

BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY )  
COMMISSION )  
v. ) Docket R-2018-2647577  
Columbia Gas of Pennsylvania )  
)

DIRECT TESTIMONY OF  
ROGER D. COLTON

ON BEHALF OF THE  
OFFICE OF CONSUMER ADVOCATE

June 7, 2018

## Table of Contents

Part 1. Impact of Customer Charge on Low-Income.....	5
Part 2. Post Rate Case Review of CAP Enrollment Options.....	16
Part 3. Budget Billing.....	21
Part 4. Targeting High CAP Credit Customers for Weatherization.....	31
Part 5. Fundraising for Columbia Gas Hardship Fund.....	33
Colton Schedules.....	39
Appendix A: Colton Vitae	

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

2 A. My name is Roger Colton. My business address is 34 Warwick Road, Belmont, MA  
3 02478.

4  
5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT POSITION?**

6 A. I am a principal in the firm of Fisher Sheehan & Colton, Public Finance and General  
7 Economics of Belmont, Massachusetts. In that capacity, I provide technical assistance to  
8 a variety of federal and state agencies, consumer organizations and public utilities on rate  
9 and customer service issues involving telephone, water/sewer, natural gas and electric  
10 utilities.

11  
12 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

13 A. I am testifying on behalf of the Office of Consumer Advocate.

14  
15 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.**

16 A. I work primarily on low-income utility issues. This involves regulatory work on rate and  
17 customer service issues, as well as research into low-income usage, payment patterns,  
18 and affordability programs. At present, I am working on various projects in the states of  
19 Rhode Island, Maryland, Pennsylvania, Michigan, Wisconsin, Illinois and Iowa, as well  
20 as in the provinces of Ontario and British Columbia. My clients include state agencies  
21 (e.g., Pennsylvania Office of Consumer Advocate, Maryland Office of People's Counsel,  
22 Iowa Department of Human Rights), federal agencies (e.g., the U.S. Department of  
23 Health and Human Services), community-based organizations (e.g., Energy Outreach

1 Colorado, Natural Resources Defense Council, Advocacy Centre Tenants Ontario), and  
2 private utilities (e.g., Unifil Corporation d/b/a Fitchburg Gas and Electric Company,  
3 Entergy Services, Xcel Energy d/b/a Public Service of Colorado). In addition to state-  
4 specific and utility-specific work, I engage in national work throughout the United States.  
5 For example, in 2011, I worked with the U.S. Department of Health and Human Services  
6 (the federal LIHEAP office) to advance the review and utilization of the Home Energy  
7 Insecurity Scale as an outcomes measurement tool for the federal Low-Income Home  
8 Energy Assistance Program (“LIHEAP”). In 2007, I was part of a team that performed a  
9 multi-sponsor public/private national study of low-income energy assistance programs.  
10 At present, I have been retained by the National Coalition on Legislation for Affordable  
11 Water (NCLAWater) to write a comprehensive “water bill of rights” to be introduced in  
12 Congress. A brief description of my professional background is provided in Appendix A.  
13

14 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

15 A. After receiving my undergraduate degree in 1975 (Iowa State University), I obtained  
16 further training in both law and economics. I received my law degree in 1981 (University  
17 of Florida). I received my Master’s Degree (regulatory economics) from the MacGregor  
18 School in 1993.  
19

20 **Q. HAVE YOU EVER PUBLISHED ON PUBLIC UTILITY REGULATORY**  
21 **ISSUES?**

22 A. Yes. I have published three books and more than 80 articles in scholarly and trade  
23 journals, primarily on low-income utility and housing issues. I have published an equal

1 number of technical reports for various clients on energy, water, telecommunications and  
2 other associated low-income utility issues. A list of my publications is included in  
3 Appendix A.

4  
5 **Q. HAVE YOU EVER TESTIFIED BEFORE THIS OR OTHER UTILITY**  
6 **COMMISSIONS?**

7 A. Yes. I have testified before the Pennsylvania Public Utility Commission (“PUC” or  
8 “Commission”) on numerous occasions regarding utility issues affecting low-income  
9 customers and customer service. I have also testified in regulatory proceedings in more  
10 than 35 states and various Canadian provinces on a wide range of utility issues. A list of  
11 the proceedings in which I have testified is listed in Appendix A.

12  
13 **Q. PLEASE EXPLAIN THE PURPOSE OF YOUR DIRECT TESTIMONY.**

14 A. The purpose of my Direct Testimony is as follows.

- 15           ➤ First, I examine the impact of the overall rate increase request and the  
16 residential customer charge proposed by Columbia Gas of Pennsylvania  
17 (“Columbia Gas” or the “Company”) on low-income customers;
- 18           ➤ Second, I examine the need for a post-rate case review of the continuing  
19 affordability of the CAP options in which customers are currently enrolled;
- 20           ➤ Third, I examine the propriety of the Budget Billing policies, practices and  
21 procedures adopted and implemented by Columbia Gas;
- 22           ➤ Fourth, I examine the extent to which Columbia Gas has complied with the  
23 prior rate case settlement in which the Company agreed to target high CAP

1 credit CAP participants for weatherization, and whether that targeting should  
2 continue;

- 3 ➤ Finally, I examine Columbia Gas' fundraising efforts, and the proposal it has  
4 advanced in this proceeding, to raise funds for its Hardship Fund.  
5

6 **Q. PLEASE BRIEFLY SUMMARIZE THE RECOMMENDATIONS PRESENTED**  
7 **IN YOUR DIRECT TESTIMONY.**

8 A. The data and discussion throughout my Direct Testimony below supports the following  
9 recommendations:

- 10 ➤ The residential customer charge as recommended by OCA witness Jerry  
11 Mierzwa should be adopted.  
12  
13 ➤ Within one complete bill cycle after receiving a final order in this proceeding,  
14 Columbia Gas should reassess the continuing affordability of the CAP  
15 payment option under which CAP participants are currently taking service.  
16 This review should occur irrespective of whether a CAP participant's  
17 reverification period falls within this time period. To the extent that this  
18 review finds that the changes in rates attributable to this proceeding would  
19 result in a more affordable CAP payment alternative, the CAP participant  
20 should, without a customer needing to make an affirmative request or being  
21 required to engage in the income reverification process, be switched to the  
22 most affordable payment alternative.  
23  
24 ➤ Columbia Gas should be directed to take the following action-steps modify its  
25 Budget Billing tariff and practices and to increase participation in its levelized  
26 Budget Billing program before its next base rate case:  
27  
28 ○ First, Columbia Gas should be directed to engage in specific targeted  
29 Budget Billing outreach to accounts, both low-income and residential  
30 generally, that experience short-term arrears during the Company's  
31 high cost months. A review of Company billing and payment records  
32 should be able to reveal seasonal nonpayment patterns.  
33

- 1                   ○ Second, Columbia Gas should be directed to offer its residential  
2 customers levelized Budget Billing plans that are fewer than 12-  
3 months at the customer’s option. Budget Billing plans of 10-months  
4 and 11-months should be available.  
5
- 6                   ○ Third, Columbia Gas should be directed to modify its Budget Billing  
7 enrollment policies. Rather than limiting the commencement of  
8 Budget Billing to a 12-month period beginning only in May, Columbia  
9 Gas should be directed to make Budget Billing enrollment available on  
10 a “year-round rolling enrollment basis” consistent with the PUC’s  
11 Budget Billing regulation.  
12
- 13                  ○ Fourth, Columbia Gas should be directed to implement a closer  
14 connection between its deferred payment arrangements and its  
15 enrollment of customers into levelized Budget Billing. In addition to  
16 more closely tying the payment arrangement to an enrollment in  
17 Budget Billing, I recommend that Columbia Gas adopt a policy that  
18 upon the completion of a payment plan, the customer would remain on  
19 Budget Billing unless the customer explicitly requests to be removed.  
20
- 21                  ➤ The settlement agreement reached in the 2016 Columbia Gas rate case directing  
22 weatherization toward high CAP credit customers be continued as one outcome of  
23 this rate proceeding.  
24
- 25                  ➤ The Company’s proposal to make permanent its contributions of the residential  
26 portion of pipeline credits and refunds to its Hardship Fund.  
27
- 28                  ➤ The Company’s proposal to decline to impose a limitation on the eligibility to  
29 receive a Hardship Fund grant to households with income between 151% and  
30 200% of Poverty should be approved.  
31
- 32                  ➤ Columbia Gas, as it has proclaimed its intent to do, should continue to actively  
33 explore ways in which it might expand the support of its Hardship Fund through  
34 voluntary donations and regularly report both the nature and results of those  
35 efforts to its universal service advisory group.  
36

37                   **Part 1. Impact of Customer Charge on Low-Income Customers.**

38 **Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR**

39 **TESTIMONY.**

1 A. The Company proposes an overall increase in rates and, as part of this request, to increase  
2 its residential customer charge from \$16.75 per month to \$18.25 per month. (Company  
3 Statement 12, page 22). In this section of my testimony, I demonstrate that most Columbia  
4 Gas CAP customers are not protected against the proposed rate increase by virtue of their  
5 participation in CAP as Columbia Gas asserts. (CAUSE-PA-1-001) (“The majority of  
6 CAP customers will experience no impact resulting from the proposed increase, as their  
7 monthly CAP payment is based on factors unrelated to rates or monthly bills.”)  
8 Moreover, even to the extent that some CAP participants are protected, the majority of  
9 CGPA’s low-income customers are not CAP participants. I also assess the impact that  
10 the Company’s proposed increase to the residential fixed monthly customer charge will  
11 have on low-income customers.

12  
13 **Q. PLEASE EXPLAIN THE BASIS FOR YOUR CONCLUSION THAT CAP**  
14 **CUSTOMERS ARE NOT A PRIORI PROTECTED FROM THE RATE**  
15 **INCREASES PROPOSED IN THIS PROCEEDING.**

16 A. While CGPA has a percentage of income component in its CAP program, it also has  
17 other CAP payment plan options that are not tied to a percentage of income. Columbia  
18 Gas has four primary payment plan alternatives which it offers to CAP participants: (1) a  
19 percentage of income alternative; (2) an alternative where a customer pays the average of  
20 those payments made in the immediately preceding twelve months; (3) a percentage of  
21 bill alternative (where the CAP bill is set equal to 50% of the bill at standard residential  
22 rates); and (4) a minimum payment alternative.<sup>1</sup> Under the percentage of income plan

---

<sup>1</sup> In addition, Columbia Gas offers a special “senior” CAP payment plan, but fewer than a dozen people avail themselves of this option and it is set aside for purposes of this discussion.

1 and minimum payments, CAP participants would be insulated from an increase in  
2 unaffordability resulting from the Company's proposed rate increases and rate design  
3 changes. Under the other CAP program components, however, customers are not  
4 insulated from increasing rates.

5  
6 Indeed, according to the Company, for the months October 2016 through March 2018, on  
7 average, only 15% of CGPA's CAP participants are enrolled in the CGPA percentage of  
8 income plan (PIP). At the same time, 34 % are enrolled in the payment plan where  
9 customers are billed the average of their last 12 months of payment, while 44% are  
10 enrolled in the Company's percentage of bill program (50% of an equal monthly payment  
11 plan). Only 8% of CGPA's CAP customers are billed at the minimum bill. (OCA-III-  
12 016). More than three-fourths (34% + 44% = 78%) of CGPA's CAP customers, in other  
13 words, will be adversely affected by the Company's proposed increased rates and change  
14 in rate design.

15  
16 **Q. PLEASE EXPLAIN THE BASIS FOR YOUR STATEMENT THAT EVEN TO**  
17 **THE EXTENT THAT SOME CAP CUSTOMERS MAY BE PROTECTED, MOST**  
18 **LOW-INCOME CUSTOMERS DO NOT PARTICIPATE IN CAP.**

19 A. According to the Company's most recent data on Universal Service Programs and  
20 Collections Performance, submitted to the Pennsylvania PUC's Bureau of Consumer  
21 Services ("BCS"), in 2017, CGPA had 101,375 estimated low-income customers. (OCA-  
22 III-001, Attachment C). Of that population, CGPA reported an average monthly  
23 "confirmed" low-income population of 67,159 customers. (OCA-III-001, Attachment C).

1 “Confirmed low-income” is a term-of-art used for purposes of reporting to the PUC’s  
 2 Bureau of Consumer Services (BCS). As can be seen, the Company has identified only  
 3 two-thirds (67%) of its estimated low-income population base ( $67,159 / 101,375 =$   
 4  $0.06704$ )).

5  
 6 Moreover, with an average monthly CAP participation of 22,000 in 2017(OCA-III-1,  
 7 Attachment C),<sup>2</sup> less than one-third ( $22,005 / 67,159 = 0.3238$ ) of confirmed low-income  
 8 customers, and only one-in-five estimated low-income customers ( $22,005 / 101,375 =$   
 9  $0.2171$ ), have enrolled in CGPA’s CAP. In other words, a relatively small proportion of  
 10 the confirmed low-income population base receives the affordability protections of CAP.

11  
 12 From 2010 to 2018, an increasing number of confirmed low-income customers were in  
 13 arrears. During that time, the number of confirmed low-income customers in arrears has  
 14 increased by more than 66% ( $[12,294 - 7,385] = 4,909 / 7,385 = 0.6647$ ).<sup>3</sup>

Table 1. Columbia Gas Confirmed Low-Income Customers in Arrears							
	2010	2011	2012	2013	2014	2015	2016
Low-Income	7,385	9,153	11,894	13,355	14,313	13,975	12,294

15  
 16 Not only are more low-income customers in debt, but they are also deeper in debt. After  
 17 seeing the average arrearage of a confirmed low-income customer dip to \$360 and \$443  
 18 in 2012 and 2013, Columbia Gas has more recently seen the average arrearage for its

<sup>2</sup> The average monthly participation is defined to be the average number of CAP bills issued each month.

<sup>3</sup> Bureau of Consumer Services, Annual Report on Universal Service Programs and Collections Performance (various years).

1 confirmed low-income customers escalate back to the levels that exceed those  
 2 experienced in the heart of the Great Recession.<sup>4</sup>

Table 2. Average Arrears of Confirmed Low-Income Customer (Columbia Gas)						
2010	2011	2012	2013	2014	2015	2016
\$504	\$508	\$360	\$443	\$553	\$620	\$530

3  
 4 Consider, in addition, the number of confirmed low-income customers (excluding CAP  
 5 participants) who have had their service disconnected. Just from 2016 to 2017, Columbia  
 6 Gas increased the number of confirmed low-income disconnections by 4.6% (from 5,367  
 7 to 5,612). (CAUSE-PA-1-016).

8

9 **Q. WHAT DO YOU CONCLUDE?**

10 A. The Company errs when it asserts that most CAP participants will not be adversely  
 11 affected by the proposed rate increase. (CAUSE-PA-1-001). More than three-quarters of  
 12 CAP participants participate in a CAP option under which payments will increase as a  
 13 result of the Company’s rate case. Even aside from this, however, most of the confirmed  
 14 low-income customers of Columbia Gas do not participate in CAP. (OCA-III-01)  
 15 (comparing total number of CAP participants to total number of confirmed low-income  
 16 customers for 2015, 2016 and 2017).

17

18 **Q. THE ADVERSE IMPACTS THAT YOU DISCUSS ARE ATTRIBUTABLE TO**  
 19 **THE RATE CASE GENERALLY AND NOT TO ANY INCREASE IN THE**

---

<sup>4</sup> BCS Annual Report on Universal Service Programs and Collections Performance.

1           **CUSTOMER CHARGE IN PARTICULAR. ARE THERE SPECIFIC ADVERSE**  
2           **IMPACTS ATTRIBUTABLE TO THE INCREASED CUSTOMER CHARGE?**

3    A.    The adverse impacts I identify above cannot be attributed exclusively to any increase in  
4           rates arising from the Company's proposed rates in general in this proceeding. One  
5           impact of the Company's proposed increase in the fixed monthly customer charge is that  
6           a higher percentage of total rates will be unavoidable. As a result, the adverse impacts  
7           flow not merely from the rate increase in general, but also from the increase in the fixed  
8           monthly customer charge in particular.

9  
10   **Q.    DOES THE DISPROPORTIONATE IMPACT OF THE INCREASED**  
11           **CUSTOMER CHARGE ON LOW-INCOME CUSTOMERS HAVE A**  
12           **CORRESPONDING FINANCIAL IMPACT ON NON-LOW-INCOME**  
13           **CUSTOMERS?**

14   A.    Yes. The proposed increase in the Company's fixed monthly customer charge, imposes  
15           disproportionately high rate increases on low-use customers, whether low-income or non-  
16           low-income. Low-use customers in the CGPA service territory, however, tend also to be  
17           disproportionately low-income customers. As a result, through its increased customer  
18           charge, the Company proposes to increase rates the most for those who  
19           disproportionately can least afford to pay those rate increases. Not only are  
20           proportionately more confirmed low-income customers in arrears, but those who are in  
21           arrears, are *deeper* in arrears. CGPA proposes to respond to these circumstances by  
22           *raising* rates the most, in an unavoidable manner, to these customers. The resulting

1 increase in bad debt, working capital, and credit and collection costs will be borne by all  
 2 ratepayers.

3  
 4 **Q. PLEASE EXPLAIN THE BASIS FOR YOUR CONCLUSION THAT LOW-**  
 5 **INCOME CUSTOMERS ARE DISPROPORTIONATELY LOW-USE**  
 6 **CUSTOMERS.**

7 A. While low-income households tend to have less efficient energy consumption than do  
 8 residential customers generally on a per square foot of housing basis, because they live in  
 9 much smaller housing units, they disproportionately tend to have lower overall natural  
 10 gas consumption. The most recent data published by the U.S. Department of Energy  
 11 (DOE) in its 2009 Residential Energy Consumption Survey (RECS) shows the following  
 12 for total energy usage in the Northeast (RECS, Table CE1.2).

Table 4. Home Energy Use by Income (Residential Energy Consumption Survey)		
2009 Annual Household Income	Per Square Foot (thousand Btu)	Per Household (million Btu)
Less than \$20,000	65.0	83.3
\$20,000 to \$39,999	56.3	98.2
\$40,000 to \$59,000	49.8	98.9
\$60,000 to \$79,999	48.4	99.9
\$80,000 to \$99,999	48.4	119.2
\$100,000 to \$119,999	42.4	131.1
\$120,000 or More	45.9	154.8

13 The same results appertain when the examination is limited exclusively to natural gas.  
 14 According to the DOE’s RECS (Table CE2.2), in the Northeast, the region of which  
 15 Pennsylvania is a part, as incomes increase, natural gas usage increases correspondingly.  
 16

Table 5. Natural Gas Usage by Income

1  
2  
3  
4  
5  
6

(Residential Energy Consumption Survey)		
2009 Annual Household Income	mmBtu	MCF
Less than \$20,000	58.7	57
\$20,000 to \$39,999	76.5	75
\$40,000 to \$59,000	69.7	68
\$60,000 to \$79,999	70.7	69
\$80,000 to \$99,999	81.2	79
\$100,000 to \$119,999	92.7	90
\$120,000 or More	114.4	112

It does not matter which end-use is being examined. As income increases, so, too, does energy usage increase. The average household data by-end-use, in million BTU, for Northeast households using the end-use (RECS, Table CE3.2) is presented immediately below.

Table 6. Natural Gas Consumption by End-Use and Income (mmBtu) (Northeast) (Residential Energy Consumption Survey)			
2009 Annual Household Income	Total	Space Heating	Water Heating
Less than \$20,000	83.3	51.2	12.5
\$20,000 to \$39,999	98.2	57.2	16.4
\$40,000 to \$59,000	98.9	55.1	16.1
\$60,000 to \$79,999	99.9	55.1	16.5
\$80,000 to \$99,999	119.2	64.0	19.0
\$100,000 to \$119,999	131.1	65.9	22.6
\$120,000 or More	154.8	78.7	26.6

7  
8  
9  
10  
11  
12  
13

**Q. DOES THE DEPARTMENT OF ENERGY PROVIDE DATA THAT HELPS TO EXPLAIN WHY LOW-INCOME CUSTOMERS TEND ALSO TO BE LOW USE CUSTOMERS?**

A. Yes. The RECS data clearly shows that natural gas consumption increases as the size of the housing unit increases. The related housing characteristics support this conclusion. Residents of single family housing have greater consumption than residents of multi-

1 family housing do. Residents of large multi-family dwellings (5+ units) have lower  
2 natural gas consumption than residents of apartments in 2 – 4 unit buildings. Renters  
3 have lower consumption than do homeowners. And renters in multi-family dwellings  
4 have lower consumption than renters in single-family homes.

5  
6 **Q. DO THE UNDERLYING DEMOGRAPHICS IN PENNSYLVANIA PROVIDE**  
7 **SUPPORT FOR THE APPLICABILITY OF THESE DEPARTMENT OF**  
8 **ENERGY CONCLUSIONS TO CGPA?**

9 A. Yes. Two lines of inquiry support this conclusion. First, Schedule RDC-1 presents the  
10 average income in Pennsylvania by the number of rooms in a housing structure, as well  
11 as the average income in Pennsylvania by the number of bedrooms in a housing structure.  
12 Schedule RDC-1 clearly shows that as housing units get larger in Pennsylvania, average  
13 income increases.

14  
15 There are two standard ways to compare the size of a housing unit when square footage is  
16 not available. One way is to look at the number of rooms; the other way is to look at the  
17 number of bedrooms. Both of these approaches document that lower-income households  
18 live in smaller sized housing units. Schedule RDC-1 shows that:

- 19 ➤ While the average income of a Pennsylvania household living in a unit with one  
20 room is \$40,399, the average income of a household living in an eight-room unit  
21 is \$95,524. By the time a house gets to have nine rooms, the average income is  
22 \$119,211.<sup>5</sup>  
23  
24 ➤ The same relationship holds true for housing size measured by the number of  
25 bedrooms. While the average income for a Pennsylvania household living in a

---

<sup>5</sup> Housing units limited to those using natural service with housing occupants billed directly by Columbia Gas.

1 unit with no bedrooms (known as an “efficiency unit”) is \$41,716, the average  
2 income of a household living in a housing unit with three bedrooms is \$69,626;  
3 the average income of a household living in a unit with five bedrooms is  
4 \$136,317.  
5

6 In both instances (number of rooms and number of bedrooms), the average income  
7 increases as the size of the housing unit increases.  
8

9 In addition to this data, Schedule RDC-2 presents a distribution of Pennsylvania  
10 households by income and by the size of the housing unit in which they live, measuring  
11 housing unit size by the number of bedrooms in the unit.<sup>6</sup> The data shows that a higher  
12 proportion of lower-income households live in smaller housing units and a higher  
13 proportion of higher income households live in larger housing units. For example, while  
14 roughly 13% to 17% of households with income less than \$20,000 live in units with one  
15 bedroom or less, less than two percent (2%) of households with incomes greater than  
16 \$150,000 live in units that small. Conversely, while roughly 46% to 52% of households  
17 with incomes of \$150,000 or more live in units with four or more bedrooms, only 11% to  
18 12% of households with incomes less than \$30,000 do. Consistently, the percentage of  
19 households in each of the higher income ranges declines as the number of bedroom  
20 declines. In Pennsylvania, higher income households clearly tend disproportionately to  
21 live in larger homes than do lower income households.  
22

23 **Q. DO YOU HAVE ANY COMMENT ABOUT THE TOTALITY OF THE**  
24 **INFORMATION YOU PRESENT ABOVE?**

---

<sup>6</sup> A similar measurement could be made using the total number of rooms rather than the number of bedrooms.

1 A. Yes. The information presented by the RECS is important not only for each piece of data  
2 standing alone, but is important because of how it fits together into a reasonably  
3 explainable pattern. Total per-household residential natural gas consumption is driven  
4 largely by the size of the housing unit. Smaller units have lower natural gas  
5 consumption. Renters tend to live in smaller housing units, and we can see a  
6 correspondingly lower natural gas consumption by renters. Households living in single-  
7 family detached homes have larger housing units, and we can see a correspondingly  
8 higher natural gas consumption. Households living in multi-family units have smaller  
9 units and lower consumption. Lower incomes are associated with renter status, as well as  
10 multi-family living. The conclusion that low-income households are also low use  
11 households is not only empirically supported, but consistently explained.

12  
13 **Q. HOW IS THIS DATA ON THE RELATIONSHIP BETWEEN INCOME AND**  
14 **USAGE RELEVANT TO THE COMPANY'S PROPOSED CUSTOMER**  
15 **CHARGE?**

16 A. The Company has proposed a significant fixed monthly customer charge in this base rate  
17 case. As is documented above, the substantial increase in the fixed monthly customer  
18 charge will disproportionately adversely affect low-use customers. Data supports the  
19 conclusion that those low-use customers will also disproportionately be low-income  
20 customers. As a result, the customer population having the greatest payment troubles  
21 with which to begin will receive the largest rate increases. This impact not only  
22 adversely affects the low-use, low-income customers, but also imposes greater costs that  
23 will need to be passed through rates to all ratepayers.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

**Part 2. Post-Rate Case Review of CAP Enrollment Options.**

**Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.**

A. In this section of my testimony, I examine whether there is reason for concern about the impact that any rate change approved in this proceeding would have on the affordability of natural gas to customers taking service under various payment options provided through the Columbia Gas CAP. My concern is based on the fact that rate changes arising from this proceeding may well affect which CAP option is the most affordable rate option available to a CAP participant.

**Q. ARE THERE PARTICULAR CAP OPTIONS THAT GIVE RISE FOR CONCERN?**

A. Yes. Columbia Gas offers one primary CAP option that may well be affected by an increase in rates resulting from this proceeding, the the percentage of bill option. Under the percentage of bill CAP option, CAP participants pay a flat rate of 50% of their budget billing amount (adjusted annually). A customer whose bill at 50% of budget billing would be less than a percentage of income payment would be enrolled in the percentage of bill option.<sup>7</sup> A customer whose percentage of income payment would be less than 50% of the budget bill would be enrolled in the percentage of income program component. It is the responsibility of Columbia Gas to ensure that customers are enrolled in the most affordable payment option.

---

<sup>7</sup> Under the percentage of income option, CAP participants pay either 7% of income (customers with income at 0 – 110% of Poverty Level) or 9% of income (customers with income at 111% - 150% of Poverty Level).

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23

**Q. WHEN DOES COLUMBIA GAS NORMALLY REVIEW WHAT CAP PAYMENT OPTION A LOW-INCOME CUSTOMER SHOULD USE?**

A. According to the Company, “Columbia manually assesses a CAP payment plan at intake, at every reverification, when a customer moves and the budget is lower than the payment plan option and any time a CAP customer calls in requesting a lower plan or expressing concern [over] an inability to pay. For those customers on percent of budget option, the payment plan is automatically reviewed and adjusted annually when budgets are reviewed and promoted.” (CAUSE-PA-2-013).

**Q. PLEASE EXPLAIN HOW A CHANGE IN RATES RESULTING FROM THIS PROCEEDING MAY AFFECT WHICH CAP OPTION WOULD DELIVER THE MOST AFFORDABLE SERVICE TO A COLUMBIA GAS CUSTOMER.**

A. If a customer is taking service under the percentage of bill option, an increase in rates may well result in a bill increase sufficient to make the percentage of income option the more affordable alternative. As is evident from the Company’s explanation of the circumstances under which it will review the propriety of the particular payment option used by a CAP participant, changes in rates attributable to a rate case have not historically been included as one of those circumstances triggering such a review.

**Q. PLEASE EXPLAIN WHY YOU HAVE REASON TO BELIEVE THAT A RATE INCREASE IN THIS PROCEEDING MAY HAVE AN IMPACT ON WHAT CAP PAYMENT OPTION IS MOST APPROPRIATE FOR A CAP PARTICIPANT.**

1 A. Columbia Gas provided a distribution of natural gas bills as a percentage of income  
2 disaggregated by the payment plan option under which CAP participants were taking  
3 service. Importantly, this distribution sets forth the percentage of income burden of bills  
4 *including* CAP-Plus and arrearage forgiveness copayment amounts. To that extent, in  
5 other words, the distribution over-states the burdens of CAP participants when viewed in  
6 light of the CAP bill affordability thresholds of 7% or 9% of income (as explained  
7 above). I have excerpted the distribution of natural gas burdens for the percentage of  
8 income and percentage of bill CAP participants for 2017 and presented that data in  
9 Schedule RDC-3. According to this Columbia Gas data, there were 12,563 participants  
10 in the percentage of bill CAP program component (1,012 + 5,805 + 5,746). (Just for  
11 comparative purposes, I note that there were 4,547 participants in the percentage of  
12 income program component (2,171 + 2,155 + 221), 17,110 participants in the two  
13 program components combined).

14  
15 Looking at the percentage of bill population, which is by far the bigger of the two  
16 program components, it is possible to gain insights into the number of CAP participants  
17 who would possibly be adversely affected by an increase in rates resulting from this  
18 proceeding. I focus my attention on customers in the lower two of the three Poverty  
19 Level tiers for which Columbia Gas provided data (<50%, 50-100%). Both of those  
20 Poverty Level tiers fall within Columbia Gas' lowest percentage of income tier (0-110%  
21 Poverty). The percentage of income burden deemed to be affordable by the  
22 Commission's CAP Policy Statement and the Columbia Gas program for customers in  
23 that tier is 7% of income.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21

My concern lies with the Columbia Gas percentage of bill customers with bill burdens of between five percent (5%) and nine percent (9%). Of the 6,817 total percentage of bill customers with income at or below 100% of Poverty, 2,817 (41%) have bill burdens of between 5% and 9% of income. Indeed, 2,208 of these customers have bill burdens of between 5% and 8% of income.<sup>8</sup> These burdens are of particular concern because, as I mention above, these burdens include CAP-Plus and arrearage copayment amounts. For these percentage of bill customers, the bill burdens at existing rates are very close to being equal to or exceeding the percentage of income burden which would make the percentage of income option the more affordable CAP payment option. Even a moderate rate hike resulting from these proceedings could increase bills to the point where for this substantial minority of CAP participants, they would be better off by taking service under the percentage of income CAP alternative.

In addition, as can be derived from Schedule RDC-3, there are 456 customers with income at or below 100% of Poverty (nearly 7% of the percentage of bill customers with incomes at that level) that take service under the percentage of bill option even while having total burdens (again, including both CAP-Plus and arrearage copayments) of 8% of income or more. Presumably, the fact that these customers have burdens above the affordable 7% of income is a result of the CAP-Plus and arrearage copayment responsibilities. These customers, also, would have bills that, if increased as a result of

---

<sup>8</sup> I examine somewhat above 7% (8% - 9%) because the data presented by Columbia Gas includes CAP-Plus and arrearage copayment dollar amounts in the payments it reports.

1 this rate proceeding, could easily be more affordable if they were charged under the  
2 percentage of income CAP option.

3  
4 **Q. HAS COLUMBIA GAS CONSIDERED THESE IMPACTS OF THIS RATE**  
5 **PROCEEDING ON THE EXTENT TO WHICH THE VARIOUS CAP PAYMENT**  
6 **ALTERNATIVES REMAIN APPROPRIATE?**

7 A. No. When specifically asked to identify the financial impact on CAP customers by  
8 payment plan type, Columbia Gas asserted that “the majority of CAP customers will  
9 experience no impact resulting from the proposed increase [in rates], as their monthly  
10 CAP payment is based on factors unrelated to rates or monthly bills.” (CAUSE-PA-1-  
11 001; see also, CAUSE-PA-1-002).

12  
13 **Q. DO YOU HAVE ADDITIONAL CONCERNS ABOUT THE BILL**  
14 **AFFORDABILITY IMPACTS OF INCREASED RATES RESULTING FROM**  
15 **THIS PROCEEDING OUTSIDE OF CAP PARTICIPANTS?**

16 A. Yes. Confirmed low-income customers in arrears that are subject to deferred payment  
17 agreements (“DPAs”) are likely to be adversely affected by this rate proceeding. Under a  
18 DPA, a confirmed low-income customer is obligated not only to make an installment  
19 payment toward his or her unpaid arrearage balance each month, but is also required to  
20 pay his or her bill for current service each month. Since 2015, a small, and declining  
21 number, and percent, of low-income customers successfully complete their DPAs.  
22 (OCA-3-001). As bills for current service increase, it will become even more difficult for  
23 these confirmed low-income customers to successfully complete their DPAs.

Year	No. of DPAs	No. of Successful DPAs	Pct of DPAs Successful
2015	19,922	6,280	31.5%
2016	16,751	5,326	31.8%
2017	15,339	4,570	29.8%

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20

The problem is exacerbated due to Columbia Gas’ policy and procedures, discussed in more detail in Part 3 below, to not allow customers with arrearages to enter into a Budget Billing plan.

**Q. WHAT DO YOU RECOMMEND?**

A. I recommend that within one complete bill cycle after receiving a final order in this proceeding, Columbia Gas reassess the continuing affordability of the CAP payment option under which CAP participants are currently taking service. This review should occur irrespective of whether a CAP participant’s reverification period falls within this time period. To the extent that this review finds that the changes in rates attributable to this proceeding would result in a more affordable CAP payment alternative, the CAP participant should, without a customer needing to make an affirmative request or being required to engage in the income reverification process, be switched to the most affordable payment alternative. The costs of such reviews and contacts should be recovered as a universal service cost to the extent that the costs are incremental in nature.

**Part 3. Budget Billing.**

**Q. PLEASE EXPLAIN THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY.**

1 A. In this section of my testimony, I review the procedures and practices of Columbia Gas in  
2 enrolling residential customers, including confirmed low-income customers, in levelized  
3 Budget Billing plans. I conclude that the Columbia Gas tariff and practices regarding the  
4 offer of Budget Billing does not comport with the Pennsylvania PUC's regulations  
5 regarding the offer of Budget Billing.

6

7 **Q. PLEASE DESCRIBE THE PURPOSE OF OFFERING BUDGET BILLING**  
8 **PLANS.**

9 A. Budget Billing plans provide an opportunity for residential customers to levelize their  
10 monthly utility bills over the course of a year. In essence, a levelized Budget Billing plan  
11 allows customers to take the peaks and valleys out of their monthly utility billing. With a  
12 natural gas utility such as Columbia Gas, the higher costs of winter heating can be time-  
13 shifted to lower cost months.

14

15 Three advantages arise from Budget Billing. First, customers avoid the possibility that,  
16 while their bills would be affordable on an annual basis, specific months with high bills  
17 would exceed available monthly income and would thus be unaffordable in that month.

18 Once the customer gets behind, he or she may have difficulties in catching up. Second, a  
19 Budget Billing plan helps a customer to minimize his or her total bills. If a customer  
20 misses payments in a high cost month, future month bills would include not only the  
21 current bill for service and unpaid prior balance, but also would include all late payment  
22 charges on the unpaid balance. Finally, Budget Billing allows customers to plan their  
23 monthly utility bill payments relative to their personal budget. The ability of customers

1 to pay their monthly bill would not be contingent on the vagaries of severe weather that  
2 might unexpectedly drive a seasonal bill out of financial reach.

3  
4 **Q. IS BUDGET BILLING A UNIVERSAL SERVICE PROGRAM?**

5 A. While Budget Billing offers particular advantages to low-income customers given the  
6 limited resources low-income customers have available to pay bills, it is not exclusively a  
7 program directed toward low-income customers. The payment problems of low-income  
8 customers tend to be associated with a chronic mismatch of expenses and the resources  
9 available to pay those expenses. While, overall, Budget Billing is not limited to income  
10 constrained households, Budget Billing is frequently directed toward customers who have  
11 a sufficiently marginal ability to pay that their ability to pay is compromised by seasonal  
12 variations in the size of bills.<sup>9</sup> Budget Billing, in other words, would be advantageous to  
13 low-income customers. It would also be advantageous to the near-poor as well.

14  
15 In addition to the advantages of Budget Billing from the perspective of the customer,  
16 Budget Billing offers advantages to the utility as well. Budget Billing would help  
17 Columbia Gas stabilize its receipt of revenue over the course of the year, thus  
18 ameliorating any need on the part of the Company to move more of its billing into fixed  
19 monthly charges to accomplish that same end.

20  
21 **Q. HOW MANY CUSTOMERS DOES COLUMBIA GAS MAINTAIN ON**  
22 **LEVELIZED BUDGET BILLING?**

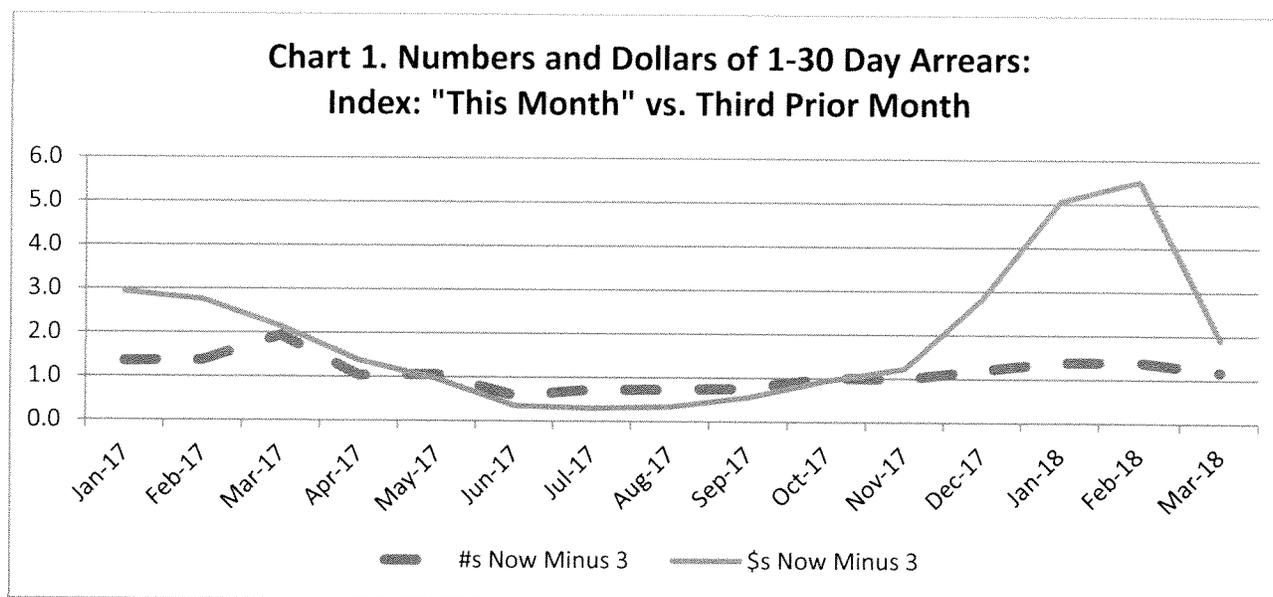
---

<sup>9</sup> In addition, seasonal workers are often laid off or on reduced hours just when their natural gas bills tend to begin to increase to reflect higher cold weather consumption.

1 A. According to the Company, Columbia Gas had an average of 99,179 overall residential  
2 customers on levelized Budget Billing in 2017. (OCA-III-20). With a total residential  
3 customer population of 393,410 (OCA-III-001), the Company's residential Budget  
4 Billing penetration was 25% ( $99,179 / 393,410 = 0.252$ ).

5  
6 **Q. DO YOU HAVE REASON TO BELIEVE THAT COLUMBIA GAS CUSTOMERS**  
7 **WOULD BENEFIT FROM BUDGET BILLING?**

8 A. Yes. I have examined the question of whether the Company's customers experience  
9 changes in arrearages during the high cost months. In the Chart below, I present a  
10 comparison of accounts in arrears for residential customers as a whole to dollars in  
11 arrears for those customers. I limit my analysis to arrears that are from 1 to 30 days past-  
12 due. These short-term arrearages will indicate changes in short-term payment patterns.  
13 If a high cost month is associated with increased nonpayment, which nonpayment would  
14 not exist in the absence of the higher costs, it will be seen in the short-term arrearages. In  
15 this Chart, I index the number of accounts in arrears to the number of accounts in arrears  
16 from the third prior month; I make the same calculation for the dollars of arrears. For  
17 example, if the number of February accounts in arrears is greater than the number of  
18 October accounts in arrears, the index will be greater than 1.0. If the dollars of August  
19 arrears are higher than the dollars of May arrears, the index will be greater than 1.0. I  
20 prepare this index so that I can track variations that can be attributed to seasonal changes  
21 in bills.



1  
2 The Chart shows the advantage that Columbia Gas would gain from increasing levelized  
3 Budget Billing to its residential customers. The index of accounts in arrears (i.e., the  
4 dashed line) remains relatively constant over the course of the year. The number of  
5 accounts in arrears in any particular month, in other words, does not substantively  
6 increase over the number of accounts in arrears in prior months. In contrast, the dollars  
7 of arrears (i.e., the solid line), show a distinctly different pattern. The peaks in dollars of  
8 arrears (i.e., when the balances are higher than in prior months) clearly occur in the high  
9 cost winter heating months. To the extent that Columbia Gas could levelize these  
10 seasonal bills through Budget Billing, the Company could eliminate (or at least mitigate)  
11 those peaks.

12  
13 One customer population, in particular, that might benefit from Budget Billing involves  
14 customers who are retiring arrears through deferred payment arrangements (“DPAs”). At  
15 present, however, there is a significant mismatch between the numbers of customers on  
16 Budget Billing and the numbers of customers on DPAs. For the 12-months ending

1 December 2017, for example, Columbia Gas had a maximum monthly number of DPAs  
2 of 19,631 (May 2017) and a minimum number of 10,614 (OCA-III-001), a nearly 85%  
3 difference. In contrast, for those same 12-months (ending December 2017), Columbia  
4 Gas had a maximum monthly number of Budget Billing participants of 101,453 (March  
5 2017) and a minimum number of 96,688 (November 2017) (OCA-III-20), only a five  
6 percent difference. There appears to be, in other words, no relationship between the  
7 number of customers on Budget Billing and the number of customers on DPAs.

8  
9 It seems evident from this data that, should Columbia Gas enroll customers who are  
10 retiring arrears through deferred payment agreements into Budget Billing, there would be  
11 a potential for increasing the Budget Billing population, particularly amongst a  
12 population who might benefit most from being on it.

13  
14 **Q. DO YOU HAVE ANY OBSERVATIONS ABOUT THE MANNER IN WHICH**  
15 **COLUMBIA GAS OFFERS LEVELIZED BUDGET BILLING TO ITS**  
16 **RESIDENTIAL CUSTOMERS?**

17 A. Yes. According to the Company, pursuant to its tariff related to Budget Billing: “the  
18 standard Budget Plan is established when a customer owes only their current bill. If any  
19 arrears are owed, they must be paid in full prior to establishing a standard Budget Plan.”  
20 (OCA-III-023). The Company states explicitly that “the standard Budget Plan is not  
21 established when a customer is in arrears.” (OCA-III-024).

22

1 Moreover, Columbia Gas states that “the standard Budget Plan runs from May to April.  
2 Customers can join the standard Budget Plan anytime, however fewer months of  
3 enrollment may result in higher monthly payments.” (OCA-III-023). The Company  
4 states finally that “the standard Budget Plan is only offered to residential customers when  
5 the number of remaining Budget months is 10 or more. If the number of months  
6 remaining is less than 10, the customer must request to join the Budget, it will not be  
7 offered/promoted.” (OCA-III-023).

8  
9 **Q. ARE BUDGET PLAN PARTICIPANTS REQUIRED TO MAKE THEIR BILL**  
10 **PAYMENTS IN FULL AND ON-TIME EVERY MONTH IN ORDER TO**  
11 **REMAIN ON THE BUDGET BILLING PLAN?**

12 A. While the Company was not explicitly asked whether it required Budget Billing  
13 participants to make their payments in-full and on-time every month in order to remain  
14 on the Budget Billing plan, information provided by Columbia Gas would indicate that  
15 such payments are *not* required. For example, when asked, the Company could not  
16 provide the total number of residential customers removed from Budget Billing for  
17 collection-related reasons (i.e., having incurred an arrears).” (OCA-03-027).

18  
19 Moreover, when asked the number of residential accounts using levelized monthly  
20 Budget Billing that had an arrearage in any given month, the Company reported that  
21 for the 12 month period ending December 2017, the number of Budget Billing  
22 accounts with an arrearage ranged from less than 5,000 (September, October,  
23 November), to more than 10,000 (January through July). (OCA-03-025). Moreover,

1 setting aside arrearages, when asked, the Company indicated that in the most recent  
2 twelve month period available, despite periodic adjustments to Budget Billing  
3 amounts over the course of the year, only 56,184 Budget Billing participants “ended  
4 their annual budget billing period having overpaid or were current on their actual  
5 bill.” (OCA-III-028).

6  
7 **Q. HOW DOES THE COLUMBIA GAS BUDGET BILL PROCESS COMPARE TO**  
8 **THE PENNSYLVANIA PUC’S BUDGET BILLING REGULATIONS?**

9 A. The Company’s Budget Billing enrollment process stands in contrast to the PUC’s  
10 regulations. Section 56.12(7) of the PUC’s regulations states: “A gas, electric and steam  
11 heating public utility shall provide its residential customers, on a year-round rolling  
12 enrollment basis, with an optional billing procedure which averages estimated public  
13 utility service costs over a 10-month, 11-month or 12-month period to eliminate, to the  
14 extent possible, seasonal fluctuations in utility bills.” 52 Pa. Code §56.12(7).

15  
16 In other words, there appears to be some disconnect between what the PUC requires in its  
17 regulations and what Columbia Gas offers in practice. For example, while the PUC’s  
18 regulations require a utility to offer Budget Billing plans of fewer than 12 months in  
19 length, Columbia Gas does not. While the PUC requires that each utility offer Budget  
20 Billing “on a year-round rolling enrollment basis” with an optional billing procedure that  
21 averages estimated utility costs over a 10-month, 11-month or 12-month basis, Columbia  
22 Gas does not. Instead, for every month past May that a customer enters into Budget

1 Billing, Columbia Gas reduces the period over which it will average its costs and  
2 increases the monthly Budget Billing amount.

3  
4 There is even question whether Columbia Gas' stated procedure of making its Budget  
5 Billing available upon request when fewer than 10 months exist before May, but not  
6 offering or promoting such Budget Billing plans during those months, complies with the  
7 PUC regulation requiring utilities to offer Budget Billing "on a year-round rolling  
8 enrollment basis."

9  
10 **Q. WHY MIGHT CUSTOMERS WISH TO ENROLL IN A BUDGET BILLING**  
11 **PLAN THAT IS SOMETHING OTHER THAN TWELVE MONTHS LONG AND**  
12 **THAT BEGIN IN A MONTH OTHER THAN MAY?**

13 A. My experience with low-income customers in particular is that not all months are equal in  
14 terms of ability to pay. Some months are high cost months with respect to household  
15 expenses other than utility costs. For example, in one program evaluation I performed for  
16 a low-income pilot project in Georgia, I learned that summer months often present  
17 financial challenges to lower-income customers given the fact that children are out-of-  
18 school and, as a result, household daily meal expenses are no longer subsidized by the  
19 free and reduced school breakfast/school lunch programs. For such a household to enter  
20 into a ten-month Budget Billing program, with the initial month being September and  
21 continuing through June, would free-up household resources specifically during the  
22 months in which that household would need additional resources.

23

1 Similarly, it would be a sound money management technique for an income-constrained  
2 Columbia Gas customer with school-age children to enter into a ten-month Budget  
3 Billing plan starting in October and ending in July of the next year, leaving August and  
4 September with low-cost gas bills during the months in which that household is faced  
5 with predictable, significant, back-to-school expenses (e.g., supplies, clothes) that strain  
6 the household's budget.

7  
8 Any number of reasons exist, in other words, why a household might wish to enter into a  
9 10-month or 11-month Budget Billing plan for its utility costs rather than a 12-month  
10 plan. Any number of reasons exist why a household might wish to enter into a Budget  
11 Billing Plan in a month other than May. While the PUC's regulations mandate that a  
12 utility offer such plans, Columbia Gas does not.

13  
14 **Q. WHAT DO YOU RECOMMEND FOR PURPOSES OF THIS RATE CASE?**

15 A. I recommend that Columbia Gas be directed to take the following action-steps modify its  
16 Budget Billing tariff and practices and to increase participation in its levelized Budget  
17 Billing program before its next base rate case:

- 18       ➤ First, I recommend that Columbia Gas be directed to engage in specific  
19       targeted Budget Billing outreach to accounts, both low-income and residential  
20       generally, that experience short-term arrears during the Company's high cost  
21       months. A review of Company billing and payment records should be able to  
22       reveal seasonal nonpayment patterns.
- 23  
24       ➤ Second, I recommend that Columbia Gas be directed to offer its residential  
25       customers levelized Budget Billing plans that are fewer than 12-months at the  
26       customer's option. Budget Billing plans of 10-months and 11-months should  
27       be available.

- 1           ➤ Third, I recommend that Columbia Gas be directed to modify its Budget  
2 Billing enrollment policies. Rather than limiting the commencement of  
3 Budget Billing to a 12-month period beginning only in May, Columbia Gas  
4 should be directed to make Budget Billing enrollment available on a “year-  
5 round rolling enrollment basis” consistent with the PUC’s Budget Billing  
6 regulation.  
7
- 8           ➤ Fourth, I recommend that Columbia Gas implement a closer connection  
9 between its deferred payment arrangements and its enrollment of customers  
10 into levelized Budget Billing. In addition to more closely tying the payment  
11 arrangement to an enrollment in Budget Billing, I recommend that Columbia  
12 Gas adopt a policy that upon the completion of a payment plan, the customer  
13 would remain on Budget Billing unless the customer explicitly requests to be  
14 removed.  
15

16           **Part 4. Targeting High CAP Credit Customers for Weatherization.**

17 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**  
18 **TESTIMONY.**

19 A. In this section of my testimony, I explain why the agreement reached in the settlement of  
20 the 2016 Columbia Gas rate case (Docket R-2016-2529660) regarding the targeting of  
21 high CAP credit customers for weatherization should be continued. The Settlement of  
22 the 2016 rate case provided in relevant part that: “Columbia agrees to review the list of  
23 customers with high CAP credits (over \$1,000) from the prior year and prioritize those  
24 customers for weatherization when possible. Once this list has been exhausted, Columbia  
25 will use the high usage CAP customer list as well as eligible customers requesting  
26 weatherization.” (Joint Petition for Settlement, para. 47, page 12).  
27

28 **Q. DOES IT APPEAR THAT COLUMBIA GAS HAS FULFILLED ITS**  
29 **AGREEMENT IN THAT PORTION OF THE 2016 SETTLEMENT?**

1 A. Yes. Columbia Gas reports that “as a result of the 2016 rate case, Columbia instituted a  
2 new policy of reviewing CAP customers with shortfall over \$1,000 for prioritization of  
3 weatherization. Of those customers, 547 had already been weatherized or had been  
4 deferred during prior weatherization efforts. 83 were weatherized in 2017. 196 were  
5 attempted to weatherize and were deferred in 2017. 281 are in the process or denied in  
6 2018.” (OCA-03-037).

7

8 **Q. HAS COLUMBIA GAS YET BEEN ABLE TO EVALUATE THE**  
9 **EFFECTIVENESS OF WEATHERIZING THESE HIGH CAP CREDIT**  
10 **CUSTOMERS?**

11 A. No. “The company analyzes actual savings results which takes at least 12 months post  
12 weatherization to get any data. No analysis has been completed since all weatherization  
13 work occurred in 2017.” (OCA-3-038).

14

15 **Q. IS THERE A NEED TO CONTINUE THIS WEATHERIZATION**  
16 **PRIORITIZATION SUBSEQUENT TO THIS RATE CASE?**

17 A. Yes. This recommendation should not be construed as an assertion in any fashion that  
18 Columbia Gas did not fulfill the terms of the 2016 Settlement. The recommendation  
19 simply reflects the fact that the need to prioritize high CAP credit customers continues.

20

21 **Q. PLEASE EXPLAIN THE BASIS FOR YOUR CONCLUSION THAT THE NEED**  
22 **TO PRIORTIZE HIGH CAP CREDIT CUSTOMERS CONTINUES.**

1 A. A substantial proportion of CAP participants continue to incur CAP credits that exceed  
2 \$1,000. In Schedule RDC-4, I present the data for CAP participants who participated in  
3 CAP for the full twelve months in 2016 and 2017. As can be seen, in 2017, 20% of  
4 percentage of income CAP participants and 14% of average of payment CAP participants  
5 generated CAP credits exceeding \$1,000.<sup>10</sup> These CAP credits are passed through  
6 directly to non-participating ratepayers. Each dollar of CAP credits that can be reduced  
7 will be a dollar that need not be paid by other ratepayers.

8  
9 It is appropriate to be concerned about this in a rate proceeding. To the extent that rates,  
10 and thus bills, increase as a result of this proceeding, the level of CAP credits to be  
11 charged to non-participants will increase to percentage of income, and to average  
12 payment, CAP participants. CAP payment obligations will remain the same while bills at  
13 standard rates will increase.

14  
15 **Q. WHAT DO YOU RECOMMEND?**

16 A. While I understand that Columbia Gas has not yet completed its savings analysis of the  
17 weatherization previously directed toward high CAP credit customers, I recommend that  
18 the settlement agreement reached in the 2016 Columbia Gas rate case be continued as one  
19 outcome of this rate proceeding.

20  
21 **Part 6. Fundraising for Columbia Gas Hardship Fund.**

---

<sup>10</sup> According to the Company's data, percentage of bill participants do not appear to generate significant numbers of accounts with CAP credits exceeding \$1,000.

1 **Q. PLEASE DESCRIBE THE PURPOSE OF THIS SECTION OF YOUR**  
 2 **TESTIMONY.**

3 A. In this part of my testimony, I respond to the Direct Testimony of Deborah Davis  
 4 (Columbia Gas Statement 14) as she addresses the part of the Settlement of the 2016 base  
 5 rate case addressing fundraising for the Company’s hardship fund. In that Settlement  
 6 (Joint Petition for Settlement, Docket No. R-2016-2529660, para. 42, page 10), Columbia  
 7 Gas made the following commitments, amongst others:

- 8 ➤ Columbia “may use the residential portion of pipeline penalty credits and  
 9 refunds received through February 28, 2018, as a funding source for the  
 10 Hardship Fund”;
- 11  
 12 ➤ Columbia may, prior to February 28, 2018, file a request with the PUC “to  
 13 continue to use the residential portion of pipeline credits and refunds to fund  
 14 the Hardship Fund”;
- 15  
 16 ➤ Columbia will “continue to develop plans. . .to seek out additional funding  
 17 from voluntary sources”;
- 18  
 19 ➤ Columbia “will” provide a “report on ideas developed and implemented to  
 20 increase voluntary contributions to the Hardship Fund as part of any request to  
 21 continue applying pipeline credits and refunds to the Hardship Fund, as well  
 22 as in its next base rate proceeding. . .”  
 23

24 **Q. HAS THE COMPANY SUCCESSFULLY EXPANDED ITS FUNDRAISING FOR**  
 25 **THE COLUMBIA GAS HARDSHIP FUND?**

26 A. No. Since January 2016, Columbia’s incremental effort over fundraising efforts that  
 27 were not fundraising efforts in effect as of January 1, 2016, has been to encourage  
 28 Company and Dollar Energy employees to participate in a promotion through which the  
 29 Hardship Fund received \$25 for each purchase of a NEST thermostat, and to encourage  
 30 Company employees to join the “Cool Down for Warmth” program, an effort through

1 which ten Columbia Gas employees sat in an ice house for 30 minutes and encouraged  
2 donations from their friends, family and co-workers. (OCA-3-032). The NEST  
3 promotion raised \$2,175 in 2017 while the Columbia team for the Cool Down for  
4 Warmth raised \$2,796. (OCA-3-33). Outside of these two initiatives, the only other  
5 activity was a one-time promotion through which Columbia Gas donated \$5 for every  
6 new customer who signed up to receive an E-bill. (OCA-3-034).

7  
8 **Q. HAS HARDSHIP FUNDING INCREASED OVERALL SINCE 2015?**

9 A. No. Hardship funding has remained constant at \$525,000 in 2015, 2016, and 2017.  
10 (OCA-3-035). The per customer average contribution was \$1.35 in 2015, \$1.34 in 2016,  
11 and \$1.33 in 2017. (OCA-3-035). The Company states that it does not track  
12 contributions from retirees, investors, employees or contractors separately from all other  
13 contributions. (OCA-3-035). In contrast, the total number of grant recipients has  
14 declined from 1,565 in 2014/2015 to 1,438 in 2016/2017 (2017/2018 is not yet complete).  
15 The average hardship fund grant has remained relatively constant, changing from  
16 \$406.65 in 2014/2015 to \$396.26 in 2016/2017. (OCA-3-036).

17  
18 **Q. IS THERE AN ONGOING NEED FOR THE COMPANY'S HARDSHIP FUND TO**  
19 **HAVE ADEQUATE FUNDING?**

20 A. Yes. I have documented some of this need in other parts of my testimony. I have  
21 previously documented: (1) an increase in the number of confirmed low-income accounts  
22 disconnected for nonpayment has occurred; (2) an increase in the number of confirmed  
23 low-income accounts in arrears has occurred in the years since 2010 (with certain

1 exceptions) (Table 1); (3) an increase has been experienced in the average level of  
 2 confirmed low-income arrears in the years since 2010 (with certain exceptions) (Table 2);  
 3 (4) fewer than half of confirmed low-income accounts that have had service disconnected  
 4 for nonpayment have had service subsequently reconnected (Table 3); and (5) few of the  
 5 deferred payment agreements entered into by Columbia Gas are successfully completed  
 6 (Table 4). All of these factors demonstrate a continuing, if not an increasing, need for the  
 7 Columbia Gas Hardship Fund to be adequately funded.

8  
 9 Aside from the data previously discussed, however, the need for the Columbia Gas  
 10 Hardship Fund can be seen simply from the aging of arrears for confirmed low-income  
 11 customers. Table 5 examines arrearages for confirmed low-income customers of  
 12 Columbia Gas coming out of the 2017/2018 winter heating season. The data shows that a  
 13 substantial number of the confirmed low-income accounts that were in arrears were 60 or  
 14 more days in arrears coming out of the winter season. As can be seen, the percentage of  
 15 accounts 60 or more days in arrears was from two to three times higher than the  
 16 percentage of dollars that old immediately after the cold weather months.

	January 2017	February 2017	March 2017	May 2017	June 2017	July 2017
Dollars of Arrears	\$514,248	\$579,254	\$507,257	\$209,395	\$231,338	\$201,315
	11%	11%	11%	9%	13%	16%
Accounts in Arrears	3,231	2,721	1,571	775	1,010	1,245
	34%	32%	21%	12%	14%	21%

NOTES:  
 /a/ Percentage is of accounts/dollars in arrears. For example, in March 2018, the data does not show that 12% of all confirmed low-income bills were 60+ days in arrears. Instead, it shows that of those confirmed low-income dollars in arrears, 12% were in arrears for 60+ days.

SOURCE: OCA-3-007, OCA-03-008.

1  
2 This data is not intended to show an increasing problem with low-income arrears.  
3 However, the data does demonstrate a *continuing* year-round need for short-term relief.  
4 While the percentage of accounts having an arrearage that is sufficiently old to begin to  
5 be considered problematic unquestionably declines during the warm weather months,  
6 nonetheless, there remains a substantial number of such accounts owing a not  
7 insignificant amount of money. The conclusion to be drawn is that Columbia Gas has an  
8 ongoing, year-round need to be able to respond to these month-to-month payment  
9 problems.

10  
11 **Q. WHAT DO YOU RECOMMEND?**

12 A. I make the following recommendations. First, I recommend approval of the Company's  
13 proposal to make permanent its contributions of the residential portion of pipeline credits  
14 and refunds to its Hardship Fund. (see generally, Columbia Gas Statement 14, at 20 –  
15 23). Second, I recommend that the Company's proposal to decline to impose a limitation  
16 on the eligibility to receive a Hardship Fund grant to households with income between  
17 151% and 200% of Poverty should be approved. (see generally, Columbia Gas Statement  
18 14, at 14). Columbia Gas should seek to expand its funding capacity to meet its needs  
19 rather than seeking to limit its definition of need to meet its available funding capacity.

20  
21 Notwithstanding the recommendations above, Columbia Gas, as it has proclaimed its  
22 intent to do, should continue to actively explore ways in which it might expand the

1 support of its Hardship Fund through voluntary donations and regularly report both the  
2 nature and results of its efforts to its universal service advisory group.

3

4 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

5 A. Yes it does.

## **Schedules**

Schedule RDC-1

Average Income by Number of Rooms or Number of Bedrooms in Housing Unit (Pennsylvania) American Community Survey (5-year data) (2012 – 2016)	
Number of Rooms / Bedrooms	Average Income by Number of Rooms / Number of Bedrooms
	Rooms Bedrooms
0	N/A \$41,716
1	\$40,399 \$38,885
2	\$47,498 \$51,694
3	\$40,382 \$69,626
4	\$46,608 \$116,764
5 /a/	\$54,110 \$136,317
6	\$62,018
7	\$77,180
8	\$95,524
9 /b/	\$119,211
Total	\$69,336 \$75,671
NOTES:	
/a/ For bedrooms, data is top-coded at 5 bedrooms.	
/b/ For rooms, data is top coded at 9 rooms.	

Schedule RDC-2

Distribution of Housing Units by Income and Housing Unit Size (Number of Bedrooms): Pennsylvania										
	\$1 - \$10,000	\$10 - \$20,000	\$20 - \$30,000	\$30 - \$40,000	\$40 - \$50,000	\$50 - \$75,000	\$75 - \$150,000	\$150 - \$250,000	\$250,000 or more	
No bedroom	1.8%	1.1%	0.9%	0.6%	0.6%	0.3%	0.3%	0.1%	0.3%	
1 bedroom	15.7%	11.8%	8.7%	8.0%	5.6%	4.8%	2.3%	1.2%	1.5%	
2 bedrooms	32.9%	31.0%	29.8%	29.2%	28.3%	23.1%	15.5%	8.6%	9.9%	
3 bedrooms	39.6%	46.5%	49.2%	49.4%	51.7%	55.4%	56.1%	44.7%	36.1%	
4 bedrooms	8.5%	8.1%	9.6%	10.9%	12.3%	14.4%	23.3%	40.8%	45.3%	
5 or more bedrooms	1.5%	1.5%	1.7%	1.9%	1.6%	1.9%	2.5%	4.5%	7.0%	
Total bedrooms	1.8%	1.1%	0.9%	0.6%	0.6%	0.3%	0.3%	0.1%	0.3%	
American Community Survey (5-year data) (2012 - 2016)										

**Schedule RDC-3**

Percentage of Income Burden (including CAP-Plus and Arrearage Forgiveness Co-payment) Columbia Gas CAP Participants Percentage of Income and Percentage of Bill (2017) (CAUSE-PA-2-012)						
2017	Percentage of Income		Percentage of Bill		Percentage of Poverty	
	0-50% Poverty	50-100% Poverty	0-50% Poverty	50-100% Poverty	0-50% Poverty	100-150% Poverty
3%	0	0	9	808	2,853	
4%	0	0	60	1,261	1,406	
5%	0	0	133	1,273	841	
6%	0	1	180	1,090	393	
7%	0	0	203	735	167	
8%	1,199	1,525	187	422	60	
9%	718	604	87	132	18	
10%	254	25	30	46	6	
11%	0	0	25	18	1	
12%	0	0	16	7	0	
13%	0	0	10	10	0	
14%	0	0	14	0	0	
15%	0	0	8	1	0	
16%	0	0	5	0	0	
17%	0	0	7	1	0	
18%	0	0	3	1	0	
19%	0	0	3	0	0	
20%	0	0	3	0	0	
20%+	0	0	29	0	1	
Total	2,171	2,155	1,012	5,805	5,746	

Schedule RDC-4

	2016					2017				
	% of Income	Average of Payments	% of Bill	Minimum Payment	Senior CAP	% of Income	Average of Payments	% of Bill	Minimum Payment	Senior CAP
Total CAP credits	2,056	5,422	6,263	931	4	1,922	5,509	5,950	783	5
# with CAP Credit >\$1,000	798	1592	331	314	0	379	747	68	154	0
% with CAP Credit >\$1,000	39%	29%	5%	34%	0%	20%	14%	1%	20%	0%

## Appendix A: Colton Vitae

## ROGER D. COLTON

**BUSINESS ADDRESS:** Fisher Sheehan & Colton  
Public Finance and General Economics  
34 Warwick Road, Belmont, MA 02478  
617-484-0597 (voice) \*\*\* 617-484-0594 (fax)  
roger@fsconline.com (e-mail)  
<http://www.fsconline.com> (www address)

### **EDUCATION:**

J.D. (Order of the Coif), University of Florida (1981)

M.A. (Economics), McGregor School, Antioch University (1993)

B.A. Iowa State University (1975) (journalism, political science, speech)

### **PROFESSIONAL AFFILIATIONS:**

Columnist: Belmont Citizen-Herald  
Producer: Belmont Media Center: BMC Podcast Network  
Newscaster: Belmont Media Center: Belmont Journal  
Member: Belmont Town Meeting  
Vice-chair: Belmont Light General Manager Screening Committee  
Chair: Belmont Goes Solar  
Coordinator: BelmontBudget.org (Belmont's Community Budget Forum)  
Coordinator: Belmont Affordable Shelter Fund (BASF)  
Chair: Belmont Solar Initiative Oversight Committee  
Member: City of Detroit Blue Ribbon Panel on Water Affordability  
Chair: Belmont Energy Committee  
Member: Massachusetts Municipal Energy Group (Mass Municipal Association)  
Past Chair: Housing Work Group, Belmont (MA) Comprehensive Planning Process  
Past Member: Board of Directors, Belmont Housing Trust, Inc.  
Past Chair: Waverley Square Fire Station Re-use Study Committee (Belmont MA)  
Past Member: Belmont (MA) Energy and Facilities Work Group  
Past Member: Belmont (MA) Uplands Advisory Committee  
Past Member: Advisory Board: Fair Housing Center of Greater Boston.  
Past Chair: Fair Housing Committee, Town of Belmont (MA)  
Past Member: Aggregation Advisory Committee, New York State Energy Research and Development Authority.  
Past Member: Board of Directors, Vermont Energy Investment Corporation.  
Past Member: Board of Directors, National Fuel Funds Network  
Past Member: Board of Directors, Affordable Comfort, Inc. (ACI)  
Past Member: National Advisory Committee, U.S. Department of Health and Human Services, Administration for Children and Families, Performance Goals for Low-Income Home Energy Assistance.

- Past Member: Editorial Advisory Board, International Library, *Public Utility Law Anthology*.
- Past Member: ASHRAE Guidelines Committee, GPC-8, *Energy Cost Allocation of Comfort HVAC Systems for Multiple Occupancy Buildings*
- Past Member: National Advisory Committee, U.S. Department of Housing and Urban Development, Calculation of Utility Allowances for Public Housing.
- Past Member: National Advisory Board: Energy Financing Alternatives for Subsidized Housing, New York State Energy Research and Development Authority.

## **BOOKS**

- Colton, *et al.*, *Access to Utility Service*, National Consumer Law Center: Boston (4<sup>th</sup> edition 2008).
- Colton, *et al.*, *Tenants' Rights to Utility Service*, National Consumer Law Center: Boston (1994).
- Colton, *The Regulation of Rural Electric Cooperatives*, National Consumer Law Center: Boston (1992).

## **JOURNAL PUBLICATIONS**

- Colton (March 2015). Quality Assurance: Evaluating Glare from Roof-Mounted PV Arrays, *Solar Professional*.
- Colton (January 2015). "Assessing Solar PV Glare In Dense Residential Neighborhoods." *Solar Industry*.
- Colton (January 2015). "Owning up to the Problem: Limiting the Use of an Assets Test for Determining Home Energy Assistance Eligibility." *Clearinghouse Review*.
- Colton (November 2003). "Winter Weather Payments: The Impact of Iowa's Winter Utility Shutoff Moratorium on Utility Bill Payments by Low-Income Customers." 16(9) *Electricity Journal* 59.
- Colton (March 2002). "Energy Consumption and Expenditures by Low-Income Households," 15(3) *Electricity Journal* 70.
- Colton, Roger and Stephen Colton (Spring 2002). "An Alternative to Regulation in the Control of Occupational Exposure to Tuberculosis in Homeless Shelters," *New Solutions: Journal of Environmental and Occupational Health Policy*.
- Colton (2001). "The Lawfulness of Utility Actions Seeking to Impose as a Condition of Service Liability for a Roommate's Debt Incurred at a Prior Address," *Clearinghouse Review*.
- Colton (2001). "Limiting The "Family Necessaries" Doctrine as a Means of Imposing Third Party Liability for Utility Bills," *Clearinghouse Review*.
- Colton (2001). "Prepayment Utility Meters and the Low-Income Consumer." *Journal of Housing and Community Development Law* (American Bar Association).
- Colton, Brown and Ackermann (June 2000). "Mergers and the Public Interest: Saving the Savings for the Poorest Customers." *Public Utilities Fortnightly*.

- Colton. (2000). "Aggregation and the Low-Income Consumer." *LEAP Newsletter*.
- Colton. (1999). "Challenging Entrance and Transfer Fees in Mobile Home Park Lot Rentals." *Clearinghouse Review*.
- Colton and Adams (1999). "Y2K and Communities of Color," *Media Alert: The Quarterly Publication of the National Black Media Coalition*.
- Colton and Sheehan (1999). "The Problem of Mass Evictions in Mobile Home Parks Subject to Conversion." *Journal of Housing and Community Development Law* (American Bar Association).
- Colton (1999). "Utility Rate Classifications and Group Homes as "Residential" Customers," *Clearinghouse Review*.
- Colton (1998). "Provider of Last Resort: Lessons from the Insurance Industry." *The Electricity Journal*.
- Colton and Adams (1998). "Fingerprints for Check Cashing: Where Lies the Real Fraud," *Media Alert: The Quarterly Publication of the National Black Media Coalition*.
- Colton. (1998). "Universal Service: A Performance-Based Measure for a Competitive Industry," *Public Utilities Fortnightly*.
- Colton, Roger and Stephen Colton (1998). "Evaluating Hospital Mergers," 17 *Health Affairs* 5:260.
- Colton. (1998). "Supportive Housing Facilities as "Low-Income Residential" Customers for Energy Efficiency Purposes," 7 *Journal of Housing and Community Development Law* 406 (American Bar Association).
- Colton, Frisof and King. (1998). "Lessons for the Health Care Industry from America's Experience with Public Utilities." 18 *Journal of Public Health Policy* 389.
- Colton (1997). "Fair Housing and Affordable Housing: Availability, Distribution and Quality." 1997 *Colloqui: Cornell Journal of Planning and Urban Issues* 9.
- Colton, (1997). "Competition Comes to Electricity: Industry Gains, People and the Environment Lose," *Dollars and Sense*.
- Colton (1996). "The Road Oft Taken: Unaffordable Home Energy Bills, Forced Mobility And Childhood Education in Missouri." 2 *Journal on Children and Poverty* 23.
- Colton and Sheehan. (1995). "Utility Franchise Charges and the Rental of City Property." 72 *New Jersey Municipalities* 9:10.
- Colton. (1995). "Arguing Against Utilities' Claims of Federal Preemption of Customer-Service Regulations." 29 *Clearinghouse Review* 772.
- Colton and Labella. (1995). "Landlord Failure to Resolve Shared Meter Problems Breaches Tenant's Right to Quiet Enjoyment." 29 *Clearinghouse Review* 536.

- Colton and Morrissey. (1995). "Tenants' Rights to Pretermination Notice in Cases of Landlords' Nonpayment of Utilities". 29 *Clearinghouse Review* 277.
- Colton. (1995). "The Perverse Incentives of Fair Market Rents." 52 *Journal of Housing and Community Development* 6.
- Colton (1994). "Energy Efficiency and Low-Income Housing: Energy Policy Hurts the Poor." XVI *ShelterForce: The Journal of Affordable Housing Strategies* 9.
- Colton (1994). "The Use of Consumer Credit Reports in Establishing Creditworthiness for Utility Deposits." *Clearinghouse Review*.
- Colton (1994). "Institutional and Regulatory Issues Affecting Bank Product Diversification Into the Sale of Insurance," *Journal of the American Society of CLU and ChFC*.
- Colton. (1993). "The Use of State Utility Regulations to Control the 'Unregulated' Utility." 27 *Clearinghouse Review* 443.
- Colton and Smith. (1993). "The Duty of a Public Utility to Mitigate 'Damages' from Nonpayment through the Offer of Conservation Programs." 3 *Boston University Public Interest Law Journal* 239.
- Colton and Sheehan. (1993). "Cash for Clunkers Program Can Hurt the Poor," 19 *State Legislatures: National Conference of State Legislatures* 5:33.
- Colton. (1993). "Consumer Information and Workable Competition in the Telecommunications Industry." XXVII *Journal of Economic Issues* 775.
- Colton and Sheehan. (1992). "Mobile Home Rent Control: Protecting Local Regulation," *Land Use Law and Zoning Digest*.
- Colton and Smith. (1992 - 1993). "Co-op Membership and Utility Shutoffs: Service Protections that Arise as an Incident of REC 'Membership.'" 29 *Idaho Law Review* 1, reprinted, XV *Public Utilities Law Anthology* 451.
- Colton and Smith. (1992). "Protections for the Low-Income Customer of Unregulated Utilities: Federal Fuel Assistance as More than Cash Grants." 13 *Hamline University Journal of Public Law and Policy* 263.
- Colton (1992). "CHAS: The Energy Connection," 49 *The Journal of Housing* 35, reprinted, 19 *Current Municipal Problems* 173.
- Colton (March 1991). "A Cost-Based Response to Low-Income Energy Problems." *Public Utilities Fortnightly*.
- Colton. (1991). "Protecting Against the Harms of the Mistaken Utility Undercharge." 39 *Washington University Journal of Urban and Contemporary Law* 99, reprinted, XIV *Public Utilities Anthology* 787.
- Colton. (1990). "Customer Consumption Patterns within an Income-Based Energy Assistance Program." 24 *Journal of Economic Issues* 1079
- Colton (1990). "Heightening the Burden of Proof in Utility Shutoff Cases Involving Allegations of Fraud." 33 *Howard L. Review* 137.

Colton (1990). "When the Phone Company is not the Phone Company: Credit Reporting in the Post-Divestiture Era." 24 *Clearinghouse Review* 98.

Colton (1990). "Discrimination as a Sword: Use of an 'Effects Test' in Utility Litigation." 37 *Washington University Journal of Urban and Contemporary Law* 97, reprinted, XIII *Public Utilities Anthology* 813.

Colton (1989). "Statutes of Limitations: Barring the Delinquent Disconnection of Utility Service." 23 *Clearinghouse Review* 2.

Colton & Sheehan. (1989). "Raising Local Revenue through Utility Franchise Fees: When the Fee Fits, Foot It." 21 *The Urban Lawyer* 55, reprinted, XII *Public Utilities Anthology* 653, reprinted, Freilich and Bushek (1995). *Exactions, Impacts Fees and Dedications: Shaping Land Use Development and Funding Infrastructure in the Dolan Era*, American Bar Association: Chicago.

Colton (1989). "Unlawful Utility Disconnections as a Tort: Gaining Compensation for the Harms of Unlawful Shutoffs." 22 *Clearinghouse Review* 609.

Colton, Sheehan & Uehling. (1987). "Seven cum Eleven: Rolling the Toxic Dice in the U.S. Supreme Court," 14 *Boston College Environmental L. Rev.* 345.

Colton & Sheehan. (1987). "A New Basis for Conservation Programs for the Poor: Expanding the Concept of Avoided Costs," 21 *Clearinghouse Review* 135.

Colton & Fisher. (1987). "Public Inducement of Local Economic Development: Legal Constraints on Government Equity Funding Programs." 31 *Washington University J. of Urban and Contemporary Law* 45.

Colton & Sheehan. (1986). "The Illinois Review of Natural Gas Procurement Practices: Permissible Regulation or Federally Preempted Activity?" 35 *DePaul Law Review* 317, reprinted, IX *Public Utilities Anthology* 221.

Colton (1986). "Utility Involvement in Energy Management: The Role of a State Power Plant Certification Statute." 16 *Environmental Law* 175, reprinted, IX *Public Utilities Anthology* 381.

Colton (1986). "Utility Service for Tenants of Delinquent Landlords," 20 *Clearinghouse Review* 554.

Colton (1985). "Municipal Utility Financing of Energy Conservation: Can Loans only be Made through an IOU?." 64 *Nebraska Law Review* 189.

Colton (1985). "Excess Capacity: A Case Study in Ratemaking Theory and Application." 20 *Tulsa Law Journal* 402, reprinted, VIII *Public Utilities Anthology* 739.

Colton (1985). "Conservation, Cost-Containment and Full Energy Service Corporations: Iowa's New Definition of 'Reasonably Adequate Utility Service.'" 34 *Drake Law Journal* 1.

Colton (1982). "Mandatory Utility Financing of Conservation and Solar Measures." 3 *Solar Law Reporter* 167.

Colton (1982). "The Use of Canons of Statutory Construction: A Case Study from Iowa, or When Does 'GHOTI' Spell 'Fish'?" 5 *Seton Hall Legislative Journal* 149.

Colton (1977). "The Case for a Broad Construction of 'Use' in Section 4(f) of the Department of Transportation Act." 21 *St. Louis Law Journal* 113.

Colton (1984). "Prudence, Planning and Principled Ratemaking." 35 *Hastings Law Journal* 721.

Colton (1983). "Excess Capacity: Who Gets the Charge from the Power Plant?" 33 *Hastings Law Journal* 1133.

Colton (1983). "Old McDonald (Inc.) Has a Farm. . . Maybe, or Nebraska's Corporate Farm Ban; Is it Constitutional?" 6 *University of Arkansas at Little Rock Law Review* 247.

### **OTHER PUBLICATIONS**

Colton (2015). *The 2015 Home Energy Affordability Gap: Connecticut*, prepared for Operation Fuel (Bloomfield, CT).

Coltn (2015). *Re-Sequencing Posting Utility Bill Payments: A Case Study Involving Philadelphia Gas Works*.

Colton (2015). *State Legislative Steps to Implement the Human Right to Water in California*, prepared for the Unitarian Universalist Service Committee (Cambridge MA).

Colton (2014). *The 2014 Home Energy Affordability Gap: Connecticut*, prepared for Operation Fuel, (Bloomfield, CT).

Colton (2014). *The Equity of Efficiency: Distributing Utility Usage Reduction Dollars for Affordable Multi-family Housing*, prepared for the Natural Resources Defense Council (New York, NY).

Colton (2014). *Assessing Rooftop Solar PV Glare in Dense Urban Residential Neighborhoods: Determining Whether and How Much of a Problem*, submitted to American Planning Association: Chicago (IL).

Colton (2013). *White Paper: Utility Communications with Residential Customers and Vulnerable Residential Customers In Response to Severe Weather-Related Outages*, prepared for Pennsylvania Office of Consumer Advocate.

Colton (2013). *Massachusetts Analysis of Impediments to Fair Housing: Fiscal Zoning and the "Childproofing" of a Community*, presented to Massachusetts Department of Housing and Community Development.

Colton (2013). *Home Energy Affordability in New York: The Affordability Gap (2012)*, prepared for New York State Energy Research and Development Authority (NYSERDA).

Colton (2013). *Home Energy Affordability in Connecticut: The Affordability Gap (2012)*, prepared for Operation Fuel (Bloomfield, CT).

Colton (2013). *Owning up to the Problem: Limiting the Use of an Assets Test for Determining Home Energy Assistance Eligibility*.

Colton (2013). *Privacy Protections for Consumer Information Held by Minnesota Rate-Regulated Utilities*, prepared for Legal Services Advocacy Project (St. Paul, MN).

Colton (2013). *Proposal for the Use of Pervious Pavement for Repaving the Belmont High School Parking Lot*, prepared for Sustainable Belmont: Belmont (MA).

Colton (2012). *Home Energy Affordability in New York: 2011*, prepared for the New York State Energy Research and Development Authority (NYSERDA) (Albany NY).

Colton (2012). *A Fuel Assistance Tracking Mechanism: Measuring the Impact of Changes in Weather and Prices on the Bill Payment Coverage Capacity of LIHEAP*, prepared for Iowa Department of Human Rights: Des Moines (IA).

Colton (2012). *Home Energy Affordability Gap: 2012: Connecticut Legislative Districts*, prepared for Operation Fuel (Bloomfield, CT).

Colton (2012). *Attributes of Massachusetts Gas/Electric Arrearage Management Programs (AMPS): 2011 Program Year*, prepared for Fisher, Sheehan & Colton, Public Finance and General Economics, Belmont (MA).

Colton (2012). *Customer and Housing Unit Characteristics in the Fitchburg Gas and Electric Service Territory*, prepared for Unifil Corporation, d/b/a Fitchburg Gas and Electric Company (Portsmouth, NH).

Colton (2012). *Public Service Company of Colorado's (PSCo) Pilot Energy Assistance Program (PEAP) and Electric Assistance Program (EAP) 2011 Final Evaluation Report*, prepared for Xcel Energy (Denver CO).

Colton (2012). *Home Energy Affordability Gap: 2011: Connecticut Legislative Districts*, prepared for Operation Fuel (Bloomfield, CT).

Colton (2011). *Home Energy Affordability in Idaho: Low-Income Energy Affordability Needs and Resources*, prepared for Community Action Partnership of Idaho (Boise, ID).

Colton (2011). *Home Energy Affordability Gap in New York*, prepared for the New York State Energy Research Development Authority (NYSERDA) (Albany, NY).

Colton (2011). *Home Energy Affordability Gap: 2010: Connecticut Legislative Districts*, prepared for Operation Fuel (Bloomfield, CT).

Colton (2011). *Section 8 Utility Allowances and Changes in Home Energy Prices in Pennsylvania*, prepared for Pennsylvania Utility Law Project: Harrisburg (PA).

Colton (2010). *Interim Report on Xcel Energy's Pilot Energy Assistance Program*, prepared for Xcel Energy (Denver, CO).

Colton (2010). *Home Energy Affordability Gap: 2009: Connecticut Legislative Districts*, prepared for Operation Fuel (Bloomfield, CT).

Colton (2010). *Home Energy Affordability in Manitoba: A Low-Income Affordability Program for Manitoba Hydro*, prepared for Resource Conservation of Manitoba, Winnipeg (MAN).

- Colton (2009). *Mirror, Mirror on the Wall: How Well Does Belmont’s Town Meeting Reflect the Community at Large*, prepared for Fisher, Sheehan & Colton, Public Finance and General Economics, Belmont (MA).
- Colton (2009). *An Outcomes Planning Approach to Serving TPU Low-Income Customers*, prepared for Tacoma Public Utilities, Tacoma (WA).
- Colton (2009). *An Outcome Evaluation of Indiana’s Low-Income Rate Affordability Programs: 2008 – 2009*, prepared for Citizens Gas and Coke Utility, Northern Indiana Public Service Company, Vectren Energy Delivery Indianapolis (IN).
- Roger Colton (2009). *The Earned Income Tax Credit (EITC) as “Energy Assistance” in Pennsylvania*, prepared for Pennsylvania Utility Law Project (PULP).
- Colton (2009). *Energy Efficiency as a Homebuyer Affordability Tool in Pennsylvania*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).
- Colton (2009). *Energy Efficient Utility Allowances as a Usage Reduction Tool in Pennsylvania*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).
- Colton (2009). *Home Energy Consumption Expenditures by Income (Pennsylvania)*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).
- Colton (2009). *The Contribution of Utility Bills to the Unaffordability of Low-Income Rental Housing in Pennsylvania*, prepared for Pennsylvania Utility Law Project, Harrisburg (PA).
- Colton (2009). *The Integration of Federal LIHEAP Benefits with Ratepayer-Funded Percentage of Income Payment Programs (PIPPs): Legal and Policy Questions Involving the Distribution of Benefits*, prepared for Pennsylvania Office of Consumer Advocate, Harrisburg (PA).
- Colton (2008). *Home Energy Affordability in Indiana: Current Needs and Future Potentials*, prepared for Indiana Community Action Association.
- Colton (2008). *Public Health Outcomes Associated with Energy Poverty: An Analysis of Behavioral Risk Factor Surveillance System (BRFSS) Data from Iowa*, prepared for Iowa Department of Human Rights.
- Colton (2008). *Indiana Billing and Collection Reporting: Natural Gas and Electric Utilities: 2007*, prepared for Coalition to Keep Indiana Warm.
- Colton (2008). *Inverted Block Tariffs and Universal Lifeline Rates: Their Use and Usability in Delivering Low-Income Electric Rate Relief*, prepared for Hydro-Quebec.
- Colton (2007). *Best Practices: Low-Income Affordability Programs, Articulating and Applying Rating Criteria*, prepared for Hydro-Quebec.
- Colton (2007). *An Outcome Evaluation of Indiana’s Low-Income Rate Affordability Programs*, performed for Citizens Gas & Coke Utility, Vectren Energy Delivery, Northern Indiana Public Service Company.
- Colton (2007). *A Multi-state Study of Low-Income Programs*, in collaboration with Apprise, Inc., prepared for multiple study sponsors.

Colton (2007). *The Law and Economics of Determining Hot Water Energy Use in Calculating Utility Allowances for Public and Assisted Housing*.

Colton (2007). *Comments of Belmont Housing Trust on Energy Conservation Standards for Residential Furnaces and Boilers*, Belmont Housing Trust (Belmont MA).

Colton (2006). *Indiana Billing and Collection Reporting: Natural Gas and Electric Utilities: 2006*, prepared for Coalition to Keep Indiana Warm.

Colton (2006). *Home Energy Affordability in Maryland: Necessary Regulatory and Legislative Actions*, prepared for the Maryland Office of Peoples Counsel.

Colton (2006). *A Ratepayer Funded Home Energy Affordability Program for Low-Income Households: A Universal Service Program for Ontario's Energy Utilities*, prepared for the Low-Income Energy Network (Toronto).

Colton (2006). *Georgia REACH Project Energize: Final Program Evaluation*, prepared for the Georgia Department of Human Resources.

Colton (2006). *Experimental Low-Income Program (ELIP): Empire District Electric Company, Final Program Evaluation*, prepared for Empire District Electric Company.

Colton (2006). *Municipal Aggregation for Retail Natural Gas and Electric Service: Potentials, Pitfalls and Policy Implications*, prepared for Maryland Office of Peoples Counsel.

Colton (2005). *Indiana Billing and Collection Reporting: Natural Gas and Electric Utilities: 2005*, prepared for Coalition to Keep Indiana Warm.

Colton (2005). *Impact Evaluation of NIPSCO Winter Warmth Program*, prepared for Northern Indiana Public Service Company.

Colton (2005). *A Water Affordability Program for the Detroit Water and Sewer Department*, prepared for Michigan Poverty Law Center.

Colton (2004). *Paid but Unaffordable: The Consequences of Energy Poverty in Missouri*, prepared for the National Low-Income Home Energy Consortium.

Sheehan and Colton (2004). *Fair Housing Plan: An Analysis of Impediments and Strategies on How to Address Them: Washington County/Beaverton (OR)*, prepared for Washington County Department of Community Development.

Colton (2004). *Controlling Tuberculosis in Fulton County (GA) Homeless Shelters: A Needs Assessment*, prepared for the Georgia Department of Human Resources, Division of Public Health.

Colton (2003). *The Impact of Missouri Gas Energy's Experimental Low-Income Rate (ELIR) On Utility Bill Payments by Low-Income Customers: Preliminary Assessment*, prepared for Missouri Gas Energy.

Colton (2003). *The Economic Development Impacts of Home Energy Assistance: The Entergy States*, prepared for Entergy Services, Inc.

Colton (2003). *Energy Efficiency as an Affordable Housing Tool in Colorado*, prepared for Colorado Energy Assistance Foundation.

Colton (2003). *The Discriminatory Impact of Conditioning Iowa's Winter Utility Shutoff Protections on the Receipt of LIHEAP*.

Colton (2003). *The Economic Development Impacts of Home Energy Assistance in Colorado*, Colorado Energy Assistance Foundation.

Colton (2003). *Measuring the Outcomes of Home Energy Assistance through a Home Energy Insecurity Scale*, prepared for the U.S. Department of Health and Human Services, Administration for Children and Families.

Colton (2002). *Low-Income Home Energy Affordability in Maryland*, prepared for Office of Peoples Counsel.

Colton (2002). *Winter Weather Payments: The Impact of Iowa's Winter Utility Shutoff Moratorium On Utility Bill Payments by Low-Income Customer*, prepared for Iowa Department of Human Rights.

Colton (2002). *A Fragile Income: Deferred Payment Plans and the Ability-to-Pay of Working Poor Utility Customers*, prepared for National Fuel Funds Network.

Colton (2002). *Credit where Credit is Due: Public Utilities and the Earned Income Tax Credit for Working Poor Utility Customers*, prepared for National Fuel Funds Network.

Colton (2002). *Payments Problems, Income Status, Weather and Prices: Costs and Savings of a Capped Bill Program*, prepared for WeatherWise.

Colton (2001). *Integrating Government-Funded and Ratepayer-Funded Low-Income Energy Assistance Programs*, prepared for U.S. Department of Health and Human Services (HHS) and Oak Ridge National Laboratory.

Colton (2001). *In Harm's Way: Home Heating, Fire Hazards, and Low-Income Households*, prepared for National Fuel Funds Network.

Colton (2001). *Structuring Low-income Affordability Programs Funded through System Benefits Charges: A Case Study from New Hampshire*, prepared for Oak Ridge National Laboratory.

Colton (2001). *System Benefits Charges: Why All Customer Classes Should Pay*.

Colton (2001). *Reducing Energy Distress: "Seeing RED" Project Evaluation* (evaluation of Iowa REACH project), prepared for Iowa Department of Human Rights.

Colton (2001). *Group Buying of Propane and Fuel Oil in New York State: A Feasibility Study*, prepared for New York State Community Action Association.

Colton (2000). *Establishing Telecommunications Lifeline Eligibility: The Use of Public Benefit Programs and its Impact on Lawful Immigrants*, prepared for Dayton (OH) Legal Aide.

Colton (2000). *Outreach Strategies for Iowa's LIHEAP Program Innovation in Improved Targeting*, prepared for Iowa Department of Human Rights.

Colton (1999). *Integration of LIHEAP with Energy Assistance Programs Created through Electric and/or Natural Gas Restructuring*, prepared for U.S. Department of Health and Human Services, Administration for Children and Families (Nov. 1999).

Colton (1999). *Fair Housing in the Suburbs: The Role of a Merged Fleet Boston in The Diversification of the Suburbs: Report to the Federal Reserve Board Concerning the Merger of BankBoston Corp. and Fleet Financial Group*, prepared for Belmont Fair Housing Committee/Belmont Housing Partnership.

Colton (1999). *Measuring LIHEAP's Results: Responding to Home Energy Unaffordability*, prepared for Iowa Department of Human Resources.

Colton (1999). *Monitoring the Impact of Electric Restructuring on Low-Income Consumers: The What, How and Why of Data Collection*, prepared for U.S. Department of Health and Human Services, Administration for Children and Families.

Colton (1999). *Developing Consumer Education Programs in a Restructured Electric Industry*, prepared for Central Missouri Counties Community Development Corporation.

Colton (1999). *Electric Restructuring and the Low-Income Consumer: Legislative Implications for Colorado*, prepared for Colorado General Assembly.

Colton (1998). *Low-Income Electric Rate Affordability in Virginia: Funding Low-Income Assistance*, prepared for Virginia Council Against Poverty.

Colton and Alexander (1998). *The Implications of an Increased Federal Role in the Regulation of Electricity on State Regulation of Consumer Protection and Universal Service Programs*.

**COLTON EXPERIENCE AS EXPERT WITNESS**

**2005 – PRESENT**

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
I/M/O UGI-Electric	Office of Consumer Advocate	R-2017-2640058	Customer service / Low-income cost recovery	Pennsylvania	18
I/M/O Philadelphia Water Department requested rates for 2019 - 2021	Philadelphia Public Advocate	None	Water rate:: low-income program cost recovery / public fire protection / storm water charge exemptions	Philadelphia	18
I/M/O Commonwealth Edison Prepayment Meters	Illinois Office of Attorney General	17-0837	Electric customer service	Illinois	18
I/M/O 2018/2020 Statewide Energy Efficiency Plan	The Way Home / New Hampshire Legal Assistance	DE 17-136	Non-energy impacts / Low-income energy efficiency	New Hampshire	17
I/M/O DTE (electric) / gas EWR (energy waste reduction) plan	Sierra Club / Natural Resources Defense Council	Case No. U-18262	Low-income energy efficiency	Michigan	17
I/M/O DTE (electric)	Sierra Club / Natural Resources Defense Council	Case No. U-18255	Low-income energy efficiency	Michigan	17
I/M/O Merger of AltaGas and WGL Holdings	Office of People's Counsel	Case No. 9449	Low-income / charitable contributions / community impacts	Maryland	17
I/M/O Philadelphia Gas Works	Office of Consumer Advocate	R-2017-2587783	Low-income / rate design	Pennsylvania	17
I/M/O UGI-Peoples Natural Gas	Office of Consumer Advocate	R-2016-2580030	Low-income	Pennsylvania	17
I/M/O Peoples Natural Gas	Office of Attorney General	16-0376	Low-income	Illinois	17
I/M/O UGI-PNG	Office of Consumer Advocate	R-2016-2580030	Rate design/EE&CP/Low-Income	Pennsylvania	17

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
I/M/O Pacific Gas and Electric Company	TURN	15-09-001	Electric bill affordability	California	16
I/M/O FirstEnergy Companies (Met Ed, Penelec, PennPower, West Penn Power)	Office of Consumer Advocate	R-2016-2537349, R-2016-2537352, R-2016-2537355, R-2016-2537359 (consolidated)	Rate design / low-income program cost recovery	Pennsylvania	16
I/M/O PGW Demand Side Management	Office of Consumer Advocate	P-2014-2459362	Demand Side Management	Pennsylvania	16
I/M/O Columbia Gas of Pennsylvania	Office of Consumer Advocate	R-2016-2529660	Rate design / customer service / Low-income program cost recovery	Pennsylvania	16
I/M/O Philadelphia Water Department	Public Advocate, City of Philadelphia	N/A	Low-income program design	Philadelphia	16
I/M/O UGI Gas	Office of Consumer Advocate	M-2015-2518438	Rate design, energy efficiency, customer service	Pennsylvania	16
Keener v. Consumers Energy	Keener (plaintiff)	15-146908-NO	Collections	State District Ct--MI	16
I/M/O Energy Efficiency and Conservation Plan, Phase III, PECO Energy	Office of Consumer Advocate	M-2015-2515691	Multi-Family Energy Efficiency	Pennsylvania	16
I/M/O Energy Efficiency and Conservation Plan, Phase III, Duquesne Light Company	Office of Consumer Advocate	M-2015-2515375	Multi-Family Energy Efficiency	Pennsylvania	16
I/M/O Energy Efficiency and Conservation Plan, Phase III, FirstEnergy Companies (Metropolitan Edison, Penelec, Penn Power, West Penn Power)	Office of Consumer Advocate	M-2015-2514767; M-2015-2514768; M-2015-2514769; M-2015-2514772	Multi-Family Energy Efficiency	Pennsylvania	16
I/M/O Energy Efficiency and Conservation Plan, Phase III, PPL Electric Corporation	Office of Consumer Advocate	M-2015-251-2515642	Multi-Family Energy Efficiency	Pennsylvania	16
I/M/O BC Hydro	Public Interest Action Centre	N/A	Rate design / terms and conditions / energy efficiency	British Columbia	15-16

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
Augustin v. Philadelphia Gas Works	Augustin (Plaintiffs)	2:14—cv-04238	Constitutional notice issues	U.S. District Court (E.D. PA)	15
I/M/O PPL Utilities	Office of Consumer Advocate	R-2015-2469275	Rate design / customer service	Pennsylvania	15
I/M/O Columbia Gas Company	Office of Consumer Advocate	R-2015-2468056	Rate design / customer service	Pennsylvania	15
I/M/O PECO Energy Company	Office of Consumer Advocate	R-2015-2468981	Rate design / customer service	Pennsylvania	15
I/M/O Philadelphia Gas Works	Office of Consumer Advocate	P-2014-2459362	Demand Side Management	Pennsylvania	15
I/M/O SBG Management v. Philadelphia Gas Works	SBG Management	C-2012-2308454	Customer service	Pennsylvania	15
I/M/O Manitoba Hydro	Resource Action Centre		Low-income affordability	Manitoba	15
I/M/O FirstEnergy Companies (Met Ed, WPP, Penelec, Penn Power)	Office of Consumer Advocate	R-2014-2428742 (8743, 8744, 8745)	Rate design / customer service / storm communications	Pennsylvania	14
I/M/O Xcel Energy Company	Energy CENTS Coalition	E002/GR-13-868	Rate design / energy conservation	Minnesota	14
I/M/O Peoples Gas Light and Coke Company / North Shore Gas	Office of Attorney General	14-0224 / 14--0225	Rate design / customer service	Illinois	14
I/M/O Columbia Gas of Pennsylvania	Office of Consumer Advocate	R-2014-2406274	Rate design / customer service	Pennsylvania	14
I/M/O Duquesne Light Company Rates	Office of Consumer Advocate	R-2013-2372129	Rate design / customer service / storm communications	Pennsylvania	13
I/M/O Duquesne Light Company Universal Service	Office of Consumer Advocate	M-2013-2350946	Low-income program design	Pennsylvania	13
I/M/O Peoples-TWP	Office of Consumer Advocate	P-2013-2355886	Low-income program design / rate design	Pennsylvania	13
I/M/O PECO CAP Shopping Plan	Office of Consumer Advocate	P-2013-2283641	Retail shopping	Pennsylvania	13
I/M/O PECO Universal Service Programs	Office of Consumer Advocate	M-201202290911	Low-income program design	Pennsylvania	13

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
I/M/O Privacy of Consumer Information	Legal Services Advocacy Project	CI-12-1344	Privacy of SSNs & consumer information	Minnesota	13
I/M/O Atlantic City Electric Company	Division of Rate Counsel	BPU-12121071	Customer service / Storm communications	New Jersey	13
I/M/O Jersey Central Power and Light Company	Division of Rate counsel	BPU-12111052	Customer service / Storm communications	New Jersey	13
I/M/O Columbia Gas Company	Office of Consumer Advocate	R-2012-2321748	Universal service	Pennsylvania	13
I/M/O Public Service Company of Colorado Low-Income Program Design	Xcel Energy d/b/a PSCo	12A--EG	Low-income program design / cost recovery	Colorado	12
I/M/O Philadelphia Water Department.	Philadelphia Public Advocate	No. Docket No.	Customer service	Philadelphia	12
I/M/O PPL Electric Power Corporation	Office of Consumer Advocate	R-2012-2290597	Rate design / low-income programs	Pennsylvania	12
I/M/O Peoples Natural Gas Company	Office of Consumer Advocate	R-2012-2285985	Rate design / low-income programs	Pennsylvania	12
I/M/O Merger of Constellation/Exelon	Office of Peoples Counsel	CASE 9271	Customer Service	Maryland	11
I/M/O Duke Energy Carolinas	North Carolina Justice Center	E-7, SUB-989	Customer service/low-income rates	North Carolina	11
Re. Duke Energy/Progress Energy merger	NC Equal Justice foundation	E-2, SUB 998	Low-income merger impacts	North Carolina	11
Re. Atlantic City Electric Company	Division of Rate Counsel	ER1186469	Customer Service	New Jersey	11
Re. Camelot Utilities	Office of Attorney General	11-0549	Rate shock	Illinois	11
Re. UGI--Central Penn Gas	Office of Consumer Advocate	R-2010-2214415	Low-income program design/cost recovery	Pennsylvania	11
Re. National Fuel Gas	Office of Consumer Advocate	M-2010-2192210	Low-income program cost recovery	Pennsylvania	11
Re. Philadelphia Gas Works	Office of Consumer Advocate	P-2010-2178610	Program design	Pennsylvania	11
Re. PPL	Office of Consumer Advocate	M-2010-2179796	Low-income program cost recovery	Pennsylvania	11
Re. Columbia Gas Company	Office of Consumer Advocate	R-2010-2215623	Rate design/Low-income program cost recovery	Pennsylvania	11
Crowder et al. v. Village of Kauffman	Crowder (plaintiffs)	3:09-CV-02181-M	Section 8 utility allowances	Texas Fed Court	11
I/M/O Peoples Natural Gas Company.	Office of Consumer Advocate	T-2010-220172	Low-income program design/cost recovery	Pennsylvania	11

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
I/M/O Commonwealth Edison	Office of Attorney General	10-0467	Rate design/revenue requirement	Illinois	10
I/M/O National Grid d/b/a Energy North	NH Legal Assistance	DG-10-017	Rate design/revenue requirement	New Hampshire	10
I/M/O Duquesne Light Company	Office of Consumer Advocate	R-2010-2179522	Low-income program cost recovery	Pennsylvania	10
I/M/O Avista Natural Gas Corporation	The Opportunity Council	UE-100467	Low-income assistance/rate design	Washington	10
I/M/O Manitoba Hydro	Resource Conservation Manitoba (RCM)	CASE NO. 17/10	Low-income program design	Manitoba	10
I/M/O TW Phillips	Office of Consumer Advocate	R-2010-2167797	Low-income program cost recovery	Pennsylvania	10
I/M/O PECO Energy—Gas Division	Office of Consumer Advocate	R-2010-2161592	Low-income program cost recovery	Pennsylvania	10
I/M/O PECO Energy—Electric Division	Office of Consumer Advocate	R-2010-2161575	Low-income program cost recovery	Pennsylvania	10
I/M/O PPL Energy	Office of Consumer Advocate	R-2010-2161694	Low-income program cost recovery	Pennsylvania	10
I/M/O Columbia Gas Company	Office of Consumer Advocate	R-2009-2149262	Low-income program design/cost recovery	Pennsylvania	10
I/M/O Atlantic City Electric Company	Office of Rate Council	R09080664	Customer service	New Jersey	10
I/M/O Philadelphia Gas Works	Office of Consumer Advocate	R-2009-2139884	Low-income program cost recovery	Pennsylvania	10
I/M/O Philadelphia Gas Works	Office of Consumer Advocates	R-2009-2097639	Low-income program design	Pennsylvania	10
I/M/O Xcel Energy Company	Xcel Energy Company (PSCo)	085-146G	Low-income program design	Colorado	09
I/M/O Atmos Energy Company	Atmos Energy Company	09AL-507G	Low-income program funding	Colorado	09
I/M/O New Hampshire CORE Energy Efficiency Programs	New Hampshire Legal Assistance	D-09-170	Low-income efficiency funding	New Hampshire	09
I/M/O Public Service Company of New Mexico (electric)	Community Action of New Mexico	08-00273-UT	Rate Design	New Mexico	09
I/M/O UGI Pennsylvania Natural Gas Company (PNG)	Office of Consumer Advocate	R-2008-2079675	Low-income program	Pennsylvania	09
I/M/O UGI Central Penn Gas Company (CPG)	Office of Consumer Advocate	R-2008-2079660	Low-income program	Pennsylvania	09
I/M/O PECO Electric (provider of last resort)	Office of Consumer Advocate	R-2008-2028394	Low-income program	Pennsylvania	08

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
I/M/O Equitable Gas Company	Office of Consumer Advocate	R-2008-2029325	Low-income program	Pennsylvania	08
I/M/O Columbia Gas Company	Office of Ohio Consumers' Counsel	08-072-GA-AIR	Rate design	Ohio	08
I/M/O Dominion East Ohio Gas Company	Office of Ohio Consumers' Counsel	07-829-GA-AIR	Rate design	Ohio	08
I/M/O Vectren Energy Delivery Company	Office of Ohio Consumers' Counsel	07-1080-GA-AIR	Rate design	Ohio	08
I/M/O Public Service Company of North Carolina	NC Department of Justice	G-5, SUB 495	Rate design	North Carolina	08
I/M/O Piedmont Natural Gas Company	NC Department of Justice	G-9, SUB 550	Rate design	North Carolina	08
I/M/O National Grid	New Hampshire Legal Assistance	DG-08-009	Low-income rate assistance	New Hampshire	08
I/M/O EmPower Maryland	Office of Peoples Counsel	PC-12	Low-income energy efficiency	Maryland	08
I/M/O Duke Energy Carolinas Save-a-Watt Program	NC Equal Justice Foundation	E-7, SUB 831	Low-income energy efficiency	North Carolina	08
I/M/O Zia Natural Gas Company	Community Action New Mexico	08-00036-UT	Low-income/low-use rate design	New Mexico	08
I/M/O Universal Service Fund Support for the Affordability of Local Rural Telecomm Service	Office of Consumer Advocate	I-0004010	Telecomm service affordability	Pennsylvania	08
I/M/O Philadelphia Water Department	Public Advocate	No Docket No.	Credit and Collections	Philadelphia	08
I/M/O Portland General Electric Company	Community Action--Oregon	UE-197	General rate case	Oregon	08
I/M/O Philadelphia Electric Company (electric)	Office of Consumer Advocate	M-00061945	Low-income program	Pennsylvania	08
I/M/O Philadelphia Electric Company (gas)	Office of Consumer Advocate	R-2008-2028394	Low-income program	Pennsylvania	08
I/M/O Columbia Gas Company	Office of Consumer Advocate	R-2008-2011621	Low-income program	Pennsylvania	08
I/M/O Public Service Company of New Mexico	Community Action New Mexico	08-00092-UT	Fuel adjustment clause	New Mexico	08
I/M/O Petition of Direct Energy for Low-Income Aggregation	Office of Peoples Counsel	CASE 9117	Low-income electricity aggregation	Maryland	07
I/M/O Office of Consumer Advocates et al. v. Verizon and Verizon North	Office of Consumer Advocate	C-20077197	Lifeline telecommunications rates	Pennsylvania	07
I/M/O Pennsylvania Power Company	Office of Consumer Advocate	P-00072437	Low-income program	Pennsylvania	07

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
I/M/O National Fuel Gas Distribution Corporation	Office of Consumer Advocate	M-00072019	Low-income program	Pennsylvania	07
I/M/O Public Service of New Mexico--Electric	Community Action New Mexico	07-00077-UT	Low-income programs	New Mexico	07
I/M/O Citizens Gas/NIPSCO/Vectren for Universal Service Program	Citizens Gas & Coke Utility/Northern Indiana Public Service/Vectren Energy	CASE 43077	Low-income program design	Indiana	07
I/M/O PPL Electric	Office of Consumer Advocate	R-00072155	Low-income program	Pennsylvania	07
I/M/O Section 15 Challenge to NSPI Rates	Energy Affordability Coalition	P-886	Discrimination in utility regulation	Nova Scotia	07
I/M/O Philadelphia Gas Works	Office of Consumer Advocate	R-000061931	Low-income programs / credit and collections	Pennsylvania	07
I/M/O Equitable Gas Company	Office of Consumer Advocate	M-000061959	Low-income program	Pennsylvania	07
I/M/O Public Service Company of New Mexico	Community Action of New Mexico	Case No. 06-000210-UT	Late charges / winter moratorium / decoupling	New Mexico	06
I/M/O Verizon Massachusetts	ABCD	Case NO. DTE 06-26	Late charges	Massachusetts	06
I/M/O Section 11 Proceeding, Energy Restructuring	Office of Peoples Counsel	PC9074	Low-income needs and responses	Maryland	06
I/M/O Citizens Gas/NIPSCO/Vectren for Univ. Svc. Program	Citizens Gas & Coke Utility/Northern Indiana Public Service/Vectren Energy	Case No. 43077	Low-income program design	Indiana	06
I/M/O Public Service Co. of North Carolina	North Carolina Attorney General/Dept. of Justice	G-5, Sub 481	Low-income energy usage	North Carolina	06
I/M/O Electric Assistance Program	New Hampshire Legal Assistance	DE 06-079	Electric low-income program design	New Hampshire	06
I/M/O Verizon Petition for Alternative Regulation	New Hampshire Legal Assistance	DM-06-072	Basic local telephone service	New Hampshire	06
I/M/O Pennsylvania Electric Co./Metropolitan Edison Co.	Office of Consumer Advocate	N/A	Universal service cost recovery	Pennsylvania	06
I/M/O Duquesne Light Company	Office of Consumer Advocates	R-000061346	Universal service cost recovery	Pennsylvania	06
I/M/O Natural Gas DSM Planning	Low-Income Energy Network	EB-2006-0021	Low-income gas DSM program.	Ontario	06
I/M/O Union Gas Co.	Action Centre for Tenants Ontario (ACTO)	EB-2005-0520	Low-income program design	Ontario	06

CASE NAME	CLIENT NAME	Docket No. (if available)	TOPIC	JURIS.	YEAR
I/M/O Public Service of New Mexico merchant plant	Community Action New Mexico	05-00275-UT	Low-income energy usage	New Mexico	06
I/M/O Customer Assistance Program design and cost recovery	Office of Consumer Advocate	M-00051923	Low-income program design	Pennsylvania	06
I/M/O NIPSCO Proposal to Extend Winter Warmth Program	Northern Indiana Public Service Company	Case 42927	Low-income energy program evaluation	Indiana	05
I/M/O Piedmont Natural Gas	North Carolina Attorney General/Dept. of Justice	G-9, Sub 499	Low-income energy usage	North Carolina	05
I/M/O PSEG merger with Exelon Corp.	Division of Ratepayer Advocate	EM05020106	Low-income issues	New Jersey	05
Re. Philadelphia Water Department	Public Advocate	No docket number	Water collection factors	Philadelphia	05
I/M/O statewide natural gas universal service program	New Hampshire Legal Assistance	N/A	Universal service	New Hampshire	05
I/M/O Sub-metering requirements for residential rental properties	Tenants Advocacy Centre of Ontario	EB-2005-0252	Sub-metering consumer protections	Ontario	05
I/M/O National Fuel Gas Distribution Corp.	Office of Consumer Advocate	R-00049656	Universal service	Pennsylvania	05

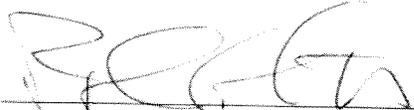
BEFORE THE  
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission	:	
	:	
v.	:	Docket No. R-2018-2647577
	:	
Columbia Gas of Pennsylvania, Inc.	:	

VERIFICATION

I, ROGER D. COLTON, hereby state that the facts set forth in my Direct Testimony, OCA Statement No. 4, are true and correct (or 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).

06/06/18  
Date

Signed:   
Roger D. Colton