization services between the prior  
16 November through April and reduced their weather normalized gas usage by  
17 twenty percent (20%) or more during the current November through April would  
18 receive a One Hundred Dollar (\$100) Incentive credit on their bill.

19  
20 **Q. HOW WOULD PGW COMPARE THE USAGE OF CRP CUSTOMERS?**

21 A. PGW would run a query each April to compare gas consumption of CRP customers for  
22 the November to April period against usage during that time period the previous year.  
23 Usage would be weather normalized, and only customers who were on CRP for the entire  
24 November to April time period would be eligible for the Incentive. Apprise Report, page  
25 38. Apprise has found that the net subsidy savings to ratepayers from this Incentive  
26 would exceed the cost of the Incentive. Apprise Report, pages 38-39. For example,  
27 according to Apprise, after subtracting the subsidy Incentive credit cost the net decline in

1 the subsidy would be \$1.03 million if ten percent (10%) of CRP participants reduce  
2 annual usage by ten percent (10%). Apprise Report, pages 38-39.

3 **Q. HOW WOULD CUSTOMERS LEARN ABOUT THE CONSERVATION**  
4 **INCENTIVE?**

5 A. PGW would promote the Incentive at CRP enrollment and re-certification, as well as  
6 through advertising campaigns. The Incentive results would be tracked and monitored to  
7 ensure that the Incentive achieves the goals of reducing CRP customer gas usage while  
8 maintaining the affordability of gas service to the participants.

9 **Q. DOES PGW INTEND TO START THE CONSERVATION INCENTIVE,**  
10 **EFFECTIVE UPON IMPLEMENTATION, IN ITS UNIVERSAL SERVICE PLAN**  
11 **FOR 2011-2013?**

12 A. Yes. PGW proposes that its Universal Service Plan for 2011-2013 include the following  
13 provisions:

14 PGW will provide CRP customers with a conservation incentive (“Incentive”), as  
15 follows: (i) CRP customers who did not receive PGW weatherization services  
16 between the prior November through April but reduced their weather normalized  
17 gas usage by ten percent (10%) or more during the current November through  
18 April (compared to the weather normalized usage) would receive a One Hundred  
19 Dollar (\$100) Incentive credit on their bill; and (ii) CRP customers who received  
20 PGW weatherization services between the prior November through April and  
21 reduced their weather normalized gas usage by twenty percent (20%) or more  
22 during the current November through April would receive a One Hundred Dollar  
23 (\$100) Incentive credit on their bill.

24  
25 PGW will run a query each April to compare gas consumption of CRP customers  
26 for the November to April period with usage during that time period the previous  
27 year. Usage would be weather normalized and only customers who were on CRP  
28 for the entire November to April time period are eligible for the Incentive.  
29

30 I have attached proposed tariff pages as Exhibit CC-2 to reflect this proposed amendment.  
31

32 **V. REPORTING**

33 **Q. IS PGW PROPOSING ANY ONGOING REPORTING COMMITMENTS TO**  
34 **PERMIT THE COMMISSION TO MONITOR THE EFFECTIVENESS OF THE**  
35 **CRP CHANGES IT IS SUGGESTING?**

1 A. Yes. PGW is willing to provide certain CRP data to the statutory parties with its  
2 Universal Service and Energy Conservation Plan filings starting in 2013. Upon written  
3 request and execution of a confidentiality agreement provided by PGW, PGW will  
4 provide statutory parties with three years of CRP customer data, collected on a fixed date  
5 each year for customers who have been on CRP for the entire year, as follows:

- 6 (i) CRP usage data;
- 7 (ii) year of enrollment in CRP and whether there was a senior citizen (i.e. over  
8 age 62) or child (i.e. under age 18) in the household at the time of enrollment or  
9 last re-certification;
- 10 (iii) the CRP asked to pay amount billed for the year;
- 11 (iv) the CRP subsidy amount for the year;
- 12 (v) the difference between the subsidy amount and \$840; and
- 13 (vi) the difference between the subsidy amount and \$1000.

14  
15 **VI. CONCLUSION**

16 **Q. IS PGW PROPOSING ANY OTHER CHANGES TO CRP AT THIS TIME?**

17 A. No. PGW does not propose any other changes to CRP at this time. This means that CRP  
18 shall continue to be available to any residential customer with gross household income at  
19 or below 150% of the FPL. There will continue to be no restriction on the number of  
20 customers on CRP. Participants will receive 1/36<sup>th</sup> arrearage forgiveness of their pre-  
21 program arrears provided they are current and pay their CRP bills each month on time  
22 and in full. CRP customers will be eligible to receive free conservation services through  
23 PGW's CWP or the Enhanced Low Income Retrofit Program, once the Commission  
24 approves the Rate Case Settlement.

25 **Q. WAS THE APPRISE REPORT, AND PGW'S PROPOSED MODIFICATIONS TO**  
26 **CRP, DISCUSSED WITH OTHER INTERESTED PARTIES?**

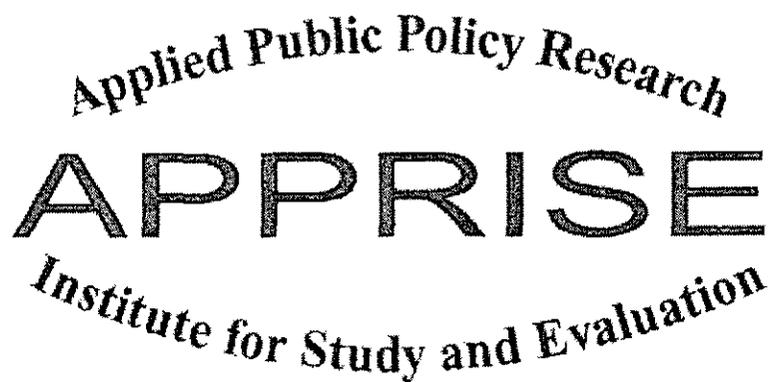
27 A. Yes. In accordance with the terms of the LIHEAP Settlement, PGW has met with the  
28 Office of the Consumer Advocate ("OCA"), Office of Trial Staff ("OTS"), and Tenant  
29 Union Representative Network ("TURN") seeking input regarding the changes to CRP

1           that should be proposed in light of the DPW mandate and the conservation incentive.  
2           PGW has attempted to address some of the concerns of these parties to the extent  
3           practicable, and to the extent that those suggestions are consistent with PGW's  
4           paramount concern to properly balance the interests of CRP and non-CRP customers.

5   **Q.    DOES THIS COMPLETE YOUR DIRECT TESTIMONY?**

6   A.    Yes.

# Exhibit CC-1



**Philadelphia Gas Works  
Customer Responsibility Program  
Analysis and Recommendations  
Final Report**

April 2010

---

## Table of Contents

Executive Summary .....	ES1
Introduction.....	ES1
Current CRP Model .....	ES1
Risks and Uncertainties.....	ES3
Opportunities.....	ES4
Comparison Programs.....	ES5
Program Alternatives .....	ES5
Summary and Recommendations .....	ES10
I. Introduction .....	1
A. Research Issues .....	1
B. Research Activities .....	1
C. Organization of the Report.....	2
II. Current Customer Responsibility Program Model.....	4
A. Eligibility .....	4
B. Bill Discount.....	4
C. Arrearage Forgiveness .....	5
D. LIHEAP Grant Application .....	5
E. CRP Participation and Costs.....	6
F. All Low-Income Program Investments.....	8
G. CRP Usage Comparison .....	9
III. Risks and Uncertainties.....	15
A. LIHEAP Payment Application .....	15
B. PUC CAP Policy Statement.....	15
C. CRP Participation.....	16
D. Gas Rates .....	17
E. Tradeoff Between Affordability for Lowest Income Households and Other Ratepayers.....	17

---

IV. Opportunities .....	19
A. Weatherization .....	19
B. Statewide Program Funding.....	23
V. Affordability Program Parameters in Comparison Programs.....	25
A. Pennsylvania Gas Customer Assistance Programs .....	25
B. Gas Customer Assistance Programs in Other Cities.....	28
VI. Program Alternatives: Options, Costs, Opportunities and Risks.....	30
A. Model 1: Current PGW CRP Model.....	30
B. Model 2: Targeted Energy Burden Model .....	39
C. Model 3: Bill Discount Model .....	43
VII. Summary and Recommendations.....	56
A. Models Considered .....	56
B. Model Comparison.....	57
C. Recommendation .....	60

## Executive Summary

PGW's Customer Responsibility Program provides discounted gas bills to low-income customers to improve energy affordability and bill payment. PGW is currently considering modifications to the program to reduce program costs and the subsidy that non-participating customers pay for the program.

### *Introduction*

PGW needed to consider significant program modifications because of recent developments that greatly increased the cost of the CRP. These changes include the following.

- 1) CRP participation has increased and will probably increase even more, given the current state of the economy. Despite increases in participation, PGW's preferred approach does not include a cap on program enrollment.
- 2) LIHEAP grants were previously used to help cover the cost of the CRP. However, Pennsylvania has recently changed program requirements and now requires PGW to apply LIHEAP to the CRP asked to pay amount. This policy increases the cost of the CRP, may reduce customer payment consistency (because when LIHEAP grants are credited to the customer's bill, the customer may go several months without needing to make a payment), and may reduce the customer's ability to receive LIHEAP crisis grants.

APPRISE has undertaken research to compare different program models and make recommendations to PGW for revising their CRP model.

### *Current CRP Model*

PGW introduced a Percentage of Income Plan Program (PIPP) in 1989, and revised the program as the Customer Responsibility Program (CRP) in 1994.

#### Eligibility

Residential customers with income at or below 150 percent of the Federal Poverty Level are eligible to participate in the CRP. Customers are not required to be payment-troubled to join the program.

#### Subsidy

Customers who participate in the CRP pay a fixed monthly amount. The amount is calculated so that customers pay 8, 9, or 10 percent of their income, based on their poverty level. There is a minimum payment amount of \$25 per month.

**Arrearage Forgiveness**

Customers who have a pre-program arrearage are eligible for forgiveness of 1/36 of those arrearages each month. The requirements for the monthly arrearages are that the bill must be paid on time and in full and that the customer must not have a current balance past due. If customers participate in the CRP and pay their bills diligently for three years, they will eliminate all of their pre-program arrears.

**LIHEAP Grant Application**

Until this year, PGW credited LIHEAP cash grants received by CRP participants to the burden born by other ratepayers to cover the cost of the CRP discount. This policy has the advantage of helping to reduce the cost of the CRP for other ratepayers and of maintaining a constant monthly payment amount for CRP participants. However, beginning this year, the Pennsylvania Department of Public Welfare (DPW) decided that PGW could no longer apply LIHEAP grants in this way. Until more information is received, PGW must apply the LIHEAP cash grants to the customer's asked to pay amount.

**CRP Participation and Costs**

Monthly average CRP participation increased from 58,100 in FY 2004 to 80,891 in FY 2009, an average annual increase of seven percent. The cost of the CRP discount increased from \$58 million in FY 2004 to \$117 million in FY 2009. The average annual cost increase between FY 2004 and FY 2009 was 16 percent. The average annual net discounts per participant were \$1,447 in FY 2009.

**All Low-Income Program Investments**

PGW provides other benefits to low-income customers in addition to the CRP discounts. These include arrearage forgiveness and the Conservation Works Program. They also provide a Senior Discount to senior households (a grandfathered program that is no longer offered) whether or not the household is low-income. The annual cost of all low-income programs and the Senior Discount was \$140.55 million in FY 2009.

**Gas Usage Comparison**

There has been concern that gas consumption may increase when customers enroll in the CRP, as their monthly bills are not related to the amount of natural gas that they consume. APPRISE's 2004 evaluation of PGW's CRP included an analysis of the change in customer gas usage from the year before they began participating in the program to the year after they enrolled. The analysis showed that current CRP participants used approximately the same amount of gas as later CRP participants and that CRP participants did not significantly increase the amount of gas they used between the year before enrollment and the year after program enrollment.

The finding that energy consumption does not increase after customers enroll in affordability programs is consistent with other studies that APPRISE has conducted. APPRISE evaluated the PECO CAP, the PG Energy CAP, the NJ USF, and the PPL CAP between 2004 and 2008. With one exception, all of these studies found no significant change in energy consumption following enrollment in the CAP. The one exception was for PECO's electric heaters who increased their electric consumption by four percent following

enrollment in the CAP. However, PECO's gas customers and their electric non-heaters also did not increase consumption following enrollment in the CAP.

### ***Risks and Uncertainties***

There are many uncertainties and risks that PGW must consider when determining how to update the CRP design. These factors include uncertainty as to how LIHEAP payment application rules may change, how the PUC CAP Policy Statement may change, changes in CRP program participation, fluctuating commodity prices, whether CRP participants would default if charges were increased, and to what extent other ratepayers can continue to bear increasing CRP costs.

#### **LIHEAP Payment Application**

The Pennsylvania Department of Public Welfare (DPW) has issued new requirements with respect to the way utilities can apply LIHEAP to customer bills. Previously, PGW used cash LIHEAP grants to help cover the CAP shortfall, the difference between the customer's full bill and what the customer is billed under the CRP. This benefitted ratepayers because it allowed PGW to reach a constant net energy burden (the percentage of income spent on gas costs) by poverty level for all CRP customers, regardless of whether or not they received LIHEAP.

For example, customers who had income below 50 percent of poverty have a CRP bill that is equal to 8 percent of their income. If they receive the LIHEAP grant, this will reduce the energy burden below 8 percent. Customers who receive LIHEAP will have lower energy burdens than those who do not. However, if PGW credits the LIHEAP grant to cover the cost of the CRP subsidy, then all customers in this poverty level group will remain at an 8 percent energy burden.

The payment method also had the benefit of maintaining a constant monthly asked to pay amount for CRP participants, which has been shown to be favorable to customers and increase payment regularity. At this point, it is uncertain as to whether the change in requirements will be maintained.

#### **PUC CAP Policy Statement**

The Pennsylvania Public Utility Commission (PUC), Bureau of Consumer Services (BCS), began a process to modify the CAP Policy Statement in 2005. Several changes to the program rules were considered. The revisions to the CAP Policy Statement have been assigned to the Commission's Law Bureau and are currently pending further Commission action.

#### **CRP Participation**

Another uncertainty for the program is how CRP participation will grow over time. CRP participation has increased dramatically over the past five years, but there has been slowdown in growth more recently and then a slight upturn in the most recent Fiscal Year. Therefore, it is uncertain how participation will change in the coming years. Variation in

CRP participation growth rate can have great implications for the cost and sustainability of the program.

### **Gas Rates**

Another uncertainty for CRP costs is gas rates. If the program continues as a fixed percentage of income with no limit on the subsidy, increases in gas rates can have a large impact on program costs. Gas rates are expected to decline by five percent over the next year, and then increase by between one and five percent each year over the following several years.

### **Tradeoff Between Affordability for Lowest-Income Households and Other Ratepayers**

Over the years, PGW has worked to balance affordability for CRP participants with the cost that the program imposes on other ratepayers. There is a question as to whether PGW's program is more generous than it needs to be or more generous than what is sustainable for other ratepayers to continue to subsidize. The average PGW customer pays an additional \$300 per year in Universal Service Charges, \$220 of which is for the CRP program. This is a large cost for the non-CRP customers, many of whom are close to low-income, but not eligible for assistance.

On the other hand, the advantage of shifting costs to non-CRP PGW ratepayers through the CRP is that it is an automatic adjustment, like the pass-through of the Gas Cost Rate; PGW does not need to go through a rate case filing to recover increased non-gas costs. To date, most of the non-CRP customers have continued to pay their bills, even when the gas prices increased above their current level. In re-designing the CRP, PGW needs to consider the potential impact of any changes in costs on both CRP participants and on all ratepayers. It is difficult to predict what level of cost will be unaffordable for either group and push either group into arrearages and uncollectables.

### **Opportunities**

PGW faces challenges in balancing affordability for the lowest income customers and other customers due to the large percentage of customers who have very low incomes and the somewhat limited incomes of many of their other customers. However, there are two potential opportunities to improve affordability for all customers. One opportunity is to provide energy efficiency services to PGW customers. These services will reduce the amount of energy needed to keep the home comfortable and safe, and increase energy affordability. The second opportunity for increased affordability for PGW customers is to alter program funding so that there is statewide funding for all low-income assistance programs.

### **Weatherization**

PGW's Conservation Works Program improves energy efficiency for CRP participants and reduces the cost of the CRP subsidy. PGW is proposing to implement additional DSM programs and to work with the Philadelphia Housing Development Corporation to coordinate delivery of efficiency services with American Recovery and Reinvestment Act



(ARRA) funding.<sup>1</sup> The potential annual reduction in the CRP subsidy from these combined program investments over the next several years is over \$10 million annually.

### **Statewide Program Funding**

The statewide program model may be a more beneficial model for PGW ratepayers than the current model where programs are designed, operated, and funded by individual utilities. Such a program can provide affordable gas to low-income participants while restricting the burden that is placed on other low income customers and customers who are just above the program income limit. While such a model may not be politically feasible in Pennsylvania, it is an approach that should be considered, given the overwhelming percentage of customers in PGW's service territory who are low-income and the need for a redistribution of program subsidy costs within the state. We believe that this change would require legislative action.

### ***Comparison Programs***

We compared PGW's CRP to other gas utility CAPs in Pennsylvania and to gas utility programs in other major cities in the U.S. PGW's program stands out from the other PA programs in many respects. The program serves many more customers, has a higher participation rate, and has higher expenditures. PGW's annual CAP credits averaged \$1,167 in 2008, compared to an average of \$552 across the other gas utilities. PGW's CAP costs averaged \$103 million in 2008, compared to an average of \$10 million across the other gas utilities. PGW customers paid an average of \$220 toward the CRP cost, compared to an average of \$40 across the other gas utilities in PA.

Data on other gas utility affordability programs in cities outside of Pennsylvania showed that the program size, average program expenditures and customer discount were much smaller for these other gas utilities than for PGW's CRP.

### ***Program Alternatives***

Projections of the cost of the Current CRP Model and two other program models, given current program participation, projected increases in participation, projected increases in gas rates, and potential increases in customer income are presented in this report.

### **Model 1: Current CRP Model**

Cost projections for the Current CRP Model, given projected gas price changes, three percent annual increases in income, and various increases in program participation are

---

<sup>1</sup> The American Recovery and Reinvestment Act (ARRA) of 2009 provided additional funding for the National Low-Income Weatherization Assistance Program and for additional energy grants under the Energy Efficiency and Conservation Block Grant (EECBG) Program that provides funds to units of local and state government, Indian tribes, and territories to develop and implement projects to improve energy efficiency and reduce energy use and fossil fuel emissions in their communities. Philadelphia has been awarded almost \$30 million in ARRA funding for the Weatherization Assistance Program. The Philadelphia Housing Development Corporation has also applied for a grant to implement additional weatherization services in coordination with PGW and other utilities.

shown below. Table ES-1 shows that projected costs are \$100 million in FY 2014 given a one percent annual increase in participation, and are \$122 million in FY 2014 given a five percent annual increase in participation.

**Table ES-1**  
**Model 1: Current CRP Model**  
**Projected Annual Costs (\$ Millions)**  
**Projected Gas Rates and 3% Annual Income Increases**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
1%	\$97.83	\$86.58	\$93.20	\$95.87	\$99.56	\$100.27
2.5%	\$97.83	\$87.87	\$95.99	\$100.20	\$105.61	\$107.94
5%	\$97.83	\$90.01	\$100.73	\$107.72	\$116.30	\$121.77

There are several alternatives for how PGW could adjust the CRP credit to account for LIHEAP benefits. One alternative is to add the full amount of the projected LIHEAP grant to the customer's asked to pay amount. Under this approach, PGW would adjust the calculation of the CRP payment by adding 1/12 of the customer's potential LIHEAP grant, based on PA's LIHEAP matrix, to the customer's monthly payment. The payment could be calculated as:

$$\text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + [\text{LIHEAP} / 12\}$$

This would result in a net bill for the customer who received LIHEAP that is equal to 8, 9 or 10 percent of income. This program model would provide an incentive for the customer to apply for LIHEAP and would reduce the cost of the CRP subsidy by \$23 million in FY 2009 and between \$24 and \$29 million in FY 2014, depending on the CRP participation growth rate. These assumptions are factored into the costs of the CRP model shown in the above table.

Another alternative is to adjust the monthly payment by adding some percentage of the projected LIHEAP grant. This percentage could be based on historical levels of LIHEAP grant receipt by CRP participants. For example, if 55 percent of CRP participants historically received LIHEAP, the calculation could be done as follows:

$$\text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + .55 * [\text{LIHEAP} / 12\}$$

The percentage LIHEAP factor could be adjusted as the percent of CRP participants who receive LIHEAP changes. This percentage is expected to increase over time as participants learn how the new calculation and LIHEAP crediting process affects their gas bill.

PGW could maintain equal monthly payments for CRP participants who receive a LIHEAP cash grant by crediting the LIHEAP grant over 12 months, rather than immediately crediting the entire grant to the customer's bill. This change would maintain an equal monthly bill for the customer and may be the simplest option for PGW to implement.

#### Conservation Incentive Mechanism

Another adjustment to the Current CRP Model is to add a Conservation Incentive Mechanism. Under an incentive mechanism, the customer would receive a financial reward for reducing usage over the previous year by a certain amount. The incentive mechanism may cause some customers, who do have the ability to make positive changes in their energy usage behavior, to reduce their gas consumption. To the extent that this does occur, the reduction in the CRP subsidy will benefit other ratepayers.

To determine the change in usage, PGW would run a query each April to compare gas consumption of CRP customers for the November to April period, with the usage during that time period the previous year. Usage during both periods would be weather normalized to allow for an accurate comparison, and only those customers who were on the CRP for the entire November to April time period would be eligible for the incentive.

PGW would provide outreach on this new conservation incentive mechanism at the time of CRP enrollment, recertification, and when outreach for LIHEAP is conducted in the fall of each year. Education would be provided to current and new CRP participants to make them aware of this new benefit for reduced consumption.

Analysis of a mechanism that would provide a \$100 incentive to customers who reduce usage by ten percent or more showed that potential ratepayer benefits of such a mechanism range from about one to two million dollars annually, depending on the percentage of customers who reduce their usage.

#### Model 2: Targeted Energy Burden Model

The New Jersey Universal Service Program and FirstEnergy (in Pennsylvania) have created low-income subsidy programs that target the customer's post-LIHEAP energy burden to a certain level. If PGW decided to target a burden of eight percent, the calculation would be done as follows:

*Annual Household Income \* 8% = Targeted Net Energy Bill (\$10,000 \* 8% = \$800)*

*Current Gas Burden = Annual Gas Bill – LIHEAP Benefit (\$2,200 - \$350 = \$1850)*

*CAP pays the difference: \$1850 - \$800 = \$1050*

*Monthly credit = \$1050/12 = \$87.50*

A disadvantage of this design is that it does not result in equal monthly bills for the customer. The customers' bills fluctuate due to monthly fluctuations in gas usage and LIHEAP credits to the customers bills. This problem could be addressed by requiring these customers to have a budget bill and applying the LIHEAP grant over 12 months.

An advantage of this design is that it reduces the risk for ratepayers (although it increases the risk for CRP participants). This is because the CRP benefit is set once per year and the benefit does not vary over the year if gas rates change or the customer increases gas usage. Additionally, the model provides an incentive for customers to apply for LIHEAP.

Cost projections for the Targeted Energy Burden Model, given projected gas price changes, three percent annual increases in income, and various increases in program participation are shown below. Table ES-2 shows that projected costs are \$101 million in FY 2014 if there is a one percent annual participation increase and to be \$123 million in FY 2014 if there is a five percent annual participation rate increase.

**Table ES-2**  
**Model 2: Targeted Energy Burden**  
**Projected Annual Costs (\$ Millions)**  
**Projected Gas Rates and 3% Annual Income Increases**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$98.70	\$87.82	\$94.34	\$97.03	\$100.72	\$101.49
2.5%	\$98.70	\$89.12	\$97.17	\$101.42	\$106.84	\$109.26
5%	\$98.70	\$91.29	\$101.96	\$109.02	\$117.64	\$123.25

### **Model 3: Bill Discount Model**

Another option for a low-income affordability program is to provide a discount to the customer on the energy bill. The Bill Discount Model splits the risk between the ratepayers and the CRP participant. If gas costs increase, the increase will be split between the customer's portion of the bill and the discounted portion of the bill.

Advantages of the Bill Discount Model are that it provides an incentive for customers to apply for LIHEAP and that it is a straightforward model to implement. A disadvantage is that it does not provide a constant monthly payment. However, PGW could achieve a constant monthly payment for the participant by utilizing the budget billing method with the LIHEAP grant credited over 12 months.

Another disadvantage of the Bill Discount Model is that it is an inefficient way to reach a targeted energy burden. Some customers will receive a discount that is greater than what is needed to achieve the targeted burden level and some customers will receive a discount that is lower than what is needed to achieve the targeted burden.

Cost projections for the Bill Discount Model with limits on the amount of gas discounted, given projected gas price changes and various increases in program participation are shown below. Table ES-3 shows that projected FY 2014 costs are \$136 million if there is a one percent annual rate of increase in participation and \$165 million if there is a five percent annual rate of increase in participation.

**Table ES-3A**  
**Model 3A: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Discount that Gets 90% to PUC Burden Target**  
**After Projected LIHEAP Grant is Subtracted**  
**With Limits on The Amount of Usage Discounted**  
**Projected Gas Rates**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$123.03	\$118.08	\$124.32	\$128.18	\$132.75	\$135.53
2.5%	\$123.03	\$119.83	\$128.04	\$133.97	\$140.81	\$145.89
5%	\$123.03	\$122.75	\$134.37	\$144.02	\$155.06	\$164.58

The analysis of the Model 3A: Bill Discount Model shown above set the discounts to keep at least 90 percent of program participants within the PUC targeted energy burden guidelines. Table ES-3B displays the projected costs for a modified Model 3B: Bill Discount Model that would have the same projected costs as those for the Current CRP Model.

**Table ES-3B**  
**Model 3B: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Maximum Discounts for Same Cost as Current CRP Model**  
**Projected Gas Rates**

<b>Annual Participation Increase</b>	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$97.58	\$93.64	\$98.60	\$101.66	\$105.29	\$107.50
2.5%	\$97.58	\$95.03	\$101.55	\$106.26	\$111.69	\$115.72
5%	\$97.58	\$97.34	\$106.56	\$114.22	\$122.99	\$130.54

## Summary and Recommendations

The three models discussed in this report should be compared on several dimensions shown in Table ES-4 and described below.

- *Equal Monthly Payments* – The Current CRP Model is the only design that provides equal monthly payments (with the allocation of the LIHEAP grant over a 12-month period.) The Targeted Energy Burden and Bill Discount Models require a budget bill arrangement to equalize the asked to pay amount. Because of the unpredictability of energy usage, the PUC requirement for periodic budget bill adjustments, and the need to avoid large make-up payments, frequent adjustments to the budget bill may result in somewhat irregular payments for program participants.
- *LIHEAP Application Issue* – The Bill Discount Model is the only design that completely removes the LIHEAP payment issue because it does not integrate the discount with the LIHEAP cash grant. The other models, however, provide more equitable net payments because they do take account of LIHEAP.
- *Conservation Incentive* – The modified CRP Model has a new proposed Conservation Incentive Mechanism. The Targeted Energy Burden Model provides an incentive for conservation because the customer's program credit is determined at the beginning of the year and fixed over the year. The Bill Discount Model provides an incentive for conservation because the customer pays a portion of the energy bill.
- *Targets Energy Burden* – The Current CRP Model and the Targeted Energy Burden Model target a set energy burden level, as opposed to the Bill Discount Model which indirectly attempts to reach a set energy burden. The Current CRP and the Targeted Energy Burden Models are more efficient at reaching the targeted energy burden level.
- *Administrative Simplicity* – The Current CRP Model is simplest for PGW because it is the model that is currently programmed into their system. The Bill Discount Model is a simple program to administer, as it only involves applying different rates for CRP customers. However, the program becomes more complex when the budget bill is included and when there are limits on the amount of gas that is discounted. The Targeted Energy Burden Model is the most complicated to explain to customers and to implement.

Cells in the table are highlighted that correspond to advantageous characteristics to make it easy to see which programs are advantageous in each area.

**Table ES-4**  
**Advantages and Disadvantages of Assistance Models**

	Assistance Model		
	Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3: Bill Discount

	Assistance Model		
	Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3: Bill Discount
Equal Monthly Payments	Yes	No	No
Resolves LIHEAP Application Issue	Partially	Partially	Yes
Conservation Incentive	Yes	Yes	Yes
Targets Energy Burden	Yes	Yes	No
Administrative Simplicity	Yes	No	Yes

Table ES-5 compares the monthly customer asked to pay amount under the three assistance models, and two versions of the Bill Discount Model. The table demonstrates that while the Current CRP and Targeted Energy Burden Models have very similar bills, the Bill Discount Model that was designed to reach the PUC burden targets has much lower projected bills. The Bill Discount Model that was designed to match the CRP cost has monthly asked to pay amounts that are lower than the other models for the lower income groups and higher than the other models for the higher income groups, but are about the same on average for participants as a whole.

**Table ES-5**  
**Comparison of Assistance Models**  
**Customer Monthly Asked to Pay Amount**

	October 2009 Participation	Assistance Model			
		Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3A: Bill Discount To Reach PUC Target	Model 3B: Bill Discount To Match CRP Cost
		Average Monthly Asked to Pay Amount			
<=25%	5,061	\$87	\$83	\$59	\$56
26-50%	16,023	\$79	\$80	\$58	\$69
51-75%	25,559	\$94	\$94	\$70	\$88
76-100%	18,753	\$108	\$108	\$80	\$111
101-125%	10,680	\$136	\$136	\$95	\$146
126-150%	5,178	\$153	\$154	\$113	\$187
<b>Total</b>	81,254	\$103	\$103	\$75	\$101

Table ES-6 compares the costs of the three models, and two versions of the Bill Discount Model. The table demonstrates that while the Current CRP and Targeted Energy Burden Models are very close in cost, the Model 3A: Bill Discount Model that was designed to reach the PUC targeted energy burden has much higher projected costs. The Model 3B: Bill Discount Model that was designed to match the CRP has lower costs than the Current CRP Model when gas prices increases in the future are taken into account, because the Bill

Discount Model program participants share the price increase on the part of the gas that they are paying for. However, the cost of the Bill Discount Model does not decline when the customer's income increases as it does with the other models.

**Table ES-6**  
**Cost Comparison of Assistance Models**  
**Annual Subsidy Cost (\$ Millions)**

Year	Parameters			Assistance Model			
	Participation Growth	Gas Cost Increase	Income Increase	Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3A: Bill Discount To Reach PUC Target	Model 3B: Bill Discount To Match CRP Cost
2009	--	--	--	\$97.83	\$98.70	\$123.03	\$97.58
2014	1%	Yes	No	\$112.90	\$113.65	\$135.53	\$107.50
2014	5%	Yes	No	\$137.10	\$138.01	\$164.58	\$130.54
2014	1%	Yes	Yes	\$100.27	\$101.49	\$135.53	\$107.50
2014	5%	Yes	Yes	\$121.77	\$123.25	\$164.58	\$130.54

### **Recommendation**

The examination of the advantages and disadvantages of the three models showed that each design has reasons to be considered in this review. While, the analysis of program costs and energy burdens provides a clear display of the inefficiency of the Bill Discount Model, the Bill Discount Model has other advantages that the others do not, resolving the important issue of the application of LIHEAP benefits. The Bill Discount Model can be designed to have the same costs as the other models. While some households will have energy burdens that exceed the PUC targeted levels, these households can be targeted for conservation services that bring their bills more in line with the PUC targets.

However, because the Current CRP Model and the Targeted Energy Burden Model are so close in projected costs and reach targeted energy burdens more efficiently than the Bill Discount Model, they should be compared on the substantive advantages and disadvantages of the approaches. The areas where the programs differ are included in the table below to make it clear which characteristics are under consideration. When the table is reduced in this way, it becomes apparent that the Current CRP model is preferred because it provides the customers with equal monthly payments and is administratively simpler.

**Table ES-6**  
**Advantages and Disadvantages of Assistance Models**

	Assistance Model	
	Model 1: Current CRP	Model 2: Targeted Energy Burden
Equal Monthly Payments	Yes	No

	Assistance Model	
	Model 1: Current CRP	Model 2: Targeted Energy Burden
Administrative Simplicity	Yes	Least

This result points to a recommendation that PGW retain the Current CRP Model with the revisions discussed earlier.

- The CRP payment formula is revised to include the LIHEAP matrix benefit as shown below for the eight percent group, or with some percentage of the LIHEAP grant factored into the customer’s payment.

$$\text{Monthly CRP Payment} = \{ [.08 * \text{Annual Household Income}] / 12 \} + [ \text{LIHEAP} / 12 ]$$

- The LIHEAP grant is applied to the customer bill over a 12-month period.
- The Conservation Incentive Mechanism is included in the revised program.

However, if it becomes apparent that the proposed means of dealing with the LIHEAP application issue under the Current CRP Model or Targeted Energy Burden Model are not acceptable to DPW, PGW could adopt the Bill Discount Model and work to provide conservation services to those households who are then faced with gas bills significantly above the PUC targets.

## I. Introduction

PGW's Customer Responsibility Program provides discounted gas bills to low-income customers to improve energy affordability and bill payment. PGW is currently considering modifications to the program to reduce program costs and the subsidy that non-participating customers pay for the program. APPRISE has been asked to evaluate various alternatives to the current model that will benefit program participants and all ratepayers. The alternative program models must comply with PUC guidelines, address volatility in commodity cost, and consider PGW's financial status.

### A. Research Issues

PGW needed to consider significant program modifications because of recent developments that greatly increased the cost of the CRP. These changes include the following.

- 1) CRP participation has increased and will probably increase even more, given the current state of the economy. Despite increases in participation, PGW's preferred approach does not include a cap on program enrollment.
- 2) LIHEAP grants were previously used to help cover the cost of the CRP. However, Pennsylvania has recently changed program requirements and now requires PGW to apply LIHEAP to the CRP asked to pay amount. This policy increases the cost of the CRP, may reduce customer payment consistency (because when LIHEAP grants are credited to the customer's bill, the customer may go several months without needing to make a payment), and may reduce the customer's ability to receive LIHEAP crisis grants.<sup>2</sup>

PGW will consider keeping the program a PIPP, using a percent of bill plan, using a rate discount plan, as well as hybrid models. PGW will be required to meet the PUC policy statement or apply for waivers and to file proposed program changes for approval by the PUC.

### B. Research Activities

APPRISE has undertaken four key research activities to develop the information that is included in this report.

---

<sup>2</sup> Customers must have a shutoff notice or have their service terminated to receive a LIHEAP crisis grant. DPW issues crisis grants in the amount requested on the customer's termination notice. If the customer uses the LIHEAP cash grant to cover the monthly asked to pay amount, the customer is less likely to receive the termination notice and be eligible for the LIHEAP crisis grant.

- 1) CRP Review and Update – APPRISE conducted an evaluation of PGW’s CRP in 2004. Since that time, PGW has made some minor changes to the program. We reviewed the 2004 program design and met with PGW to discuss changes that have been made to the program since that time. We also discussed goals and requirements for the revised program design.
- 2) Program Review – APPRISE conducted a review of other gas utility affordability programs both in Pennsylvania and in major Northeastern and Midwestern cities. APPRISE developed information to compare the design and costs of these different programs.
- 3) Program Options Memo – APPRISE prepared a memo that provided an analysis of the program options that may best meet PGW’s goals within the PUC regulatory requirements. The program options memo described options for reducing program costs, reducing uncertainty about program costs, and maximizing the probability that customers meet their payment obligations. APPRISE made recommendations for the program options that appeared to best meet PGW’s requirements and have the greatest probability of success.
- 4) Data Analysis – APPRISE discussed the program options memo with PGW and developed proposed specifications for three alternative program designs. Using these specifications, APPRISE modeled the program costs for the different program options, given projected changes in program participation, gas rates, and customer income.

### **C. Organization of the Report**

Six sections follow this introduction.

- 1) *Section II – Current Customer Responsibility Program Model:* Provides a detailed description of the current design of PGW’s CRP, analyzes program participation and costs, and describes gas usage for CRP participants and non-participants.
- 2) *Section III – Risks and Uncertainties:* Provides analysis of the risks and uncertainties that could affect the implementation and costs of the CRP. These include changes to requirements as to how LIHEAP cash grants can be applied to customer bills, changes to the CAP policy statement, program participation levels, gas rates, and potential customer payment response to changes in CRP subsidy levels.
- 3) *Section IV – Opportunities:* Provides an analysis of two potential opportunities for PGW to reduce the cost of the CRP subsidy to other ratepayers – weatherization and statewide program funding.
- 4) *Section V – Bill Payment Program Parameters in Comparison Programs:* Provides an analysis and comparison of bill payment programs implemented by other PA gas utilities and bill payment programs run by gas utilities in other major cities.

- 5) *Section VI – Program Alternatives: Options, Costs, Opportunities, and Risks:* Provides a description and analysis of two program alternatives and provides cost projections for the current model and the two other models given potential changes in program participation, gas costs, and customer income.
- 6) *Section VII – Summary and Recommendations:* Compares the advantages, disadvantages, and costs of the three program models and makes recommendations for a refined CRP model.

APPRISE prepared this report under contract to PGW. PGW facilitated this research by furnishing data and information to APPRISE. Any errors or omissions in this report are the responsibility of APPRISE. Further, the statements, findings, conclusions, and recommendations are solely those of analysts from APPRISE and do not necessarily reflect the views of PGW.

## II. Current Customer Responsibility Program Model

PGW introduced a Percentage of Income Plan Program (PIPP) in 1989, and revised the program as the Customer Responsibility Program (CRP) in 1994. The current program was approved by the PUC in 2003. The program was designed to provide affordable gas bills to low-income households, avoid loss of service for vulnerable customers, improve payment patterns, reduce collection costs, and minimize the burden placed on other ratepayers. This section describes the program's design, including program eligibility and benefits, CRP participation over the past several years, CRP discount costs, and gas usage for CRP and non-CRP customers.

### A. Eligibility

Residential customers with income at or below 150 percent of the Federal Poverty Level are eligible to participate in the CRP. Customers are not required to be payment-troubled to join the program. They are not required to have an arrearage, to have a broken payment agreement, or to have utility and housing costs that exceed a certain percentage of income.

There is no limit on the number of participants in the CRP, and program participation has grown significantly over the past decade.

### B. Bill Discount

Customers who participate in the CRP pay a fixed monthly amount. The amount is calculated so that customers pay 8, 9, or 10 percent of their income, based on their poverty level. The table below shows the relationship between the customer's poverty level and the annual bill. The customer pays 1/12 of the listed percentage of income each month. There is a minimum payment amount of \$25 per month.

**Table II-1  
CRP Payment Percentage**

Federal Poverty Level	Customer Payment Percent of Gross Income
0% - 50%	8%
51% - 100%	9%
101% - 150%	10%

Note: the Federal Poverty Level for a family of four in FY 2009 is \$22,050.

The CRP discount is calculated as the actual monthly bill minus the percentage of income payment. Customers receive a negative discount in months where their actual bill is less than their percentage of income payment. PGW ratepayers subsidize an average of 53 percent of CRP participants' gas bills, before taking into account LIHEAP grants the participants may receive.

Customers who have an arrearage at the time that they join the CRP, a “pre-program arrearage”, have an additional charge of \$5 per month added to the bill to contribute towards the reduction of the arrearages.

There are no limits on the annual maximum CAP credit or on consumption.

### **C. Arrearage Forgiveness**

Customers who have a pre-program arrearage are eligible for forgiveness of 1/36 of those arrearages each month. The requirements for the monthly arrearage forgiveness are as follows.

- The bill must be paid on time and in full.
- The customer must not have a current balance past due.

If customers participate in the CRP and pay their bills diligently for three years, they will eliminate all of their pre-program arrears.

### **D. LIHEAP Grant Application**

The Federal LIHEAP program, administered through the Department of Public Welfare in Pennsylvania, provides grants to low-income households to help cover their utility bills. These grants are sent directly to the utility that the customer designates. The Crisis component of LIHEAP provides additional assistance to low-income customers who receive termination notices to help these customers avoid loss of utility service and to terminated customers to help these customers restore service.

Until this year, PGW credited LIHEAP cash grants received by CRP participants to the burden born by other ratepayers to cover the cost of the CRP discount.<sup>3</sup> This policy has the advantage of helping to reduce the cost of the CRP for other ratepayers and of maintaining a constant monthly payment amount for CRP participants. Previous research with low-income households has shown that customers prefer a predictable monthly payment obligation and that the predictable payment helps to increase payment compliance.

However, beginning this year, the Pennsylvania Department of Public Welfare (DPW) decided that PGW could no longer apply LIHEAP grants in this way. The Federal Department of Health and Human Services, Office of Family Services, Division of Energy Assistance has sent the matter to their legal counsel for review and is waiting to receive a decision on whether or not LIHEAP funds can be used in this way. Until more information is received, PGW must apply the LIHEAP cash grants to the customer asked to pay amount. This report provides recommendations for modifying the current design to maintain revenue

---

<sup>3</sup> A similar practice was followed by the five other gas utilities in Pennsylvania with PIPP Programs. However, these other utilities applied the benefit to the individual customer's subsidy, rather than to the program as a whole.

neutrality and equal monthly customer asked to pay amounts under the new LIHEAP application rules.

LIHEAP Crisis grants and other customer assistance payments such as UESF are credited to the customer's account in the same manner as customer cash payments and are used to offset the monthly payment, the CRP balance, and arrears.

### **E. CRP Participation and Costs**

Table II-2 shows how year-end CRP participation has increased from 2004 through 2008, from the annual PUC Reports on Universal Service Programs. The table shows the number of CRP participants, the number of identified low-income customers, the percent of PGW customers who are identified low-income, and the CRP participation rate. While there has been some fluctuation in the number of identified low-income customers and the CRP participation rate, there has been a large increase in the number of CRP participants since 2004, from just over 60,000 participants to nearly 78,000 participants at the end of 2008, an increase of 28 percent, or an average annual increase of 7 percent. However, after large increases in participation in 2005 and 2006, the rate of increase has slowed and almost stopped increasing in calendar years 2007 and 2008.

**Table II-2  
CRP Participation**

	2004	2005	2006	2007	2008
<b>CRP Participants</b>	60,621	67,120	76,045	76,235	77,749
<b>% Increase in CRP Participation from Previous Year</b>	--	11%	13%	0%	2%
<b>Identified Low-Income Customers</b>	156,723	155,308	139,303	146,836	153,239
<b>Percent of Customers who Are Low-Income</b>	32.9%	32.6%	29.1%	30.5%	31.8%
<b>CRP Participation Rate</b>	39%	43%	55%	52%	51%

Source: Reports on Universal Service Programs & Collections Performance, Pennsylvania Public Utility Commission, Bureau of Consumer Services, 2004-2008.

Table II-3 displays annual average CRP participation by CRP tier, as reported in PGW's annual CRP participation reports. Rather than end-of-year participation, this table shows the monthly average over the fiscal year, and data are available through 2009.<sup>4</sup> These data show the greatest participation growth in FY 2006 and FY 2007, a decrease in FY 2008, and an upturn in CRP participation growth in FY 2009, probably due to the current recession. The average annual participation increase between FY 2004 and FY 2009 was seven percent.

<sup>4</sup> Fiscal years run from September through August.

**Table II-3  
CRP Participation  
By CRP Tier**

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
<b>Minimum (\$25/Month)</b>	2,111	2,426	2,716	2,714	2,827	3,665
<b>8%</b>	12,950	14,111	15,780	16,508	15,944	16,000
<b>9%</b>	30,409	32,760	37,592	40,917	41,899	43,429
<b>10%</b>	12,630	11,811	14,533	16,746	17,080	17,798
<b>Total</b>	58,100	61,108	70,621	76,885	77,749	80,891
<b>Annual % Increase</b>		5%	16%	9%	1%	4%

Source: PGW Annual CRP Reports.

Table II-4 displays the total annual CRP net discounts for FY 2004 through FY 2009. The table shows that the cost of the discount increased from \$58 million in FY 2004 to \$117 million in FY 2009. These discounts represent a subsidy of 53 percent of the average participant's yearly usage prior to the LIHEAP grant application. The average annual cost increase between FY 2004 and FY 2009 was 16 percent.

**Table II-4  
CRP Net Discounts (\$ Millions)  
By CRP Tier**

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
<b>Minimum (\$25/Month)</b>	\$3.13	\$3.88	\$5.08	\$4.85	\$4.77	\$7.15
<b>8%</b>	\$18.03	\$21.29	\$28.22	\$28.22	\$27.42	\$30.48
<b>9%</b>	\$30.29	\$37.18	\$51.01	\$50.98	\$52.10	\$62.58
<b>10%</b>	\$6.67	\$7.97	\$13.13	\$12.52	\$12.65	\$16.85
<b>Total</b>	\$58.12	\$70.32	\$97.44	\$96.57	\$96.95	\$117.07
<b>Annual % Increase</b>		21%	39%	-1%	0%	21%

Source: PGW Annual CRP Reports.

Table II-5 displays the average annual net discounts per participant. The table shows that annual discounts averaged \$1,447 per participant in FY 2009.

**Table II-5  
CRP Average Annual Net Discounts  
Per Participant  
By CRP Tier**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
<b>Minimum (\$25/Month)</b>	\$1,601	\$1,871	\$1,787	\$1,687	\$1,950
<b>8%</b>	\$1,509	\$1,788	\$1,710	\$1,720	\$1,905

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
9%	\$1,135	\$1,357	\$1,246	\$1,243	\$1,441
10%	\$675	\$903	\$748	\$741	\$947
<b>Total</b>	<b>\$1,151</b>	<b>\$1,380</b>	<b>\$1,256</b>	<b>\$1,247</b>	<b>\$1,447</b>
<b>Annual % Increase</b>		20%	-9%	-1%	16%

Source: PGW Annual CRP Reports.

Data for September 2004 net discount is not available so the annual net discount is not shown for FY 2004.

Table II-6 displays PGW's fiscal year average gas prices. The table shows that the large increase in the average discount in FY 2006 is related to the large increase in gas prices that year. The increase in the discount in FY 2009 is likely related to economic conditions, as there was a slight decline in gas prices in FY 2009.

**Table II-6**  
**Average PGW Gas Prices**  
**FY 2004 – FY 2009**

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Cost per Mcf	13.4182	14.6903	18.7135	17.7297	18.5374	18.2676
<b>Annual % Increase</b>		9%	27%	-5%	5%	-1%

## ***F. All Low-Income Program Investments***

PGW provides other benefits to low-income customers in addition to the CRP discounts. These include:

- Arrearage forgiveness: CRP participants can have arrearages forgiven each month that they pay bills on time and in full.
- Senior Discount: a program that is only for seniors who enrolled prior to September 1, 2003. This program provides a 20 percent discount on customers' bills. This program is not considered part of PGW's Universal Service Programs and is not restricted to low-income seniors, but PGW believes that a significant percentage of the participants are low-income.
- Conservation Works Program (CWP): provides weatherization improvements in CRP participants' homes to improve energy efficiency and comfort.

Table II-7 displays the annual cost of all of these programs and the total low-income program investment made by PGW from FY 2005 through FY 2009. The table shows that total program investments were \$140.55 million in FY 2009.

**Table II-7**  
**All Low-Income Investments**  
**(\$ Millions)**

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
<b>CRP</b>	\$70.32	\$97.44	\$96.57	\$96.95	\$117.07
<b>Arrearage Forgiveness</b>	\$8.41	\$10.12	\$9.34	\$8.22	\$8.05
<b>Senior Discount</b>	\$16.92	\$16.48	\$14.51	\$13.00	\$13.15
<b>CWP</b>	\$1.87	\$2.11	\$2.05	\$2.38	\$2.28
<b>Total</b>	\$97.52	\$126.15	\$122.47	\$120.55	\$140.55

Source: PGW Reports.

### G. CRP Usage Comparison

Table II-8 displays average monthly usage (ccf) for CRP participants by CRP tier from PGW's monthly CRP reports. The table shows that there has been some fluctuation in usage over time. Usage averaged 101 ccf per month in FY 2009.

**Table II-8**  
**CRP Average Monthly Usage (ccf)**  
**By CRP Tier**

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
<b>Minimum (\$25/Month)</b>	97.81	93.94	83.65	86.91	82.89	93.30
<b>8%</b>	107.14	103.90	91.93	96.41	95.58	101.42
<b>9%</b>	104.99	104.38	90.22	96.08	93.42	99.72
<b>10%</b>	111.66	112.58	97.42	102.62	100.38	107.12
<b>Total</b>	106.66	105.44	91.83	97.25	95.01	101.39
<b>Annual % Increase</b>		-1%	-13%	6%	-2%	7%

Source: PGW Annual CRP Reports.

There has been concern that gas consumption may increase when customers enroll in the CRP, as their monthly bills are not related to the amount of natural gas that they consume. APPRISE's 2004 evaluation of PGW's CRP included an analysis of the change in customer gas usage from the year before they began participating in the program to the year after they enrolled.

Table II-9 displays the results from the analysis. The table shows two types of usage in two time periods for three groups of customers. The two types of usage shown are as follows.

- *Day Adjusted Usage*: The day adjusted usage is the customer's annual usage, adjusted to 365 days of usage.

- *Weather Normalized Usage*: The weather normalized usage is annualized usage that has been adjusted to control for the weather, by modeling the relationship between the average daily temperature and the customer's gas usage, and then predicting the customer's usage in an average weather year.

The three groups of customers shown are as follows.

- Treatment group: Customers who enrolled in the CRP in 2003 and did not participate in the CRP in the year prior to enrollment. We compare their usage in the year prior to enrollment to their usage in the year following enrollment. This comparison shows how usage changed for this group after they enrolled in the CRP compared to their usage when they were not participating in the program.
- Comparison group 1 – low-income non-participants: These are customers who have been identified as low-income because they received an energy assistance grant, but who did not participate in the CRP between 2001 and 2004. Their change in usage between the two time periods is an indication of the impact on factors outside of the program such as the economy or gas rates on gas usage.
- Comparison group 2 – later program participants: These are customers who did not participate in the pre or post period shown in the table, but who enrolled in the CRP the following year. Their change in usage between the two time periods is an indication of the impact of factors outside of the program such as the economy or gas rates on gas usage.

The table provides information to assess whether the CRP impacts participants' gas usage.

- Comparison of usage for the three different groups. The table shows that the current CRP participants and the customers who later enroll in the CRP have higher usage than the low-income non-participants. The fact that the low-income non-participants have lower usage than the current participants may lead some to argue that the program increases usage. However, there are a few reasons that this does not appear to be the case.
  - The participants may have joined the program because their higher usage, related to home and demographic characteristics, made the full bill unaffordable. The non-participants may not have joined because they did not need additional assistance or because the CRP was not beneficial to them due to their lower usage.
  - The fact that the customers who later joined the program also have higher usage than those who were non-participants leads to the conclusion that there is something about these customers that both make their usage higher and make them have need for the CRP.

- Comparison of usage across the two different time periods. The table shows that the customers who enrolled in the CRP did not increase their usage. Both the raw change in usage and the weather normalized change in usage were very small, less than two percent of pre enrollment usage.
  - *Day Adjusted Usage:* Customers used an average of 1,203 ccf in the year preceding CRP enrollment, and an average of 1,180 ccf in the year following CRP enrollment, a decline of 23 ccf, or two percent of pre-enrollment usage. The net change (average of difference between the two comparison groups) in day adjusted usage was a decline of 33 ccf.
  - *Weather Normalized Usage:* Customers had an average weather-normalized usage of 1,184 ccf in the year preceding enrollment and usage of 1,199 ccf in the year following enrollment, an increase of 15 ccf, or one percent of pre-enrollment usage. The net change in weather normalized usage was an increase of 8 ccf.

The data show that customers do not increase their usage after enrolling in the CRP.

**Table II-9**  
**CRP Usage Impacts**  
**All Customers (ccf)**  
**From APPRISE 2004 CRP Evaluation**

	TREATMENT GROUP			CONTROL GROUP 1 LOW-INCOME NOT CRP PARTICIPANTS				CONTROL GROUP 2 LATER CRP PARTICIPANTS			
	Pre	Post	Change	Pre	Post	Change	Net Change	Pre	Post	Change	Net Change
Number of Customers	7,136			82,251				5,214			
Day Adjusted Usage	1,203	1,180	-23**	920	874	-47**	24**	1,060	1,127	67**	-90**
Weather Normalized Usage	1,184	1,199	15**	908	891	-17**	32**	1,097	1,128	31**	-16**

\*\*Denotes significance at the 99 percent level. \*Denotes significance at the 95 percent level.

The finding that energy consumption does not increase after customers enroll in affordability programs is consistent with other studies that APPRISE has conducted. APPRISE evaluated the PECO CAP, the PG Energy CAP, the NJ USF, and the PPL CAP between 2004 and 2008. With one exception, all of these studies found no significant change in energy consumption following enrollment in the CAP. The one exception was for PECO's electric heaters who increased their electric consumption by four percent following enrollment in the CAP. However, PECO's gas customers and their electric non-heaters also did not increase consumption following enrollment in the CAP.

PGW provided another data set of monthly usage from September 2008 through August 2009 for all PGW accounts. We conducted analyses of these data to provide another

comparison of gas usage for CRP participants and CRP non-participants. The analysis includes 312,815 residential accounts after elimination of extreme outliers.

Table II-10 shows that CRP customers have higher average monthly gas usage than non-CRP customers. While CRP participants have mean monthly usage of 97 ccf, non-participants have mean monthly usage of 65 ccf. However, there are demographic differences between these two groups of households that impact usage.

**Table II-10**  
**Average Monthly Usage (ccf)**  
**By CRP Participation**  
**September 2008 through August 2009**

	Number of Accounts	Mean Usage	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile
<b>CRP Participants</b>	80,796	97	68	91	119
<b>Non-CRP Participants</b>	232,019	65	42	60	80
<b>All Customers</b>	312,815	73	46	66	92

Table II-11 displays statistics on average monthly usage for heating customers by CRP participation. The table shows the same large difference in consumption between CRP heating and non-CRP heating customers. While CRP heating customers have average monthly usage of 98 ccf, non-CRP heating customers have average monthly usage of 67 ccf.

**Table II-11**  
**Average Monthly Usage (ccf)**  
**By CRP Participation**  
**Heating Customers**  
**September 2008 through August 2009**

	Number of Accounts	Mean Usage	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile
<b>CRP Participants</b>	77,832	98	69	92	120
<b>Non-CRP Participants</b>	210,708	67	45	62	81
<b>All Customers</b>	288,540	75	49	68	93

Table II-12 displays statistics on average monthly gas consumption for CRP and non-CRP participants by the whether the home was built before or after 1950. The table shows a much greater difference in usage between CRP and non-CRP participants for homes built prior to 1950 (difference is 32 ccf) than for homes built after 1950 (difference is 20 ccf). This is consistent with the hypothesis that CRP customers use more gas because their homes are in poor condition. The older homes are more likely to be in worse condition for CRP participants than for non-CRP participants because they have not been able to invest in

renovation and upgrades. The table also shows that 93 percent of the CRP participants live in these older homes compared to 72 percent of the non-CRP participants.

**Table II-12**  
**Average Monthly Usage (ccf)**  
**By CRP Participation and Home Age**  
**Heating Customers**  
**September 2008 through August 2009**

	Number of Accounts	Mean Usage	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile
<b>Homes Built in 1950 or Earlier</b>					
CRP Participants	71,573	100	70	93	121
Non-CRP Participants	149,779	68	44	61	83
<b>Homes Built in 1951 or Later</b>					
CRP Participants	5,446	84	60	80	102
Non-CRP Participants	58,863	64	48	62	78
<b>All Customers</b>	<b>285,661</b>	<b>75</b>	<b>49</b>	<b>68</b>	<b>93</b>

Table II-13 displays gas consumption by CRP participation and home type. Most of the customers are classified as living in condominiums or PUDs, the designation used for row homes. Differences in usage between CRP and non-CRP participants is greatest for single family residences and least for multi-family residences.

**Table II-13**  
**Average Monthly Usage (ccf)**  
**By CRP Participation and Home Type**  
**Heating Customers**  
**September 2008 through August 2009**

	Number of Accounts	Mean Usage	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile
<b>Condominium, PUD</b>					
CRP Participants	67,639	95	68	90	116
Non-CRP Participants	147,971	60	42	56	74
<b>Single Family Residence</b>					
CRP Participants	8,576	120	84	111	147
Non-CRP Participants	58,943	81	59	75	95
<b>Multi-Family Residence (5+units)</b>					
CRP Participants	1,617	127	81	118	165
Non-CRP Participants	3,794	102	58	87	129

	Number of Accounts	Mean Usage	25 <sup>th</sup> Percentile	Median	75 <sup>th</sup> Percentile
All Customers	288,540	75	49	68	93

Table II-14 displays results from regression analysis that shows the difference between CRP and non-CRP customer gas consumption after all available explanatory factors are controlled for. These factors include whether the customer has gas heat, whether the home was built before or after 1950, the square footage of the home, and the type of home. The second column also controls for the zip code where the home is located, which is likely to be correlated with other characteristics of the home that are related to energy usage. The table shows that after controlling for all of these factors, CRP participants use an average of 29 more ccf per month than non-CRP participants. However, as noted previously, the regression does not control for the condition or energy-efficiency of the home.

**Table II-14**  
**Regression Analysis**  
**Average Monthly Consumption (ccf)**  
**September 2008 through August 2009**

	Regression 1: Without Zip Code Controls	Regression 2: With Zip Code Controls
CRP	34	29
Heating	28	32
Built after 1950	13	8
Sq. Footage		
1001-1500	12	11
1501-2000	27	24
2001-2500	38	35
2501 or more	62	57
Multi-family	14	13
Single family	10	15

Note: all variables are statistically significant at the 99 percent level, except zip code dummies.

This analysis shows that CRP customers consume more gas than non-CRP customers, even after controlling for several home characteristics. However, the analysis does not show that these customers are using more gas due to the CRP program. It is likely that higher usage customers join the CRP precisely because the program is most needed by and most beneficial to customers who use more gas. The lowest usage customers would not benefit from the program because their actual monthly gas cost, together with a LIHEAP grant, may be less costly than the fixed percentage of income that CRP participants pay.

### III. Risks and Uncertainties

There are many uncertainties and risks that PGW must consider when determining how to update the CRP design. These factors include uncertainty as to how LIHEAP payment application rules may change, how the PUC CAP Policy Statement may change, changes in CRP program participation, fluctuating commodity prices, whether CRP participants would default if charges were increased, and to what extent other ratepayers can continue to bear increasing CRP costs.

#### A. LIHEAP Payment Application

The Pennsylvania Department of Public Welfare has issued new guidelines with respect to the way utilities can apply LIHEAP to customer bills. Previously, PGW used cash LIHEAP grants to help cover the CAP shortfall, the difference between the customer's full bill and what the customer is billed under the CRP. This benefitted ratepayers because it allowed PGW to target a constant net energy burden by poverty level for all CRP customers, regardless of whether or not they received LIHEAP. The payment method also had the benefit of maintaining a constant monthly asked to pay amount for CRP participants, which has been shown to be favorable to customers and increase payment regularity.

At this point, it is uncertain whether the change in requirements will be maintained. DHHS has referred this issue to legal counsel for an opinion on whether or not this application of LIHEAP violates the Federal LIHEAP Statute. Therefore, it is unclear how PGW should address these issues. If the decision holds, PGW should consider the following:

- 1) Whether and how to modify the CRP to maintain current costs, given that CRP costs are now increased by the LIHEAP grants that were previously used to offset the CAP shortfall.
- 2) Whether and how to modify the CRP in an attempt to maintain a constant monthly asked to pay amount, given that LIHEAP grants will now be credited directly to CRP participants' asked to pay amount. Depending on the size of the LIHEAP grant relative to the CRP monthly payment, customers may have several months where no bill payment is required, unless PGW changes the CRP payment structure to address this issue.

#### B. PUC CAP Policy Statement

The Pennsylvania Public Utility Commission (PUC), Bureau of Consumer Services (BCS), began a process to modify the CAP Policy Statement in 2005. Several changes to the program rules were considered, including changing the targeted energy burden for natural gas heating customers to six percent for all customers (currently targeted energy burdens are 5%-8% for households below 50% of poverty, 7%-10% for households between 51% and 100% of poverty, and 9%-10% percent for households between 101% and 150% of poverty).

The revisions to the CAP Policy Statement have been assigned to the Commission's Law Bureau and are currently pending further Commission action.

Conversation with PUC staff have indicated that this should be an area of less concern for PGW for the following reasons.

- 1) There have been several countervailing factors since the process began in 2005, including the economic downturn, rate caps expiring for 85% of the customers in PA, and potential changes from DPW. There is concern that changes to make the CAP more affordable for participants will make it more expensive for other ratepayers.
- 2) While the entire CAP Policy Statement is under consideration for changes, it appears that the PUC is reconsidering continuation on the path of revision.
- 3) The PUC appears to feel that PGW has obtained good results with their CAP and a workable balance between affordability for CAP and the subsidy that other ratepayers are asked to pay. PGW has been relatively successful at getting their CAP participants to pay their CAP bills as their collection has improved. It appears that the PUC looks at PGW's CAP as a success.
- 4) The PUC does not agree with the new LIHEAP rules. The PUC is trying to make the argument that utilities should be able to spread the LIHEAP grant over the year, so the customer has a constant monthly payment. The PUC understands that if the customer does not have a bill to pay for several months, it will be very difficult to get the customer to start paying again. They also understand that if the utility cannot credit the LIHEAP payment to the CAP subsidy, there will be pressure to drive up the CAP bill (the amount that the participant is asked to pay).

### **C. CRP Participation**

Another uncertainty for the program is how CRP participation will grow over time. Data in the previous section showed that CRP participation has increased dramatically over the past five years, but that there has been slowdown in growth more recently and then a slight upturn in the most recent Fiscal Year. Therefore, it is uncertain how participation will change in the coming years. Variation in the CRP participation growth rate can have great implications for the cost and sustainability of the program.

Table III-1 displays projected CRP participation over the next five fiscal years, assuming annual participation growth rates of 1%, 2.5%, and 5%. If the program grows at one percent each year, participation will reach 85,000 by 2014. However, if the program grows at 5% each year, there will be over 100,000 CRP participations by 2014. Any projection of program costs needs to take account of this risk.

**Table III-1  
CRP Participation Projections**

Annual Participation Increase	Actual FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	80,891	81,700	82,517	83,342	84,175	85,017
2.5%	80,891	82,913	84,986	87,111	89,289	91,521
5%	80,891	84,936	89,182	93,641	98,324	103,240

#### D. Gas Rates

Another uncertainty for CRP costs is gas rates. If the program continues as a fixed percentage of income with no limit on the subsidy, increases in gas rates can have a large impact on program costs. Table III-2 shows current gas rates and PGW projections over the next five years. The table shows that gas rates are expected to decline by five percent over the next year, and then increase by between one and five percent each year over the following years.

**Table III-2  
Current and Projected Gas Rates  
(\$/ Mcf)**

	Actual 9/09	Projected				
		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
<b>GCR</b>	\$10.7871	\$9.0448	\$9.6858	\$10.0490	\$10.5183	\$10.7232
<b>Distribution</b>	\$7.4805	\$8.2528	\$8.3983	\$8.4363	\$8.4682	\$8.4817
<b>Total per Mcf</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual % Increase</b>		-5%	5%	2%	3%	1%

#### E. Tradeoff Between Affordability for Lowest Income Households and Other Ratepayers

Over the years, PGW has worked to balance affordability for CRP participants with the cost that the program imposes on other ratepayers. Because such a high percentage of PGW customers are low-income (32 percent compared to an average of 14 percent over the other gas companies in PA), and because PGW has a high CRP participation rate (51% compared to an average of 41% across the other gas utilities), the program has imposed high costs on other ratepayers. CRP spending averages \$220 per residential customer for PGW, compared to \$40 for the other natural gas companies in PA.<sup>5</sup>

<sup>5</sup> This amount does not include the other Universal Service Program costs or the cost of PGW's Senior Discount Program.

There is growing concern about the size of the subsidy and how nonparticipants are affected by the program cost. The cost of the subsidy has increased with increased CRP participation, gas prices, and the new LIHEAP rules. There is a question as to whether PGW's program is more generous than it needs to be or more generous than what is sustainable for other ratepayers to continue to subsidize.

On the other hand, the advantage of shifting costs to non-CRP PGW ratepayers through the CRP is that it is an automatic adjustment, like the pass-through of the Gas Cost Rate; PGW does not need to go through a rate case filing to recover increased non-gas costs. To date, most of the non-CRP customers have continued to pay their bills, even when the gas prices increased above their current level.

In re-designing the CRP, PGW needs to consider the potential impact of any changes in costs on both CRP participants and on all ratepayers. It is difficult to predict what level of cost will be unaffordable for either group and push either group into arrearages and uncollectables.

## IV. Opportunities

PGW faces challenges in balancing affordability for the lowest income customers and other customers due to the large percentage of customers who have very low incomes and the somewhat limited incomes of many of their other customers. However, there are two potential opportunities to improve affordability for all customers. One opportunity is to provide energy efficiency services to PGW customers. These services will reduce the amount of energy needed to keep the home comfortable and safe, and increase energy affordability. The second opportunity for increased affordability for PGW customers is to alter program funding so that there is statewide funding for all low-income assistance programs. These two opportunities are explored in this section of the report.

### A. Weatherization

PGW has had their Conservation Works Program to improve efficiency for CRP participants for 20 years. They are also proposing to implement additional DSM programs and to work with the Philadelphia Housing Development Corporation to coordinate delivery of efficiency services with American Recovery and Reinvestment Act (ARRA) funding. This section describes the programs and analyzes the potential CRP subsidy cost reduction due to the three programs.

#### 1. Conservation Works Program

PGW initiated the Conservation Works Program (CWP) in 1990 to provide conservation services to high usage CRP participants. This program benefits CRP participants by increasing the safety and comfort of their home and it benefits all PGW ratepayers by reducing the usage of CRP participants, and therefore reducing the CRP subsidy. Recent evaluation of this program has found that average program savings are 146 ccf per year per participant. This translates into a reduction in the CRP subsidy of approximately \$250 per year, depending on current gas rates. Given that 2,500 customers are served each year with the CWP, this will reduce the CRP subsidy by approximately \$625,000 for each cohort of customers served.

PGW began piloting more comprehensive energy efficiency service delivery as part of the CWP in 2006. They will determine whether to continue the more comprehensive treatments after evaluating the cost-effectiveness of these services. These expanded services have the potential to reduce the CRP subsidy for the highest usage customers by even greater amounts. However, the tradeoff will be that a lower number of customers can be served each year. Given current program funding of \$2.3 million, only about 2,500 customers or three percent of the CRP population can be served each year.

## **2. Five-Year Gas Demand Side Management Plan**

PGW has worked with a consultant to put together a plan, which has been submitted to the PUC, to provide conservation services to all customers. The plan includes seven demand-side management (DSM) programs to reduce energy consumption with a \$58 million dollar investment over the next five years. They calculated a net benefit/cost ratio of 1.96 for these programs. The cost of these programs will be higher gas rates in the short-term, but lower energy costs over the longer term. Additionally, they project that the gas savings will reduce greenhouse gas emissions by one million tons of carbon dioxide and that these programs will directly and indirectly create 600 to 1,000 net additional jobs in Pennsylvania over the next five years.

The programs include an enhanced low-income program. Proposed expenditures for this program are \$50,000 in 2010 and approximately \$6.7 million each year in 2011 through 2013. They plan to serve 3,834 customers in each year from 2011 to 2014 and estimate that annual savings will be 263 ccf per customer served. This program will encompass the CWP, with additional investments and additional customers served.

## **3. Philadelphia Housing Development Corporation Plan**

PGW has coordinated with the Philadelphia Housing Development Coordination (PHDC) to develop a plan to utilize expanded WAP funding through ARRA to provide additional weatherization services, coordinated with PGW's CWP to CRP participants.<sup>6</sup> They plan to serve 2,161 households by March 2012. They note that it is expected that the majority of these households will be CRP participants.

PGW has worked with PHDC and other utilities to develop a coordinated approach to implementing whole house energy efficiency measures. They plan to blend funds from the PHDC with those from CWP and other utility programs when the WAP funding is not sufficient to provide all energy efficiency services needed in the home. Expected program savings would reduce the CRP subsidy by about \$450 for each CRP customer treated.

## **4. Estimated Program Savings**

Table IV-1 displays the estimated gas usage and CRP subsidy savings from the programs over the current and next five fiscal years. Only the new DSM program and the PHDC programs are shown once the DSM programs are implemented, as the CWP program is incorporated into the new DSM program for the years that this new DSM program is operating. The table shows quite significant potential reductions in the subsidy. The CWP savings are based upon recent evaluation results, and are projected to reduce the subsidy by \$1.2 million annually from the investments made between FY

---

<sup>6</sup> WAP is the Federal Low-Income Weatherization Assistance Program that provides no-cost weatherization services to low-income households across the country. LIURP is the Low Income Usage Reduction Program that the PUC requires all utilities in PA to deliver. LIURP is implemented as the Conservation Works Program (CWP) by PGW.

2009 and FY 2010. The new PGW DSM program for low-income customers savings are based upon planning projections and the new PHDC program, with more comprehensive services than the current PGW CWP is projected to have the same level of savings. The new PGW DSM program is projected to reduce the subsidy by \$7.7 million annually by FY 2014 and the PHDC program by nearly \$1 million.<sup>7</sup> Total annual CRP savings from the three programs together are estimated to be over \$10 million.

**Table IV--1  
Estimated Program Savings**

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$1.82676	\$1.72976	\$1.80841	\$1.84853	\$1.89865	\$1.92049
<b>CWP</b>						
<b>Participants</b>	2500	2500				
<b>Average Savings (ccf)</b>	146	146				
<b>Annual Savings for Current Participants (ccf)</b>	365,000	365,000				
<b>Total Annual Savings (ccf)</b>	365,000	730,000	730,000	730,000	730,000	730,000
<b>Annual Reduction in Subsidy</b>	\$666,767	\$1,262,725	\$1,320,139	\$1,349,427	\$1,386,015	\$1,401,958
<b>PGW DSM</b>						
<b>Participants</b>			3834	3834	3834	3834
<b>Average Savings (ccf)</b>			263	263	263	263
<b>Annual Savings for Current Participants (ccf)</b>			1,008,342	1,008,342	1,008,342	1,008,342
<b>Total Annual Savings (ccf)</b>			1,008,342	2,016,684	3,025,026	4,033,368

<sup>7</sup> We assume that all customers treated by the new PGW DSM program and the PHDC program are CRP participants. Treatment of non-CRP customers would lessen the subsidy reduction.

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Annual Reduction in Subsidy			\$1,823,496	\$3,727,901	\$5,743,466	\$7,746,043
<b>PHDC</b>						
Participants	--	670	670	670	--	--
Average Savings (ccf)	--	263	263	263	--	--
Annual Savings for Current Participants (ccf)	--	176,210	176,210	176,210	--	--
Total Annual Savings (ccf)	--	176,210	352,420	528,630	528,630	528,630
Annual Reduction in Subsidy	--	\$304,801	\$637,320	\$977,188	\$1,003,683	\$1,015,229
<b>Total Annual Subsidy Reduction</b>	<b>\$666,767</b>	<b>\$1,567,526</b>	<b>\$3,723,540</b>	<b>\$5,967,814</b>	<b>\$8,133,163</b>	<b>\$10,163,229</b>

The impact of the reduction in gas consumption on the cost of the low-income subsidy program will vary, depending on the design of the program. If the program appropriately targets the services to customers with the highest usage who have energy costs significantly above the percent of income payments that they are required to make under the CRP and Targeted Energy Burden Models, then the full benefit of the conservation savings will accrue to the ratepayers by reducing the cost of the subsidy. Under the Bill Discount Model, only the percentage of the bill that is subsidized will be reduced. Table IV-2 shows that under the Bill Discount Model, 75 percent of the reduced energy costs will accrue to the ratepayers and the other 25 percent will accrue to the program participants.

**Table IV-2**  
**Impact of Conservation Savings on Subsidy Cost**  
**Percent of Savings Impacting Subsidy Cost and Dollar Reduction in Subsidy Cost**

	Assistance Model		
	Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3: Bill Discount
Percent of Savings	100%	100%	75%
Cost Reduction (\$ Millions)	\$10.2	\$10.2	\$7.7

## **B. Statewide Program Funding**

Universal Service Programs in Pennsylvania are designed and implemented by the individual utility companies, under the direction and oversight of the Pennsylvania Public Utility Commission, Bureau of Consumer Services. The programs are funded through the individual utilities' customer bases.

Low income programs in Illinois, New Jersey, Ohio (electric only), Maryland, and Wisconsin are statewide, run by a statewide program office or utility commission. Utility customers throughout the state receive the same program services and benefits. In some cases the benefits are distributed to customers throughout the state as needed, regardless of where the funding came from. In other cases, the funding must be spent in the utility territories where it was obtained.

Potential advantages of a uniform statewide program include:

- **Equity:** A uniform statewide program provides the same benefits for customers, regardless of where they reside.
- **Integration:** A statewide program may allow for easier integration between ratepayer funded programs and state weatherization and LIHEAP programs. There is currently some coordination between LIHEAP and CRP, in that customers are encouraged to apply for LIHEAP when applying for the CRP. However, a statewide program would allow for easier integration between the programs, such as by making the ratepayer-funded program benefit take into account the LIHEAP benefit. A statewide program may also allow for easier integration between utility LIURP and state weatherization programs.
- **Funding:** A statewide program allows for redistribution of ratepayer funds from more affluent to less affluent areas. For example, New Jersey has implemented a statewide system benefits charge that distributes benefits as needed to residential customers throughout the state. This model reduces the overwhelming burden for some territories, while placing only a modest increase in rates on those in more affluent territories.

Potential disadvantages of a uniform statewide program are:

- **Not tailored:** A statewide program cannot take into account the needs of a specific utility company's customers.
- **Potential for less utility involvement:** In some instances, utilities are less involved when programs are administered by the state, and there is less knowledge about current utility practice and experience in the program design and implementation team.

The statewide program model may be a more beneficial model for PGW ratepayers. Such a program can provide affordable gas to low-income participants while restricting the burden that is placed on other low income customers and customers who are just above the program income limit. While such a model may not be politically feasible in Pennsylvania, it is an approach that should be considered, given the overwhelming percentage of customers in PGW's service territory who are low-income and the need for a redistribution of program subsidy costs throughout the state. We believe that this change would require legislative action.

## V. Affordability Program Parameters in Comparison Programs

This section provides information on gas utility CAPs in Pennsylvania and low-income customer assistance programs in other major cities.

### A. Pennsylvania Gas Customer Assistance Programs

Table V-1 provides information on CAPs run by the gas distribution companies in PA. The table shows that PGW's program stands out from the other PA programs in many respects.

- *Size:* PGW's program serves many more customers. PGW's program served nearly 80,000 customers in 2008 compared to an average of less than 15,000 customers for the other gas utilities.
- *Participation Rate:* PGW has a higher percentage of low-income customers participating in their CRP than any other gas utility except PECO. Participation rates for the other companies average 41 percent, compared to PGW's 51 percent, even when the 100% participation rate for PECO is included.
- *Percent of Residential Customers:* PGW has a much greater percentage of residential customers who participate in CAP compared to other gas utilities in PA. Sixteen percent of PGW's residential customers participate in the CRP, compared to an average of five percent across the other gas utilities. Participation rates for the other gas utilities range from two to nine percent.
- *Gross CAP Costs:* PGW's gross CAP costs are significantly greater than the other gas utilities in PA. PGW's costs averaged \$103 million in 2008, compared to an average of \$10 million across the other gas utilities.
- *Residential Customer Spending:* PGW's customers bear a much greater subsidy cost than the residential customers of other gas utilities in PA. While PGW customers paid an average of \$220 toward the CRP cost, the average across the other gas utilities in PA was \$40.

**Table V-1  
Pennsylvania Gas CAPs  
2008 Data**

	PGW	Other PA Gas Utilities							Average Over Other PA Gas Utilities
		Columbia	Dominion	Equitable	NFG	PECO	UGI	UGI Penn	
Participants	78,490	24,675	14,425	20,733	12,312	20,667	8,292	3,051	14,879
Participation Rate	51%	39%	25%	42%	44%	100%	27%	12%	41%
Residential Customers	481,218	369,922	326,622	239,185	197,850	438,232	298,547	143,718	287,725
% of Residential Customers in Program	16%	7%	4%	9%	6%	5%	3%	2%	5%
Percentage of CAP Bill Paid	90%	94%	83%	91%	76%	79%	88%	85%	85%
Gross CAP Costs (\$Millions)	\$103	\$24	\$9	\$16	\$8	\$8	\$5	\$2	\$10
Universal Service Spending per Residential Customer	\$220	\$70	\$29	\$70	\$48	\$22	\$19	\$21	\$40

Table V-2 provides information on monthly CAP bills, CAP credits, and percent of total bills charged to CAP customers for the gas utilities in PA. The table shows that PGW's program pays a higher percentage of the total gas costs than the other utility programs.

- *Residential Rates:* PGW's gas rates are higher than all of the other gas utilities in PA. While PGW's rates are \$50 for a monthly bill of 2 MCF, the other utilities average \$41 for the same usage. The higher rates relate to the cost of providing the large CRP subsidy.
- *Annual CAP Credits:* PGW's annual CAP credits are higher than many other utilities, averaging \$1,167 in 2008 compared to an average of \$552 across the other gas utilities.
- *Percent of Bills Charged to Customers:* PGW customers are charged for an average of 47 percent of their usage. This compares to an average of 65 percent for the other utilities. Note that when the LIHEAP subsidies are added in, the customer charges and the LIHEAP subsidies cover an average of 55 percent of the customer gas

charges. The comparison for the other gas utilities that also credit LIHEAP to the shortfall is a 61 percent average (not including the LIHEAP grants).

**Table V-2**  
**Pennsylvania Gas CAPs**  
**Average CAP Bills and Credits**  
**2008 Data**

	PGW	Other PA Gas Utilities							Average Over Other PA Gas Utilities
		Columbia	Dominion	Equitable	NFG	PECO	UGI	UGI Penn	
Residential Monthly Bill for Usage of 2 MCF <sup>8</sup>	\$50.33	\$41.98	\$37.43	\$44.81	\$43.42	\$38.35	\$37.22	\$47.06	\$41.47
Average Monthly CAP Bill	\$87	\$47	\$81	\$79	\$92	\$82	\$97	\$112	\$84
Average Annual CAP Credits	\$1,167	\$883	\$583	\$737	\$614	\$183	\$431	\$436	\$552
Percent of Total Bills Charged to Customers	47%	39%	63%	56%	64%	84%	73%	76%	65%

Table V-3 displays information about the type of payment plan provided by PA gas utilities, and the application of LIHEAP dollars. The table shows that in addition to PGW, four other utilities use a PIPP model for their CAP program. One has the same percentage of income payment and the other three have lower percentage of income payments for at least 2 of the three income groups. Two gas utilities provide a discounted bill, and one utility provides a variety of options for calculating the subsidy. Two of the gas utilities have maximum CAP credits. Five of the other seven gas utilities restrict participation to payment troubled customers.

The table also shows that with the exception of the two utilities that have a discount model, all of the other gas utilities in PA use the LIHEAP grant to help cover the cost of the CAP discount. However, these utilities apply the LIHEAP grant to individual CAP customers' subsidies, rather than to the program as a whole.

<sup>8</sup> Source: PA PUC Rate Comparison Report, April 15, 2009.

**Table V-3  
Pennsylvania Gas CAPs  
2008 Data**

	<b>PGW</b>	<b>Columbia</b>	<b>Dominion</b>	<b>Equitable</b>	<b>NFG</b>	<b>PECO</b>	<b>UGI</b>	<b>UGI Penn</b>
<b>Type of Plan</b>	PIPP	Options <sup>1</sup>	PIPP	PIPP	Discount	Discount	PIPP	PIPP
<b>Percentage of Income Payment</b>	<=50%: 8% 51-100%:9% 101-150%:10%	<110%: 7% 110%-150%:9%	<=50%: 8% 51-100%: 9% 101-150%: 10%	<=50%: 7% 51-100%: 8% 101-150%:10%	--	--	<=50%: 7% 51-100%:8% 101-150%:9%	<=50%: 7% 51-100%: 8% 101-150%: 9%
<b>Maximum CAP Credit</b>	--	--	--	--	--	--	Heating: \$1,146 Non-heating: \$640	\$1140
<b>Restricted to Payment Troubled</b>	No	Termination notice or at least one failed payment agreement, or identified through cross utility referral and credit scoring.	Failed to maintain one or more payment arrangements.	Failed to maintain one or more payment arrangements.	Arrearage or at least one current, canceled, or defaulted arrangement.	No.	No.	Receipt of a termination notice.
<b>LIHEAP Application</b>	CAP Credit	CAP Credit	CAP Credit	CAP Credit	Budget Bill	Monthly Payment	CAP Credit	CAP Credit

<sup>1</sup>PIPP, Discount, or average of last 12 months of payments.

### **B. Gas Customer Assistance Programs in Other Cities**

This section examines some of the parameters of gas programs run by utilities in other major cities. Much of these data were difficult to obtain. However, the table shows that the program size, average program expenditures and customer discount were much smaller for these other utilities than for PGW's CRP. The table shows that all of the programs studied with data reported apply the LIHEAP cash grant to the customer's monthly bill.

**Table V-3  
Major City Gas Affordability Plans**

	<b>Baltimore</b>	<b>Columbus</b>	<b>DC</b>	<b>Indianapolis</b>	<b>St. Louis</b>
<b>Management</b>	BG&E	Columbia Gas	Washington Gas	Citizen's Gas	Laclede Gas
<b>Participants</b>	33,000 (2008)			17,700 (2006)	2,148 (2006)
<b>Average Annual CAP Credits</b>	\$82 (2008, gas and electric)		\$226 (2009)	\$121 (2006)	\$178 (2006)
<b>Gross CAP Costs (\$Millions)</b>	\$1.1 (2008)			\$2.1 (2006)	\$0.4 (2006)

	Baltimore	Columbus	DC	Indianapolis	St. Louis
<b>Program Type</b>	Fixed Monthly Credit based on poverty level	PIPP	Discount	Discount	Matrix – Fixed credit
<b>LIHEAP</b>	Monthly bill	Monthly bill	Monthly Bill	Monthly bill	

## VI. Program Alternatives: Options, Costs, Opportunities and Risks

In this section we present projections of the cost of the Current CRP Model and two other program models, given current program participation, projected increases in participation, projected increases in gas rates, and potential increases in customer income. The projections presented here utilize 2009 gas data for approximately 70,000 of the 81,000 CRP participants who were in the program in October 2009. The data were weighted upward by the number of CRP participants in each CRP tier or poverty level in October 2009.

### A. Model 1: Current PGW CRP Model

This section presents current and projected costs for the present design of the CRP model. The section also discusses adjustments to the Current CRP Model that may be desired, given changes that have been imposed on PGW with respect to the way LIHEAP is credited to CRP participants' accounts.

#### 1. Current and Projected Costs

Table VI-1 displays costs for the Current CRP Model, based first on FY 2009 PGW reports and then on projections using 2009 usage data and FY 2009 average gas rates. The table shows that actual costs for FY 2009 for the CRP discount were \$117 million and the average annual discount was \$1,447. The projected costs were \$120 million and the projected average annual discount was \$1,483. The total projected costs is somewhat higher due to the fact that we are looking at a slightly larger population and a different population than the actual group of households who came on and off the CRP in FY 2009. The average monthly asked to pay amount is \$80.

**Table VI-1**  
**Model 1: Current CRP Model**  
**Actual and Projected 2009 Discounts**

	FY 2009 Program Statistics (From PGW Annual Report)				Projections Based on 2009 Usage Data And FY 2009 Gas Rates			
	Average Monthly Participation	Total Net Discount (\$ Millions)	Average Annual Net Discount	Average Monthly Asked to Pay Amount	October 2009 Participation	Total Net Discount (\$ Millions)	Average Annual Net Discount	Average Monthly Asked to Pay Amount
Minimum (\$25/Month)	3,665	\$7.15	\$1,950	\$25	3,963	\$7.50	\$1,892	\$25
8%	16,000	\$30.48	\$1,905	\$45	16,302	\$29.40	\$1,804	\$45
9%	43,429	\$62.58	\$1,441	\$80	43,647	\$62.90	\$1,441	\$79
10%	17,798	\$16.85	\$947	\$136	17,342	\$20.67	\$1,192	\$128
<b>Total</b>	<b>80,891</b>	<b>\$117.07</b>	<b>\$1,447</b>	<b>\$83</b>	<b>81,254</b>	<b>\$120.48</b>	<b>\$1,483</b>	<b>\$80</b>

Table VI-2 displays projected costs for the Current CRP Model, given three different scenarios for annual CRP participation increases, a one percent increase each year, a 2.5 percent increase each year, and a five percent increase each year. The previous analysis of CRP participation between FY 2004 and FY 2009 showed that there was an average annual participation increase of seven percent. However, if the outlier of 16 percent from FY 2005 to FY 2006 is removed, the average is five percent. The table below shows that if participation increases by one percent annually, the program cost would be \$127 million in FY 2014 and if it increases by five percent annually, the program cost would be \$154 million in FY 2014. This analysis holds gas prices constant at the 2009 level.

**Table VI-2**  
**Model 1: Current CRP Model**  
**Projected Annual Costs (\$ Millions)**  
**By Annual Participation Increase**  
**Constant Gas Rates**

Annual Participation Increase	FY 2009 Projected Cost	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$120.48	\$121.68	\$122.90	\$124.13	\$125.37	\$126.62
2.5%	\$120.48	\$123.49	\$126.58	\$129.74	\$132.98	\$136.31
5%	\$120.48	\$126.50	\$132.82	\$139.47	\$146.44	\$153.76

Table VI-3 displays projected costs of the Current CRP Model given projected gas rates over the next five years. The cost per ccf is increased or decreased, but the customer charge of \$12 per month is held constant. These rate projections were provided by PGW. Costs increase to \$137 million by FY 2014 with a one percent annual increase in participation and increase to \$166 million with a five percent annual increase in participation.

**Table VI-3**  
**Model 1: Current CRP Model**  
**Projected Annual Costs (\$ Millions)**  
**By Annual Participation Increase**  
**Using Projected Gas Rates**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Gas Rate	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
Annual Participation Increase	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$120.48	\$111.71	\$120.99	\$126.42	\$133.02	\$136.70
2.5%	\$120.48	\$113.37	\$124.61	\$132.14	\$141.10	\$147.16

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
5%	\$120.48	\$116.13	\$130.76	\$142.05	\$155.38	\$166.00

The previous analysis held customer income constant. However, as customers' income increase, the cost of the subsidy should be lower because customers would pay the fixed percentage on a greater amount of income. Table VI-4 displays projected costs of the CRP with increased gas rates and annual increases in income of three percent, based on average increases in the Consumer Price Index (CPI) over the past several years. While we increase participant incomes, we do not move them into higher poverty level groups, as the poverty level cutoff also increases by approximately three percent each year.

Table VI-4 shows how the projected increase in customer incomes affects the projected subsidy level. However, it is unclear whether the low-income population can be expected to receive annual increases in income that are equal to the CPI. The table shows that projected costs are \$124 million in FY 2014 given a one percent annual increase in participation, and are \$151 million in FY 2014 given a five percent annual increase in participation.

**Table VI-4  
Model 1: Current CRP Model  
Projected Annual Costs (\$ Millions)  
By Annual Participation Increase  
Using Projected Gas Rates  
Annual Income Increases of 3%**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
1%	\$120.48	\$109.45	\$116.30	\$119.20	\$123.13	\$124.07
2.5%	\$120.48	\$111.08	\$119.78	\$124.59	\$130.61	\$133.56
5%	\$120.48	\$113.79	\$125.70	\$133.94	\$143.83	\$150.67

**2. Revisions to Accommodate LIHEAP Changes**

PGW's Current CRP Model has the benefits of targeting a set energy burden level and providing customers with a constant monthly asked to pay amount that does not vary even when the customer receives LIHEAP. This plan has worked well for PGW, and it should remain one of the options that PGW considers. However, changes in the way that PGW must credit LIHEAP to customer accounts would create significant changes for the program that PGW may want to address. Therefore, to maintain the status quo, PGW may have to make some changes to the CRP design. These changes would

involve increasing the CRP asked to pay amount to account for the LIHEAP revenue that is not credited to the shortfall, and adjusting the monthly CRP asked to pay amounts to maintain constant bills in the presence of LIHEAP payments.

- a) **Maintain Constant CRP Costs With Change in LIHEAP Payment Application**  
Table VI-5 displays the LIHEAP revenue that was obtained from CRP participants to help cover the CAP shortfall in the past three fiscal years. The amount ranged from \$9.3 to \$16.2 million, an average of \$200 per CRP participant in FY 2009.

**Table VI-5**  
**PGW LIHEAP Grants From CRP Customers**

	FY 2007	FY 2008	FY 2009
<b>LIHEAP Cash Grants</b>	\$10,153,059	\$9,297,514	\$16,203,722
<b>Number of CRP Participants</b>	76,885	77,749	80,891
<b>Average Grant Per CRP Participant</b>	\$132	\$120	\$200

Pennsylvania's LIHEAP benefits are based upon region, fuel, household income gross income, and number of people in the household. Using the LIHEAP table from 2009-2010 and characteristics of the 2009 population, we projected the total LIHEAP benefits across the 2009 LIHEAP population. Table VI-6 shows that the total LIHEAP benefit for all participants in 2009 would be \$22.65 million if all CRP participants received LIHEAP. Note that the total LIHEAP funding available and the benefit amount is dependent on the Federal LIHEAP appropriation for the year.

**Table VI-6**  
**LIHEAP Benefits**  
**From 2009-2010 Pennsylvania LIHEAP Table**

	Projections Based on October 2009 Number of Participants		
	October 2009 Participation	Average LIHEAP Benefit	Total Benefits (\$ Millions)
<b>Minimum (\$25/Month)</b>	3,963	\$821	\$3.25
<b>8%</b>	16,302	\$401	\$6.54
<b>9%</b>	43,647	\$239	\$10.43
<b>10%</b>	17,342	\$139	\$2.42
<b>Total</b>	81,254	\$279	\$22.65

PGW could use potential LIHEAP benefits based on the PA LIHEAP table to adjust CRP subsidies. For example, instead of calculating the monthly CRP payment as:

$$\text{Monthly CRP Payment} = [.08 * \text{Annual Household Income}] / 12$$

The payment could be calculated as:

$$\text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + [\text{LIHEAP}/12\}$$

This would result in a net bill for the customer who received LIHEAP that is equal to 8, 9 or 10 percent of income. This program model would provide an incentive for the customer to apply for LIHEAP because the customer would need to receive the LIHEAP grant to achieve the targeted energy burden.

Another option is to partially adjust the payment by adding a fraction of the projected LIHEAP grant, based on the historical percentage of CRP participants who receive LIHEAP. For example, if 55 percent of CRP participants receive LIHEAP, the formula could be adjusted as follows:

$$\text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + .55 * [\text{LIHEAP}/12\}$$

The percentage LIHEAP factor could be adjusted as the percent of CRP participants who receive LIHEAP changes. This percentage is expected to increase over time as participants learn how the new calculation and LIHEAP crediting process affects their gas bills.

Table VI-7A displays the increase in LIHEAP benefits across the CRP population given various increases in CRP participation rates. If PGW employed the method described above to provide adjusted CRP benefits with the full LIHEAP grant, the amounts in the table below could be subtracted from the subsidy costs shown in the previous projections. The bottom portion of the table shows the net cost of the CRP after subtracting these LIHEAP amounts.

**Table VI-7A**  
**Total Annual LIHEAP Benefits (\$ Millions)**  
**For All CRP Participants**  
**From 2009-2010 Pennsylvania LIHEAP Table**  
**And Net CRP Discount Cost (\$ Millions) After LIHEAP Subtraction**

PROJECTED LIHEAP BENEFITS FOR ALL PARTICIPANTS BASED ON PA LIHEAP MATRIX						
Annual Participation Increase	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$22.65	\$22.87	\$23.10	\$23.33	\$23.57	\$23.80
2.5%	\$22.65	\$23.21	\$23.79	\$24.39	\$25.00	\$25.62
5%	\$22.65	\$23.78	\$24.97	\$26.22	\$27.53	\$28.90

NET CRP DISCOUNT COST AFTER SUBTRACTING LIHEAP						
Annual Participation Increase	FY 2009 <sup>9</sup>	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$97.83	\$86.58	\$93.20	\$95.87	\$99.56	\$100.27
2.5%	\$97.83	\$87.87	\$95.99	\$100.20	\$105.61	\$107.94
5%	\$97.83	\$90.01	\$100.73	\$107.72	\$116.30	\$121.77

Table VI-7B displays the projected average monthly customer asked to pay amount by current CRP group and by poverty level under the Current CRP Model with projected LIHEAP benefits added to the customer's asked to pay amounts. The table shows that the average monthly asked to pay amount is \$103. Customers' net asked to pay amounts will be lower if they receive the LIHEAP grant.

**Table VI-7B**  
**Customer Monthly Asked to Pay Amount**  
**Model 1: Current CRP Model, With LIHEAP Adjustment**  
**By CRP Group and Poverty Level**

Current CRP Groups			Poverty Level Group		
	October 2009 Participation	Average Monthly Asked to Pay Amount		October 2009 Participation	Average Monthly Asked to Pay Amount
<b>Minimum (\$25/Month)</b>	3,963	\$90	<=25%	5,061	\$87
			26-50%	16,023	\$79
<b>8%</b>	16,302	\$78	<b>51-75%</b>	25,559	\$94
<b>9%</b>	43,647	\$99	<b>76-100%</b>	18,753	\$108
<b>10%</b>	17,342	\$139	<b>101-125%</b>	10,680	\$136
			<b>126-150%</b>	5,178	\$153
<b>Total</b>	81,254	\$103	<b>Total</b>	81,254	\$103

If PGW is not permitted to implement the program by calculating the subsidy as described above, PGW could adjust the percent of income payment to cover the LIHEAP benefit. This method would not be as equitable, because the subsidy could not be adjusted to equal the potential LIHEAP benefit exactly for all households,

<sup>9</sup> Note that the net CRP cost will be slightly more (\$98.37 Million instead of \$97.83 Million) after subtracting LIHEAP because some customers will have a LIHEAP grant that is greater than their pre-LIHEAP subsidy and no longer benefit from participating in the program after this change in formula. For example, one customer originally had a subsidy of \$242 and a projected LIHEAP benefit of \$430. Therefore, the customer's new subsidy would be less than \$0 so the customer would not participate in this redesigned program. However, only about five percent of participants would be in this circumstance, so it does not have a large impact on the calculations, and we make the simplification of subtracting the full LIHEAP projected benefits here.

but it would be revenue neutral and approximate the LIHEAP benefit that could be obtained.

Table VI-8A shows the revised payment amounts that would make up for the LIHEAP revenue. For example, customers who have income at or below 50 percent of poverty would have a new percent of income payment equal to 13.9 percent of income, instead of the previous payment of 8 percent of income and customers with income between 100 and 150 percent of poverty would have a payment equal to 10.9 percent of income instead of the previous payment of 10 percent of income.

**Table VI-8A  
Revised Payment Percentages  
To Account for LIHEAP Matrix Benefit**

	Projections Based on October 2009 Number of Participants			
	October 2009 Participation	Average LIHEAP Benefit	Mean Annual Income	Revised Payment
<b>Minimum (\$25/Month)</b>	3,963	\$821	\$2,594	\$93
<b>8%</b>	16,302	\$401	\$6,797	13.9%
<b>9%</b>	43,647	\$239	\$10,564	11.3%
<b>10%</b>	17,342	\$139	\$15,318	10.9%

While this approach may be more likely to be accepted by DPW, it has the disadvantage that it uses the average LIHEAP benefit to target the post-LIHEAP burden, rather than the projected LIHEAP benefit based on household size and income. Table VI-8B shows how energy burdens vary due to this discrepancy. The table shows that the strategy does not work well for the minimum payment group. Their average energy burden is 11 percent. While the average energy burdens, if the customer receives the projected LIHEAP grant, is close to the original targeted level of eight to ten percent, the table shows that ten percent of the customers in the original eight percent group would have an energy burden above 12 percent if they received the projected LIHEAP grant.

**Table VI-8B  
Projected Energy Burden Distribution  
With Revised Payment Percentages  
To Account for LIHEAP Matrix Benefit**

	Mean	Percentile			Maximum
		10	50	90	
<b>Minimum (\$25/Month)</b>	11%	11%	11%	13%	100%

	Mean	Percentile			Maximum
		10	50	90	
8%	7%	0%	8%	12%	14%
9%	9%	7%	9%	11%	11%
10%	10%	9%	10%	10%	11%

**b) Maintain Equal Monthly Asked to Pay Amounts**

One way that PGW could maintain equal monthly payments for CRP participants who receive a LIHEAP cash grant is to credit the LIHEAP grant over 12 months, rather than immediately crediting the entire grant to the customer's bill. This change would maintain an equal monthly bill for the customer and may be the simplest option for PGW to implement, but may not be acceptable to DPW, as the 8/12/09 letter from Linda Blanchette states that "a LIHEAP cash grant must be used to meet the household's immediate energy needs".

However, the National Fuel Gas Distribution Corporation (NFG) currently has a similar policy where they adjust the customer's annual budget bill when a LIHEAP grant is received. The following is from their 2008-2010 Universal Service and Energy Conservation Plan.

*When LIHEAP payments are posted to LIRA (Low-Income Residential Assistance Program) customers' accounts, the payments are applied to the Budget Plan balance. The system reviews the status of the Budget Plan and lowers the monthly payment amount according to the amount credited to the Budget Plan balance. The Budget Plan is restarted for a full year.*

Therefore, this adjustment may be an option that PGW should consider.

**3. Conservation Incentive Mechanism**

Analysis of PGW customers' gas consumption shows that CRP participants consume significantly more gas than non-CRP participants. Experience in the CWP revealed that the condition of participants' homes and the need for significant weatherization services is at least part of the cause of the higher usage. Study of PGW's CRP participants and studies of other low-income affordability programs show that customers do not increase their usage after enrolling in an affordability program. Despite these findings, there has been concern that there is a need to provide an incentive for PGW CRP participants to conserve.

PGW has considered two types of mechanisms – a penalty mechanism and an incentive mechanism. Under a penalty mechanism, there would be a limit on the total amount of the customer's annual CRP credit or the customer would be charged for exceeding the previous year's usage by a certain amount. Under an incentive mechanism, the customer would receive a financial reward for reducing usage over the previous year by a certain amount. The disadvantage of the penalty mechanism is that some customers are not able to reduce usage, due to the condition of their homes. Increasing their bill payment

responsibility could result in high energy burdens, unaffordable bills, and payment noncompliance. This could also result in increased collections costs and an increased burden on other ratepayers. The incentive mechanism, on the other hand, may cause some customers, who do have the ability to make positive changes in their energy usage behavior, to reduce their gas consumption. To the extent that this does occur, the reduction in the CRP credit will benefit other ratepayers.

Under one potential incentive design, PGW would run a query each April to compare gas consumption of CRP customers for the November to April period, with the usage during that time period the previous year. Usage during both periods would be weather normalized to allow for an accurate comparison, and only those customers who were on the CRP for the entire November to April time period would be eligible for the incentive. The usage reduction that would qualify CRP participants for the incentives is as follows.

- CRP participants who did not have CWP services completed between the previous April current November and reduced their usage by more than 10% would receive the incentive.
- CRP participants who had CWP services completed between the previous April and current November and reduced their usage by more than 20% would receive the incentive.

*CWP participants are required to reduce their consumption by a greater amount because their gas consumption should decline based on the conservation services they received in their homes.*

Customers who reduced gas consumption by the percentages shown above would receive a \$100 credit on their PGW bill.

PGW would provide outreach on this new conservation incentive mechanism at the time of CRP enrollment, recertification, and when outreach for LIHEAP is conducted in the fall of each year. Education would be provided to current and new CRP participants to make them aware of this new benefit for reduced consumption.

Table VI-9 displays the projected ratepayer savings from this Conservation Incentive Mechanism. The table shows that if ten percent of CRP participants reduce annual usage by ten percent, the CRP subsidy will be reduced by \$1.84 million. After subtracting the subsidy cost, the net savings to ratepayers is \$1.03 million. If 20 percent of CRP participants reduce annual usage by ten percent, the net decline in the subsidy cost will be \$2.09 million.

**Table VI-9**  
**Projection of Ratepayer Benefits (\$Millions)**  
**From Conservation Incentive Mechanism**

	Current Usage	10% Usage Reduction 10% of CRP Participants	10% Usage Reduction 20% of CRP Participants
Subsidy Cost	\$120.48	\$118.64	\$116.77
LIHEAP Grants	\$22.65	\$22.65	\$22.65
Subsidy Cost with LIHEAP Adjustment	\$97.83	\$95.99	\$94.12
Ratepayer Savings Over Current Usage Cost		\$1.84	\$3.71
Number of Customers with Incentive		8,099	16,247
Incentive Cost		\$0.81	\$1.62
Net Savings		\$1.03	\$2.09

## **B. Model 2: Targeted Energy Burden Model**

This section describes the bill payment assistance model that is used by the New Jersey Universal Service Program and FirstEnergy. Projections of program costs are also furnished.

### **1. Program Description**

The New Jersey Universal Service Program and FirstEnergy have created low-income subsidy programs that target the customer's post-LIHEAP energy burden to a certain level. This design may be unacceptable to HHS or DPW since they may consider the program to be "using LIHEAP as a resource". However the 8/12/09 letter from Linda Blanchette of DPW states that "a past or current LIHEAP cash grant cannot be used to formulate a household's CAP credit or "asked to pay" amount, so it may be possible to use the PA LIHEAP matrix rather than an actual grant to formulate the credit. This method would not treat LIHEAP recipients differently than non-LIHEAP recipients.

Under this plan, a certain energy burden is targeted. FirstEnergy targets a post-LIHEAP burden of three percent for electric non-heating customers and six percent for electric heating customers. The NJ USF targets a post-LIHEAP burden of three percent for electric, three percent for gas, and six percent for electric heating customers. While these programs do not vary the burden based on the customer's poverty level, PGW could choose to target different burden levels based on household poverty level. Both programs have a maximum subsidy amount.

If PGW decided to target a burden of eight percent, the calculation would be done as follows:

$Annual\ Household\ Income * 8\% = Targeted\ Net\ Energy\ Bill$  ( $\$10,000 * 8\% = \$800$ )  
 $Current\ Gas\ Burden = Annual\ Gas\ Bill - LIHEAP\ Benefit$  ( $\$2,200 - \$350 = \$1850$ )  
 $CAP\ pays\ the\ difference: \$1850 - \$800 = \$1050$   
 $Monthly\ credit = \$1050/12 = \$87.50$

A disadvantage of this design is that it does not result in equal monthly bills for the customer. The customers' bills fluctuate due to monthly fluctuations in gas usage and LIHEAP credits to the customers bills. This problem could be addressed by requiring these customers to have a budget bill and applying the LIHEAP grant over 12 months.

An advantage of this design is that it reduces the risk for ratepayers (although it increases the risk for CRP participants). This is because the CRP benefit is set once per year and the benefit will not vary over the year if gas rates change or the customer increases gas usage. Additionally, the model provides an incentive for customers to apply for LIHEAP.

## 2. Projected Costs

Costs are projected under this model, assuming targeted energy burden levels of eight percent for customers with income below 50 percent of poverty, nine percent for customers with income between 51 and 100 percent of poverty, and ten percent for customers with income between 100 and 150 percent of poverty.

Table VI-10A displays projections of the cost of the Targeted Energy Burden Model. The table shows that the FY 2009 projected costs of this program are \$99 million and the average customer subsidy is \$1,215. The average monthly asked to pay amount is \$103.

**Table VI-10A**  
**Model 2: Targeted Energy Burden Model**  
**Projected 2009 Costs**

	Projections Based on 2009 Usage Data and FY 2009 Gas Rates			
	October 2009 Participation	Total Net Discount (\$ Millions)	Average Annual Net Discount	Average Monthly Asked to Pay Amount
8%	20,264	\$27.69	\$1,367	\$80
9%	43,648	\$52.69	\$1,207	\$99
10%	17,342	\$18.31	\$1,056	\$139
<b>Total</b>	81,254	\$98.70	\$1,215	\$103

Table VI-10B displays the projected average monthly customer asked to pay amount by poverty level under the Targeted Energy Burden Model, for comparison with other analyses conducted by poverty level.

**Table VI-10B**  
**Model 2: Targeted Energy Burden Model**  
**Customer Monthly Asked to Pay Amount**  
**By Poverty Level**

Poverty Level Group		
	October 2009 Participation	Average Monthly Asked to Pay Amount
<=25%	5,061	\$83
26-50%	16,023	\$80
51-75%	25,559	\$94
76-100%	18,753	\$108
101-125%	10,680	\$136
126-150%	5,178	\$154
<b>Total</b>	<b>81,254</b>	<b>\$103</b>

Table VI-11 displays the projected costs of the Targeted Energy Burden Model given various assumptions about increases in customer participation. Gas rates are kept constant in this simulation. The table shows that given an annual participation growth rate of one percent, the projected cost of the program is \$104 million in FY 2014, and given an annual participation growth rate of five percent, the projected cost of the program is \$126 million in FY 2014.

**Table VI-11**  
**Model 2: Targeted Energy Burden Model**  
**Projected Annual Costs (\$ Millions)**  
**By Annual Participation Increase**  
**Constant Gas Rates**

Annual Participation Increase	FY 2009 Projected Cost	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$98.70	\$99.69	\$100.68	\$101.69	\$102.71	\$103.73
2.5%	\$98.70	\$101.17	\$103.70	\$106.29	\$108.95	\$111.67
5%	\$98.70	\$103.64	\$108.82	\$114.26	\$119.97	\$125.97

Table VI-12 displays projected costs of the Targeted Energy Burden Model given various increases in participation and projected gas rates. The table shows that the

projected FY 2014 costs are \$114 million for a one percent annual participation rate increase and \$138 million for a five percent annual participation rate increase.

**Table VI-12**  
**Model 2: Targeted Energy Burden Model**  
**Projected Annual Costs (\$ Millions)**  
**By Annual Participation Increase**  
**Using Projected Gas Rates**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$98.70	\$89.95	\$98.81	\$103.94	\$110.23	\$113.65
2.5%	\$98.70	\$91.29	\$101.77	\$108.64	\$116.93	\$122.35
5%	\$98.70	\$93.52	\$106.80	\$116.78	\$128.76	\$138.01

Table VI-13 displays projected costs of the Targeted Energy Burden Model given various participation rate increases, gas rate increases, and annual income increases of three percent. The table shows that with the income adjustment, the cost is projected to be \$101 million in FY 2014 if there is a one percent annual participation increase and to be \$123 million in FY 2014 if there is a five percent annual participation rate increase.

**Table VI-13**  
**Model 2: Targeted Energy Burden Model**  
**Projected Annual Costs (\$ Millions)**  
**By Annual Participation Increase**  
**Using Projected Gas Rates**  
**Annual Income Increases of 3%**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$98.70	\$87.82	\$94.34	\$97.03	\$100.72	\$101.49
2.5%	\$98.70	\$89.12	\$97.17	\$101.42	\$106.84	\$109.26
5%	\$98.70	\$91.29	\$101.96	\$109.02	\$117.64	\$123.25

### **C. Model 3: Bill Discount Model**

The Bill Discount Model is used by PECO and many other affordability programs around the country. This section describes the program and provides projections of the program cost.

#### **1. Program Description**

Another option for a low-income affordability program is to provide a discount to the customer on the energy bill. There are several options for the way the discount is applied.

- The discount can be applied on the full gas bill or on one type of charge.
- The discount can be applied on the full gas usage or gas usage up to a certain threshold.
- The discount can be constant or can vary with usage.
- The discount can be the same for all participants or can be greater for lower income or lower poverty level households.

The Bill Discount Model splits the risk between the ratepayers and the CRP participant. If gas costs increase, the increase will be split between the customer's portion of the bill and the discounted portion of the bill.

Advantages of the Bill Discount Model are that it provides an incentive for customers to apply for LIHEAP and that it is a straightforward model to implement. This model may also provide an incentive for reduced consumption, as costs are directly related to the amount of gas consumed. A disadvantage is that it does not provide a constant monthly payment. However, PGW could achieve a constant monthly payment for the participant by utilizing the budget billing method with the LIHEAP grant credit averaged over 12 months.

Another disadvantage of the Bill Discount Model is that it is an inefficient way to reach a targeted energy burden. Some customers will receive a discount that is greater than what is needed to achieve the targeted level and some customers will receive a discount that is lower than what is needed to achieve the targeted burden.

#### **2. Projected Costs**

This section models the cost of the Bill Discount Model. The simulations provided here model the discount on the full bill—both the rate and the monthly fee are discounted.

##### **Initial Bill Discount Model Projections**

Table VI-14 shows the projected costs of providing a 75 percent discount to customers with income at or below 50 percent of poverty, a 50 percent discount to customers with income between 51 and 100 percent of poverty, and a 25 percent discount to customers with income between 101 and 150 percent of poverty. The table shows that the

projected 2009 cost of this program is \$98 million. The average monthly asked to pay amount is \$101.

**Table VI-14**  
**Model 3: Bill Discount Model**  
**Projected 2009 Costs**

		Projections Based on 2009 Usage Data and FY 2009 Gas Rates			
Poverty Level	Discount	October 2009 Participation	Total Net Discount (\$ Millions)	Average Annual Net Discount	Average Monthly Asked to Pay Amount
<=50%	75%	20,264	\$34.91	\$1,723	\$48
51%-100%	50%	43,648	\$51.63	\$1,183	\$99
101%-150%	25%	17,342	\$11.64	\$671	\$168
<b>Total</b>		81,254	\$98.19	\$1,208	\$101

Table VI-15 displays the projected costs of the Bill Discount Model given various participation rate increases. The table shows that the FY 2014 projected costs are \$103 million for a one percent annual increase and \$125 million for a five percent annual increase in participation. Gas rates are held constant in this table.

**Table VI-15**  
**Model 3: Bill Discount Model**  
**Projected Annual Costs (\$ Millions)**  
**By Annual Participation Increase**  
**Constant Gas Rates**

Annual Participation Increase	FY 2009 Projected Cost	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$98.19	\$99.17	\$100.16	\$101.16	\$102.17	\$103.20
2.5%	\$98.19	\$100.64	\$103.16	\$105.74	\$108.38	\$111.09
5%	\$98.19	\$103.10	\$108.25	\$113.66	\$119.35	\$125.31

Table VI-16 displays the projected costs of the Bill Discount Model given various participation rate increases and projected gas rates. The table shows that projected costs are \$108 million with a one percent annual increase in participation and are \$131 million with a five percent annual increase in participation.

**Table VI-16**  
**Model 3: Bill Discount Model**  
**Projected Annual Costs (\$ Millions)**  
**By Annual Participation Increase**  
**Using Projected Gas Rates**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$98.19	\$94.22	\$99.21	\$102.29	\$105.95	\$108.17
2.5%	\$98.19	\$95.62	\$102.18	\$106.92	\$112.39	\$116.44
5%	\$98.19	\$97.95	\$107.23	\$114.94	\$123.76	\$131.35

**Bill Discount Model Projections to Reach PUC Targeted Burden**

A disadvantage of the Bill Discount Model is that it cannot directly target the discount needed by each customer to reach a targeted energy burden. Table VI-17 displays the discount needed to reach the Pennsylvania Public Utilities Commission (PUC) targeted burden levels. The PUC has set target ranges for three different poverty level groups, shown in the table below. We used the top of the range to determine the discount necessary to bring the customer to the targeted burden level. For example, the PUC set a targeted energy burden of five percent to eight percent for customers with income at or below 50 percent of the poverty level. The table shows the discount needed to reach an eight percent burden for households with income at or below 25 percent of poverty and for households with income between 26 and 50 percent of poverty. The mean discount needed by customers with income at or below 25 percent of poverty is 86 percent. Half of these customers will reach this burden target if a discount of 88 percent is provided, 75 percent will reach the burden target if a 92 percent discount is provided, and 90 percent will reach the target if a 94 percent discount is provided.

**Table VI-17**  
**Model 3: Bill Discount Model**  
**Discount Needed to Reach PUC Burden Target**  
**By Poverty Level**

Poverty Group	PUC Burden Target	Target Used	Discount Needed to Reach Target							
			Mean Discount	Min	Percentiles					Max
					10%	25%	50%	75%	90%	
<=25%	5%-8%	8%	86%	11%	75%	83%	88%	92%	94%	100%
26%-50%	5%-8%	8%	72%	1%	52%	65%	75%	83%	87%	96%

Poverty Group	PUC Burden Target	Target Used	Discount Needed to Reach Target							
			Mean Discount	Min	Percentiles					Max
					10%	25%	50%	75%	90%	
51%-75%	7%-10%	10%	53%	0%	23%	41%	57%	68%	76%	92%
76%-100%	7%-10%	10%	45%	0%	11%	29%	48%	62%	71%	89%
101%-125%	9%-10%	10%	39%	0%	12%	25%	40%	54%	64%	87%
126%-150%	9%-10%	10%	34%	0%	9%	19%	34%	48%	59%	85%

Table VI-18 displays the projected 2009 costs of the Bill Discount Model if the discounts in the table above to bring 90 percent of the participants to the PUC burden level are used. This table shows that the projected FY 2009 cost of this program is \$147 million and the average discount is \$1,814. The average monthly asked to pay amount is \$50.

**Table VI-18**  
**Model 3: Bill Discount Model**  
**Projected 2009 Discount Costs**  
**Discount that Gets 90% to PUC Burden Target**

		Projections Based on 2009 Usage Data and FY 2009 Gas Rates			
Poverty Level	Discount	October 2009 Participation	Total Net Discount (\$ Millions)	Average Annual Net Discount	Average Monthly Asked to Pay Amount
<=25%	94%	5,061	\$10.73	\$2,121	\$11
26%-50%	87%	16,023	\$32.25	\$2,013	\$25
51%-75%	76%	25,559	\$45.52	\$1,781	\$47
76%-100%	71%	18,753	\$32.17	\$1,716	\$58
101%-125%	64%	10,680	\$18.11	\$1,696	\$80
126%-150%	59%	5,178	\$8.57	\$1,654	\$96
<b>Total</b>		81,254	\$147.36	\$1,814	\$50

Table VI-19 displays the costs of the projected discounts to get 90 percent of the CRP participants in each poverty level group to the targeted PUC burden level, given various annual participation rate increases. The table shows that costs in FY 2014 are \$155 million if the annual participation rate increase is one percent, and are \$188 million if the annual participation rate increase is five percent.

**Table VI-19**  
**Model 3: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Discount that Gets 90% to PUC Burden Target**  
**Constant Gas Rates**

<b>Annual Participation Increase</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
1%	\$147.36	\$148.83	\$150.32	\$151.82	\$153.34	\$154.87
2.5%	\$147.36	\$151.04	\$154.82	\$158.69	\$162.65	\$166.72
5%	\$147.36	\$154.72	\$162.46	\$170.58	\$179.11	\$188.07

Table VI-20 displays the projected costs of the discount needed to get 90 percent of participants to the targeted energy burden level, given projected increases in participation rates and gas rates. The table shows that the projected FY 2014 costs are \$162 million if there is a one percent annual rate of increase in participation and \$197 million if there is a five percent annual rate of increase in participation.

**Table VI-20**  
**Model 3: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Discount that Gets 90% to PUC Burden Target**  
**Using Projected Gas Rates**

	<b>FY 2009</b>	<b>Projected</b>				
		<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
1%	\$147.36	\$141.40	\$148.90	\$153.52	\$159.01	\$162.34
2.5%	\$147.36	\$143.50	\$153.35	\$160.46	\$168.67	\$174.76
5%	\$147.36	\$147.00	\$160.93	\$172.49	\$185.74	\$197.14

**Bill Discount Model Projections to Reach PUC Targeted Burden**  
**With Limits on the Amount of Gas Consumption that is Discounted**

Another option for the discount model is to provide the discounted rate on a limited amount of gas consumption, and then charge the regular gas rate for gas consumption above that level. This approach has the advantages of providing additional incentives to conserve to participating customers and of reducing the cost of the program. Customers

who have usage above the level that was discounted could be targeted for conservation services through PGW’s CWP.

In this section, we propose some initial limits, above which gas usage would not be discounted for program participants. The limits were chosen with the following principles.

- Program participants will not have the ability to limit their usage to reach a set discount limit. Rather, they may be encouraged to restrict their usage through the understanding that there is some limit placed on the amount of gas that is discounted. Therefore, as an incentive mechanism, it is not of great importance where the limit is set. Rather, it is of more importance that customers are educated so that they understand they need to conserve gas, because if their usage is too high, it will get very expensive.
- Customers have greater opportunity to reduce gas consumption in the winter when they have greater usage, so more customers should reach the limit in the winter.
- The CWP should be able to treat most customers who reach the limit over a period of a few years, to assist these customers to reduce their usage to an affordable level.
- Simpler approaches, with less variation in the limits, are preferred.

Table VI-21 displays the proposed consumption levels, above which gas consumption would not be discounted, and the percent and number of CRP participants in each poverty group who are projected to have gas consumption above these levels. On average, about 10,000 customers have usage above the limit in the winter months. As the CWP treats approximately 2,500 customers each year, these customers could be treated over a four to five year period.

**Table VI-21  
Model 3: Bill Discount Model  
Proposed Limits on Discounted Usage  
Number and Percent of CRP Participants With Usage Over Discount Limit  
By Poverty Level**

Month	January	February	March	April	May	June							
Discount Limit	375	275	250	135	60	60							
Number and Percent of CRP Participants With Usage Over the Discounted Level													
Povety Level	CRP Total	%	#	%	#	%	#	%	#	%	#	%	#
<=25%	5,061	13%	676	13%	652	11%	538	11%	553	13%	640	2%	94

Month	January		February		March		April		May		June		
Discount Limit	375		275		250		135		60		60		
Number and Percent of CRP Participants With Usage Over the Discounted Level													
26-50%	16,023	13%	2,065	12%	1,985	10%	1,655	10%	1,681	13%	2,112	2%	327
51-75%	25,559	13%	3,226	12%	3,085	10%	2,443	10%	2,546	12%	3,029	2%	401
76-100%	18,753	13%	2,485	12%	2,327	10%	1,858	10%	1,898	11%	2,155	2%	296
101-125%	10,680	16%	1,683	15%	1,612	12%	1,282	12%	1,261	13%	1,381	1%	151
126-150%	5,178	18%	924	17%	865	13%	670	12%	635	13%	676	2%	82
Total	81,254	14%	11,067	13%	10,531	10%	8,450	11%	8,572	12%	9,986	2%	1,349

Month	July		August		September		October		November		December		
Discount Limit	60		60		60		135		200		300		
Number and Percent of CRP Participants With Usage Over the Discounted Level													
Povety Level	CRP Total	%	#	%	#	%	#	%	#	%	#	%	#
<=25%	5,061	1%	45	1%	37	1%	58	4%	220	14%	690	12%	594
26-50%	16,023	1%	175	1%	170	1%	178	4%	604	14%	2,166	11%	1,774
51-75%	25,559	1%	207	1%	220	1%	276	4%	1,004	13%	3,343	11%	2,781
76-100%	18,753	1%	173	1%	206	1%	173	4%	773	14%	2,535	11%	2,147
101-125%	10,680	1%	74	1%	101	1%	105	5%	512	16%	1,722	13%	1,432
126-150%	5,178	1%	44	1%	55	1%	65	5%	268	17%	898	14%	740
Total	81,254	1%	715	1%	788	1%	853	4%	3,388	14%	11,359	12%	9,474

Table VI-22 displays statistics on the amount by which customers exceed the limited usage discount. The table shows that there are over 19,000 customers who exceed the limited amount in at least one month. However, 25 percent of these customers have total use over the year that exceeds the limits by only 17 ccf. The average amount by which these customers exceed the usage limits over the year is 254 ccf. Evaluation of the CWP has shown that this program reduces customer usage by an average of 146 ccf and PGW's new DSM program is projected to reduce customer usage by an average of 263 ccf. Therefore, these programs will help customers to reduce their usage to an affordable level.

**Table VI-22**  
**Model 3: Bill Discount Model**  
**Amount of Usage Over the Discount Limit (ccf)**  
**By Poverty Group**

Poverty Group	Number of CRP Participants	Total Annual Amount Over the Discount (ccf)						
		Mean	Percentile					Maximum
			10	25	50	75	90	
<=25%	1,119	257	5	18	94	350	787	2,781
26-50%	3,645	228	4	15	79	303	671	3,023
51-75%	5,587	246	4	16	83	322	735	2,955
76-100%	4,321	261	5	17	94	348	746	2,984
101-125%	3,103	270	5	20	105	362	775	2,862
126-150%	1,786	285	6	21	113	369	822	2,987
<b>TOTAL</b>	<b>19,562</b>	<b>254</b>	<b>5</b>	<b>17</b>	<b>91</b>	<b>338</b>	<b>742</b>	<b>3,023</b>

Table VI-23 displays the projected 2009 costs of the Bill Discount Model with the proposed discount limits. This table shows that the projected FY 2009 cost of this program is \$141 million and the average discount is \$1,731. The average monthly asked to pay amount is \$57.

**Table VI-23**  
**Model 3: Bill Discount Model**  
**Projected 2009 Discount Costs**  
**Discount that Gets 90% to PUC Burden Target**  
**With Limits on The Amount of Usage Discounted**

		Projections Based on 2009 Usage Data and FY 2009 Gas Rates			
Poverty Level	Discount	October 2009 Participation	Total Net Discount (\$ Millions)	Average Annual Net Discount	Average Monthly Asked to Pay Amount
<=25%	94%	5,061	\$10.24	\$2,023	\$19
26%-50%	87%	16,023	\$30.93	\$1,930	\$32
51%-75%	76%	25,559	\$43.62	\$1,707	\$53
76%-100%	71%	18,753	\$30.71	\$1,638	\$65
101%-125%	64%	10,680	\$17.14	\$1,604	\$87
126%-150%	59%	5,178	\$8.02	\$1,549	\$105
<b>Total</b>		<b>81,254</b>	<b>\$140.65</b>	<b>\$1,731</b>	<b>\$57</b>

Table VI-24 displays the costs of the projected discounts with the limits on the amount of gas that is discounted, given various annual participation rate increases. The table

shows that costs in FY 2014 are \$148 million if the annual participation rate increase is one percent, and are \$180 million if the annual participation rate increase is five percent.

**Table VI-24**  
**Model 3: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Discount that Gets 90% to PUC Burden Target**  
**With Limits on The Amount of Usage Discounted**  
**Constant Gas Rates**

Annual Participation Increase	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$140.65	\$142.05	\$143.47	\$144.91	\$146.36	\$147.82
2.5%	\$140.65	\$144.16	\$147.77	\$151.46	\$155.25	\$159.13
5%	\$140.65	\$147.68	\$155.06	\$162.81	\$170.96	\$179.50

Table VI-25 displays the projected costs of the discount needed with limits on the amount of gas that is discounted, given projected increases in participation rates and gas rates. The table shows that the projected FY 2014 costs are \$155 million if there is a one percent annual rate of increase in participation and \$188 million if there is a five percent annual rate of increase in participation.

**Table VI-25**  
**Model 3: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Discount that Gets 90% to PUC Burden Target**  
**With Limits on The Amount of Usage Discounted**  
**Using Projected Gas Rates**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
Gas Rate	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
Annual Participation Increase	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
1%	\$140.65	\$134.98	\$142.12	\$146.53	\$151.75	\$154.93
2.5%	\$140.65	\$136.99	\$146.37	\$153.15	\$160.97	\$166.78
5%	\$140.65	\$140.33	\$153.60	\$164.63	\$177.26	\$188.13

**Bill Discount Model Projections to Reach PUC Targeted Burden  
After LIHEAP Grant is Received**

**With Limits on the Amount of Gas Consumption that is Discounted**

The other models incorporated the projected LIHEAP benefit amount when calculating the subsidy needed to bring the customer to the targeted energy burden level. In the following analysis, we incorporate the projected LIHEAP benefit when determining what discount the customer would need to reach the targeted burden. Table VI-26 displays the discount needed to reach the Pennsylvania Public Utilities Commission (PUC) targeted burden levels after the projected LIHEAP benefit has been subtracted from the customer's projected costs. The table compares the discount needed prior to and after incorporating the LIHEAP benefit. The table shows that taking LIHEAP into account reduces the discount needed from 94 percent to 72 percent for the group with income at or below 25 percent of the poverty level and reduced the discount needed from 59 percent to 55 percent for the group with income between 126 and 150 percent of the poverty level. Note that this discount would be applied to the full amount of gas usage (up to any discount limit imposed), but the amount of discount needed is lower because the LIHEAP benefit is taken into account.

**Table VI-26  
Model 3: Bill Discount Model  
Discount Needed to Reach PUC Burden Target  
By Poverty Level**

Poverty Group	PUC Burden Target	Target Used	Discount Needed to Reach Target for 90 Percent	
			Without LIHEAP	With LIHEAP
<=25%	5%-8%	8%	94%	72%
26%-50%	5%-8%	8%	87%	73%
51%-75%	7%-10%	10%	76%	67%
76%-100%	7%-10%	10%	71%	63%
101%-125%	9%-10%	10%	64%	60%
126%-150%	9%-10%	10%	59%	55%

Table VI-27 displays the average monthly customer asked to pay amount when the LIHEAP grant is factored in. The table shows that the mean monthly asked to pay amount is now \$74.

**Table VI-27**  
**Model 3: Bill Discount Model**  
**LIHEAP Grant Subtracted When Calculating Needed Discount**  
**Customer Monthly Asked to Pay Amount**  
**By Poverty Level**

Poverty Level Group		
	October 2009 Participation	Average Monthly Asked to Pay Amount
<=25%	5,061	\$59
26-50%	16,023	\$58
51-75%	25,559	\$70
76-100%	18,753	\$80
101-125%	10,680	\$95
126-150%	5,178	\$113
<b>Total</b>	<b>81,254</b>	<b>\$75</b>

Table VI-28 displays the projected costs of the discount needed after the LIHEAP benefit is received with limits on the amount of gas that is discounted, given projected increases in participation rates and gas rates. The table shows that the projected FY 2014 costs are \$136 million if there is a one percent annual rate of increase in participation and \$165 million if there is a five percent annual rate of increase in participation.

**Table VI-28**  
**Model 3: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Discount that Gets 90% to PUC Burden Target**  
**After Projected LIHEAP Grant is Subtracted**  
**With Limits on The Amount of Usage Discounted**  
**Using Projected Gas Rates**

	FY 2009	Projected				
		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
<b>Gas Rate</b>	\$18.2676	\$17.2976	\$18.0841	\$18.4853	\$18.9865	\$19.2049
<b>Annual Participation Increase</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
1%	\$123.03	\$118.08	\$124.32	\$128.18	\$132.75	\$135.53
2.5%	\$123.03	\$119.83	\$128.04	\$133.97	\$140.81	\$145.89
5%	\$123.03	\$122.75	\$134.37	\$144.02	\$155.06	\$164.58

### **Bill Discount Model Projections With Cost Held at Current CRP Model Costs**

The previous versions of the Bill Discount Model set the discounts to keep at least 90 percent of program participants within the PUC targeted energy burden guidelines. In this section, we examine the characteristics and costs of a discount that would have the same initial costs as the projected costs for the Current CRP Model.

Table VI-29 displays discount levels, monthly asked to pay amounts, and pre and post-LIHEAP energy burdens for a Bill Discount Model that would have the same projected costs as those for the Current CRP Model. The table shows that discounts would range from 70 percent for participants with household income at or below 25 percent of the poverty level to 20 percent for participants with household income between 126 and 150 percent of the federal poverty level. The table shows that the average energy burden for the lowest poverty group would be 23 percent if they did not receive LIHEAP and would be three percent if they did receive LIHEAP. The average energy burden for households with income between 26 and 50 percent of poverty would be 13 percent if they did not receive LIHEAP and six percent if they did.

**Table VI-29**  
**Model 3: Bill Discount Model**  
**Maximum Discounts for Same Cost as Current CRP Model**  
**Discount Percentage, Asked to Pay Amount, and Energy Burden**

Poverty Group	Discount	Average Monthly Asked to Pay Amount	Average Pre LIHEAP Energy Burden <sup>10</sup>	Average Post LIHEAP Energy Burden
<=25%	70%	\$56.42	23%	3%
26-50%	64%	\$69.42	13%	6%
51-75%	55%	\$87.92	12%	9%
76-100%	45%	\$110.75	12%	10%
101-125%	34%	\$145.75	12%	11%
126-150%	20%	\$186.92	13%	13%

Table VI-30 displays the projected costs of the discounts displayed in the previous tables. The projected 2009 cost is \$97.58 Million as these costs were targeted to be the same as the projected 2009 cost for the Current CRP Model (\$97.83 Million). Projected costs in FY 2014 are also approximately the same as projected 2004 costs for the Current CRP Model.

<sup>10</sup> The Pre-LIHEAP energy burden for the group with income between 126 and 150 percent of poverty is 13.36 percent and the Post-LIHEAP energy burden for that group is 12.65. Both are rounded to 13 percent.

**Table VI-30**  
**Model 3: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Maximum Discounts for Same Cost as Current CRP Model**  
**Constant Gas Rates**

<b>Annual Participation Increase</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
1%	\$97.58	\$98.56	\$99.54	\$100.54	\$101.54	\$102.56
2.5%	\$97.58	\$100.02	\$102.52	\$105.08	\$107.71	\$110.40
5%	\$97.58	\$102.46	\$107.58	\$112.96	\$118.61	\$124.54

Table VI-31 displays the projected costs of the discounts displayed in the previous tables, with projected changes in gas rates. The 2014 costs are slightly lower than for the Current CRP Model, because Bill Discount Model program participants share the price increase on the part of the gas that they are paying for. However, the cost of the Bill Discount Model does not decline when the customer's income increases as it does with the other models.

**Table VI-31**  
**Model 3: Bill Discount Model**  
**Projected Annual Discount Costs (\$ Millions)**  
**Maximum Discounts for Same Cost as Current CRP Model**  
**Projected Gas Rates**

<b>Annual Participation Increase</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>
1%	\$97.58	\$93.64	\$98.60	\$101.66	\$105.29	\$107.50
2.5%	\$97.58	\$95.03	\$101.55	\$106.26	\$111.69	\$115.72
5%	\$97.58	\$97.34	\$106.56	\$114.22	\$122.99	\$130.54

## VII. Summary and Recommendations

This section provides a brief description of the three models considered, a summary of the advantages and disadvantages of the three models, a comparison of the program costs, and a recommendation for PGW's program.

### A. Models Considered

The three models analyzed in this report are described briefly below.

- *Model 1: Current CRP Model with LIHEAP Modification* – Customers who participate in the CRP pay a fixed monthly amount. The amount is calculated so that customers pay 8, 9, or 10 percent of their income, based on their poverty level. There is a minimum payment amount of \$25 per month.

The first model revision adjusts the calculation of the CRP payment by adding 1/12 of the customer's potential LIHEAP grant, based on PA's LIHEAP matrix, to the customer's monthly payment, or by adding some percentage of the potential LIHEAP grant. The payment could be calculated as:

$$\text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + [\text{LIHEAP}/12\}$$

Or can be calculated as:

$$\text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + .55 * [\text{LIHEAP}/12\}$$

The second model revision credits the LIHEAP grant to the customer's account over 12 months, to maintain an equal monthly bill for the customer.

The third model revision adds in a Conservation Incentive Mechanism to encourage participants to reduce their gas consumption.

- *Model 2: Targeted Energy Burden Model* – This model targets the customer's post-LIHEAP energy burden to a certain level. If PGW decided to target a burden of eight percent, the calculation would be done as follows:

$$\text{Annual Household Income} * 8\% = \text{Targeted Net Energy Bill } (\$10,000 * 8\% = \$800)$$

$$\text{Current Gas Burden} = \text{Annual Gas Bill} - \text{LIHEAP Benefit } (\$2,200 - \$350 = \$1850)$$

$$\text{CAP pays the difference: } \$1850 - \$800 = \$1050$$

$$\text{Monthly credit} = \$1050/12 = \$87.50$$

- *Model 3: Bill Discount Model* – This model provides a discount to the customer on the energy bill. It is essentially a different rate that the program participant pays for gas usage.

The three models are compared in the next section.

## B. Model Comparison

Table VII-1 compares the three models on several program characteristics. The table demonstrates that each model has advantages in different areas.

- *Equal Monthly Payments* – The Current CRP Model is the only design that provides equal monthly payments (with the allocation of the LIHEAP grant over a 12-month period.) The Targeted Energy Burden and Bill Discount Models require a budget bill arrangement to equalize the asked to pay amount. Because of the unpredictability of energy usage, the PUC requirement for periodic budget bill adjustments, and the need to avoid large make-up payments, frequent adjustments to the budget bill may result in somewhat irregular payments for program participants.
- *LIHEAP Application Issue* – The Bill Discount Model is the only design that completely removes the LIHEAP payment issue because it does not integrate the discount with the LIHEAP cash grant. The other models, however, provide more equitable net payments because they do take account of LIHEAP.
- *Conservation Incentive* – The modified CRP Model has a new proposed Conservation Incentive Mechanism. The Targeted Energy Burden Model provides an incentive for conservation because the customer's program credit is determined at the beginning of the year and fixed over the year. The Bill Discount Model provides an incentive for conservation because the customer pays a portion of the energy bill.
- *Targets Energy Burden* – The Current CRP Model and the Targeted Energy Burden Model target a set energy burden level, as opposed to the Bill Discount Model which indirectly attempts to reach a set energy burden. The Current CRP and the Targeted Energy Burden Models are more efficient at reaching the targeted energy burden level.
- *Administrative Simplicity* – The Current CRP Model is simplest for PGW because it is the model that is currently programmed into their system. The Bill Discount Model is simple to administer, as it only involves applying different rates for CRP customers. However, the program becomes more complex when the budget bill is included. The Targeted Energy Burden Model is the most complicated to explain to customers and to implement.

Cells in the table are highlighted that correspond to advantageous characteristics to make it easy to see which programs are advantageous in each area.

**Table VII-1  
Advantages and Disadvantages of Assistance Models**

	Assistance Model		
	Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3: Bill Discount
Equal Monthly Payments	Yes	No	No
Resolves LIHEAP Application Issue	Partially	Partially	Yes
Conservation Incentive	Yes	Yes	Yes
Targets Energy Burden	Yes	Yes	No
Administrative Simplicity	Yes	No	Yes

Table VII-2 compares the monthly customer asked to pay amount under the three assistance models, and the two versions of the Bill Discount Model. The table demonstrates that while the Current CRP and Targeted Energy Burden Models have very similar bills, the Model 3A: Bill Discount Model that was designed to reach the PUC burden targets has much lower projected bills. The Model 3B: Bill Discount Model that was designed to match the CRP cost has monthly asked to pay amounts that are lower than the other models for the lower income groups and higher than the other models for the higher income groups, but they are about the same as the other models on average for participants as a whole.

**Table VII-2  
Comparison of Assistance Models  
Customer Monthly Asked to Pay Amount**

	October 2009 Participation	Assistance Model			
		Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3A: Bill Discount To Reach PUC Target	Model 3B: Bill Discount To Match CRP Cost
		Average Monthly Asked to Pay Amount			
<=25%	5,061	\$87	\$83	\$59	\$56
26-50%	16,023	\$79	\$80	\$58	\$69
51-75%	25,559	\$94	\$94	\$70	\$88
76-100%	18,753	\$108	\$108	\$80	\$111
101-125%	10,680	\$136	\$136	\$95	\$146
126-150%	5,178	\$153	\$154	\$113	\$187
<b>Total</b>	81,254	\$103	\$103	\$75	\$101

Table VII-3A compares the Pre-LIHEAP energy burden under the three assistance models, and the two versions of the Bill Discount Model. The Bill Discount Model designed to reach the PUC targeted energy burden has the lowest energy burdens because it is designed to meet the PUC target for 90 percent of participants after receipt of the LIHEAP grant. All

of the models have higher pre-LIHEAP energy burdens for the lower poverty groups because these models are designed to reach energy burdens after receipt of LIHEAP and the lower poverty groups have greater projected LIHEAP benefits.

Table VII-3B compares the Post-LIHEAP energy burden. The Current CRP and Targeted Energy Burden Models reach the energy burden that they target for each program participant, because of the model design. The exception for the Current CRP group is the lowest poverty level group because some of these participants have the minimum payment instead of the percentage of income payment. The Model 3A: Bill Discount Model that was designed to meet the PUC targets meets the PUC target for 90 percent of participants, but is below that level on average. The Model 3B: Bill Discount Model that was designed to match the CRP cost has Post-LIHEAP energy burdens that are lower than the other models for the lower income groups and higher than the other models for the higher income groups.

However, it is also important to examine the distribution of the energy burden. As designed, the Current CRP Model and the Targeted Energy Burden Model reach the energy burden that is targeted for all program participants (with the exception of a small number of minimum payment group customers in the Current CRP Model.) However, the Bill Discount Model has a range of energy burdens that are achieved. Table VII-3B shows that 25 percent of customers with income between 26 and 50 percent of poverty have an energy burden above 9 percent and 25 percent of customers with income between 126 and 150 percent of poverty have an energy burden above 15 percent after receipt of LIHEAP. This is a key disadvantage of the Bill Discount Model.

**Table VII-3A  
Comparison of Assistance Models  
Pre-LIHEAP Energy Burden**

	Assistance Model															
	Model 1: Current CRP				Model 2: Targeted Energy Burden				Model 3A: Bill Discount To Reach PUC Target				Model 3B: Bill Discount To Match CRP Cost			
	Mean	Percentile			Mean	Percentile			Mean	Percentile			Mean	Percentile		
		25	50	75		25	50	75		25	50	75		25	50	75
<=25%	39%	26%	47%	47%	36%	26%	42%	42%	24%	13%	20%	28%	23%	14%	21%	29%
26-50%	15%	11%	14%	18%	15%	11%	14%	18%	11%	6%	9%	13%	13%	8%	12%	17%
51-75%	12%	11%	12%	13%	12%	11%	12%	13%	9%	6%	8%	11%	12%	8%	10%	14%
76-100%	11%	10%	11%	12%	11%	10%	11%	12%	9%	5%	7%	10%	12%	8%	11%	14%
101-125%	11%	11%	11%	12%	11%	11%	11%	12%	8%	5%	7%	9%	12%	9%	11%	14%
126-150%	11%	11%	11%	11%	11%	11%	11%	11%	8%	6%	7%	9%	13%	10%	12%	15%

**Table VII-3B  
Comparison of Assistance Models  
Post-LIHEAP Energy Burden**

	Assistance Model															
	Model 1: Current CRP				Model 2: Targeted Energy Burden				Model 3A: Bill Discount To Reach PUC Target				Model 3B: Bill Discount To Match CRP Cost			
	Mean	Percentile			Mean	Percentile			Mean	Percentile			Mean	Percentile		
		25	50	75		25	50	75		25	50	75		25	50	75
<=25%	11%	8%	12%	12%	8%	8%	8%	8%	5%	0%	0%	3%	3%	0%	0%	4%
26-50%	8%	8%	8%	8%	8%	8%	8%	8%	5%	0%	3%	5%	6%	3%	6%	9%
51-75%	9%	9%	9%	9%	9%	9%	9%	9%	6%	3%	5%	7%	9%	5%	7%	11%
76-100%	9%	9%	9%	9%	9%	9%	9%	9%	7%	4%	5%	8%	10%	6%	9%	12%
101-125%	10%	10%	10%	10%	10%	10%	10%	10%	7%	4%	6%	8%	11%	8%	10%	13%
126-150%	10%	10%	10%	10%	10%	10%	10%	10%	7%	5%	6%	8%	13%	9%	11%	15%

Table VII-4 compares the costs of the three models and the two versions of the Bill Discount Model. Note that the Current CRP costs assume that the new formula is used that adds 1/12 of the LIHEAP matrix benefit to the customer's payment each month, the Targeted Energy Burden Model takes the projected LIHEAP benefit into account in the formula, and the Model 3A: Bill Discount Model calculates the discount needed after the LIHEAP benefit is received. The table demonstrates that the Current CRP and Targeted Energy Burden Models are very close in cost in all of the projections. The Model 3A: Bill Discount Model designed to reach the PUC targeted energy burdens has much higher projected costs. The Model 3B: Bill Discount Model designed to match the CRP costs are lower than for the Current CRP Model when gas prices increases in the future are taken into account, because Bill Discount Model program participants share the price increase on the part of the gas that they are paying for. However, the cost of the Bill Discount Model does not decline when the customer's income increases as it does with the other models.

**Table VII-4**  
**Cost Comparison of Assistance Models**  
**Annual Subsidy Cost (\$ Millions)**

Year	Parameters			Assistance Model			
	Participation Growth	Gas Cost Increase	Income Increase	Model 1: Current CRP	Model 2: Targeted Energy Burden	Model 3A: Bill Discount	Model 3B: Bill Discount
						To Reach PUC Target	To Match CRP Cost
2009	--	--	--	\$97.83	\$98.70	\$123.03	\$97.58
2014	1%	Yes	No	\$112.90	\$113.65	\$135.53	\$107.50
2014	5%	Yes	No	\$137.10	\$138.01	\$164.58	\$130.54
2014	1%	Yes	Yes	\$100.27	\$101.49	\$135.53	\$107.50
2014	5%	Yes	Yes	\$121.77	\$123.25	\$164.58	\$130.54

The higher costs for the Model 3A: Bill Discount Model relates to the inefficiency of this program design in reaching a targeted energy burden level and the fact that the cost projections were made to bring 90 percent of the participants to the PUC targeted burden.<sup>11</sup> The Bill Discount Model is an inefficient way of reaching the targeted energy burden level, because to reach the level for 90 percent of the participants, many participants receive a greater discount than what is needed to reach the targeted burden.

### C. Recommendation

The examination of the advantages and disadvantages of the three models showed that each design has reasons to be considered in this review. While, the analysis of program costs and

<sup>11</sup> The discounts were set to reach the targeted energy burden level for 90 percent of participants in each poverty group because another utility in PA who implemented the Bill Discount model in PA reached an agreement with the PUC to set their discounts in this manner.

energy burdens provides a clear display of the inefficiency of the Bill Discount Model, the Bill Discount Model has other advantages that the others do not, resolving the important issue of the application of LIHEAP benefits. The Bill Discount Model, as shown in the analysis of Model 3B, can be designed to have the same costs as the other models. While some households will have energy burdens that exceed the PUC targeted levels, these households can be targeted for conservation services that bring their bills more in line with the PUC targets.

However, because the Current CRP Model and the Targeted Energy Burden Model are so close in projected costs and reach targeted energy burdens more efficiently than the Bill Discount Model, they should be compared on the substantive advantages and disadvantages of the approaches. The areas where the programs differ are included in the table below to make it clear which characteristics are under consideration. When the table is reduced in this way, it becomes apparent that the Current CRP model is preferred because it provides the customers with equal monthly payments and it is simpler for PGW to implement.

**Table VII-4  
Advantages and Disadvantages of Assistance Models**

	Assistance Model	
	Model 1: Current CRP	Model 2: Targeted Energy Burden
Equal Monthly Payments	Yes	No
Administrative Simplicity	Yes	No

This result points to a recommendation that PGW retain the Current CRP Model with the three revisions discussed earlier.

- The CRP payment formula is revised to include the LIHEAP matrix benefit (or some percentage of the benefit) as shown below for the eight percent group.

$$\text{Monthly CRP Payment} = \{[.08 * \text{Annual Household Income}] / 12\} + [\text{LIHEAP} / 12]$$

- The LIHEAP grant (or some fraction of the grant) is applied to the customer bill over a 12-month period.
- The Conservation Incentive Mechanism is added.

However, if it becomes apparent that the proposed means of dealing with the LIHEAP application issue under the Current CRP Model or Targeted Energy Burden Model are not acceptable to DPW, PGW could adopt the Bill Discount Model and work to provide conservation services to those households who are then faced with gas bills significantly above the PUC targets.

# Exhibit CC-2

# PHILADELPHIA GAS WORKS

## GAS SERVICE TARIFF



Issued by: Thomas Knudsen  
President and CEO

PHILADELPHIA GAS WORKS  
800 West Montgomery Avenue  
Philadelphia, PA 19122

---

Issued:

Effective:

PHILADELPHIA GAS WORKS

---

List of Changes Made by this Tariff Supplement

---

Issued:

Effective:

### 13. Universal Service And Energy Conservation Programs

#### 13.1 CUSTOMER RESPONSIBILITY PROGRAM.

13.1.A. Eligibility and Enrollment. A Customer is eligible for the Customer Responsibility Program if it is determined at the time of application (or recertification) that the Customer's annual household gross income is at or below 150% of the federal poverty level. The Customer shall provide all documentation necessary for PGW to determine the household income including but not limited to proof of household income, verification of family size, and character of service requested (Heating or Non-Heating). PGW has the right to verify a Customer's income by means including but not limited to verification through governmental agency and checking credit reports. Enrollment shall be ongoing and open year-round. Customers selecting Transportation Service will no longer qualify for the CRP Program and will be responsible for the tariffed rates under General Service - Rate GS.

13.1.B. Requirements. A Participant must abide by the following provisions. The failure of a Participant to comply with one of the following could result in dismissal from the CRP Program:

13.1.B.1. A Participant shall make regular monthly Customer Responsibility Payments. Failure to do so may lead to termination of service.

13.1.B.2. A Participant shall recertify annually, based upon the Participant's anniversary date of enrollment.

13.1.B.3. It is the Participant's responsibility to notify PGW when there is a change in the household's income or size. Adjustments to a Participant's bill will be made anytime there is a change in income or family size.

13.1.B.4. When eligible, a Participant must apply for and assign at least one energy assistance grant, such as a LIHEAP grant, to PGW annually.

13.1.B.5. Participants must take the necessary actions to participate in the Conservation Works Program (CWP) or other conservation programs and to abide by established consumption limits.

13.1.B.6. A Participant must allow access to their property for meter readings or for the installation of an AMR. Failure to allow access for four consecutive months will result in dismissal from CRP.

13.1.B.7. A Participant shall be responsible for seeking assistance and guidance from PGW, including budget counseling, in the event that the Participant is unable to meet the above responsibilities.

13.1.C. Applicable Rates. A Participant's CRP Payments will be based upon the Participant's family size and gross household income **and a LIHEAP related credit, subject to an annual adjustment based on the percentage of LIHEAP Cash Grants assigned by CRP customers in the prior year.** A Participant will pay a percentage of his/her gross household income depending on where that Participant falls within the Federal Poverty Guidelines (FPL). Rates are calculated under rate schedule GS, including riders.

13.1.C.1. For payment purposes CRP Participants will be defined as follows:

13.1.C.1.a. Group A: Participants whose gross household income has been verified as being from 0 – and up to and including 50% of FPL.

Philadelphia Gas Works

---

13.1.C.1.b. Group B: Participants whose gross household income has been verified as being greater than 50% and up to and including – 100% of FPL.

13.1.C.1.c. Group C: Participants whose gross household income has been verified as being greater than 100% – and up to and including 150% of FPL.

13.1.C.2. A CRP Participant will be responsible for paying the following rates for service or **\$25<sup>1</sup>** per month, whichever is greater.

13.1.C.2.a. Group A: 8% of gross income, **offset by a projected LIHEAP related credit based on the total LIHEAP Cash Grants projected to be received by CRP customers.**

13.1.C.2.b. Group B: 9% of gross income, **offset by a projected LIHEAP related credit based on the total LIHEAP Cash Grants projected to be received by CRP customers.**

13.1.C.2.c. Group C: 10% of gross income, **offset by a projected LIHEAP related credit based on the total LIHEAP Cash Grants projected to be received by CRP customers.**

13.1.D. Arrearages. Participants making regular monthly Customer Responsibility Payments will earn forgiveness on their pre-program Arrearages. The amount of and criteria applicable to Arrearage forgiveness shall be consistent with applicable Commission Orders. Participants choosing an NGS are responsible for all outstanding balances owed to PGW.

13.2. CONSERVATION WORKS PROGRAM (CWP). PGW shall establish fair, effective and efficient Gas usage reduction programs for low-income Customers. Such programs are intended to maintain affordable Gas Service and to reduce uncollectible accounts and the collection and termination expenses of PGW by enabling low income Customers to conserve energy and reduce their Gas usage.

---

<sup>1</sup> This corrects a typographical error. The Universal Service and Energy Conservation Plan 2008-2010 increased the CRP minimum payment to \$25. See Docket No. M-00072021.

Philadelphia Gas Works

---

13.2.A. Eligibility. This program is available to Residential Heating CRP Participants with high usage. PGW shall have access to the Residential Building to determine the most appropriate usage reduction measures. An eligible Customer who is a Tenant shall have an equal opportunity to secure program services if the Landlord has granted written permission to the Tenant for the installation of program measures, and the Landlord agrees, in writing, that rents will not be raised unless the increase is related to matters other than the installation of the usage reduction measures, and the Tenant is not evicted for a stated period of time at least 12 months after the installation of the program measures, if the Tenant complies with ongoing obligations and responsibilities owed the Landlord. A covered utility may seek Landlord contributions as long as the contributions do not prevent an eligible Customer from receiving program services. Contributions from Landlords shall be used by the utility as supplemental to its approved Conservation Works Program budget.

13.2.B. Conservation Works Program Funding. Funding for Conservation Works programs shall be at least .2% of jurisdictional revenues during each year of operation. In the event that PGW employs independent contractor(s) to manage such program(s), said contractor(s) may spend not more than 15% of program funding for administrative costs and PGW shall not charge any of its expenses for such program(s) to program administration. In all other circumstances, PGW shall spend not more than 15% of its Conservation Works Program funding for administrative costs.

13.2.C. Integration. PGW shall coordinate its Conservation Works reduction programs with existing resources in the community, and operate in conjunction with the relevant public or private programs so that Customers experiencing ability-to-pay problems are made aware of the usage reduction program and are referred to public, private, or utility programs that may enhance their ability to pay their utility bills.

13.2.D. Dwelling Repairs. Expenditures on program measures may include energy-related repairs to the dwelling necessary to permit measures that are needed to reduce usage effectively. The cost-effectiveness of such expenditures shall be measured in the same manner as all other expenditures under this program.

13.2.E. Conservation Incentive. Residential Heating CRP Participants are eligible for a conservation incentive on their bill as follows: (i) Participants who did not receive PGW weatherization services between the prior November to April but reduced their weather normalized gas usage by ten percent (10%) or more during the current November through April will receive a One Hundred Dollar (\$100) incentive credit on their bill; and (ii) Participants who received PGW weatherization services between the prior November through April and reduced their weather normalized gas usage by twenty percent (20%) or more during the current November through April will receive a One Hundred Dollar (\$100) incentive credit on their bill.

13.3. CARES. PGW's CARES is a program designed to assist Customers experiencing temporary hardships affecting their ability to pay his/her Gas bills. Through this program, PGW will assist Customers with referrals to appropriate social service agencies, engage in community outreach as well as consumer education.

**VERIFICATION**

I hereby state that: a) I am Vice President of Customer Affairs for Philadelphia Gas Works ("PGW"); and b) I am authorized to make this verification on behalf of PGW; and c) the facts set forth in the attached Petition and Testimony are true and correct to the best of my knowledge, information and belief and that I expect to be able to prove the same at a hearing held in this matter.

I understand that the statements herein are made subject to the penalties of 18 Pa. C.S. § 4904 (relating to unsworn falsification to authorities).

Date: 6/2/10

  
Cristina Coltro

RECEIVED  
2010 JUN -4 AM 11:18  
PA PGW  
SECRETARY'S BUREAU

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served a true copy of PGW's Corrected Petition to Modify its Universal Services and Energy Conservation Plans with Respect to the Customer Responsibility Program upon the participants listed below in accordance with the requirements of § 1.54 (relating to service by a participant).

**VIA EMAIL AND FIRST CLASS MAIL**

Christy M. Appleby, Esq.  
Tanya J. McCloskey, Esq.  
Office of Consumer Advocate  
5<sup>th</sup> Floor, Forum Place Bldg.  
555 Walnut Street  
Harrisburg, PA 17101-1921  
[cappleby@paoca.org](mailto:cappleby@paoca.org)  
[tmccloskey@paoca.org](mailto:tmccloskey@paoca.org)

Charis Mincavage, Esq.  
McNEES, WALLACE, NURICK  
100 Pine Street  
P.O. Box 1166  
Harrisburg, PA 17108-1166  
[cmincava@mwn.com](mailto:cmincava@mwn.com)

William R. Lloyd, Esq.  
Office of Small Business Advocate  
Commerce Building, Suite 1102  
300 North 2<sup>nd</sup> Street  
Harrisburg, PA 17101  
[willlloyd@state.pa.us](mailto:willlloyd@state.pa.us)

Richard A. Kanaskie, Esq.  
Adeolu A. Bakare, Esq.  
Office of Trial Staff  
PA Public Utility Commission  
Commonwealth Keystone Building  
400 North Street, 2nd Floor  
Harrisburg, PA 17120  
[rkanaskie@state.pa.us](mailto:rkanaskie@state.pa.us)  
[abakare@state.pa.us](mailto:abakare@state.pa.us)

Phillip Bertocci, Esq.  
Thu B. Tran, Esquire  
Community Legal Services  
1424 Chestnut Street  
Philadelphia, PA 19102  
[pbertocci@clsphila.org](mailto:pbertocci@clsphila.org)  
[ttran@clsphila.org](mailto:ttran@clsphila.org)

Date: June 4, 2010

  
Daniel Clearfield, Esq.

RECEIVED  
2010 JUN -4 AM 11:17  
PA PUC  
SECRETARY'S BUREAU