

June 1, 2016

Mr. Aaron Greenwell
Acting Executive Director
Public Service Commission
Commonwealth of Kentucky
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602

RECEIVED

JUN 02 2016

PUBLIC SERVICE
COMMISSION

RE: Case No. 2016-00107

Dear Mr. Greenwell

Enclosed for docketing with the Commission is an original and ten (10) copies of Columbia Gas of Kentucky Inc.'s Amended and Supplemental Response to the Commission's Order of May 4, 2016. Columbia determined that the wording on the first page of its Response filed May 16, 2016 in the upper-right of the first page incorrectly identified the response as Set One No. 1, instead of Set Two No. 1. The response referred to attached summaries of three analyses that were inadvertently omitted. The complete corrected response is attached hereto.

Should you have any questions about this filing, please contact me at 614-460-4648.

Sincerely,

Stephen B. Seiple (jmc)

Stephen B. Seiple
Assistant General Counsel

Enclosures

cc: Hon. Richard S. Taylor

COLUMBIA GAS OF KENTUCKY, INC.
RESPONSE TO STAFF'S SECOND REQUEST FOR INFORMATION
DATED MAY 4, 2016

1. Provide the California Standard Tests – the Participant Test, the Program Administrator Test, the Ratepayer Impact Measure, and the Total Resource Cost Test individually for the High-Efficiency Appliance Rebate Program, the Home Audit Program, and the Modified Low-Income High Efficiency Furnace Replacement Program, and for Columbia's Demand Side Management program as a whole. If the test results are less than one, explain why Columbia believes the program should be continued.

Response:

The *California Standard Practice Manual* defines the Participant Test, the Program Administrator Test, the Ratepayer Impact Measure, and the Total Resource Cost Test as follows:

The Participant Test: The Participant Test is the measure of the quantifiable benefits and costs to the customer due to participation in a program.

The Program Administrator Cost Test: The Program Administrator Cost Test measures the net costs of a demand-side management program as a resource option based on the costs incurred by the program administrator (including incentive costs) and excluding any net costs incurred by the participant. The benefits are similar to the Total Resource Cost Test benefits.

The Ratepayer Impact Measurement Test: The Ratepayer Impact Measure (RIM) test measures what happens to customer bills or rates due to changes in utility revenues and operating costs caused by the program. Rates will go down if the change in revenues from the program is greater than the change in utility costs. Conversely, rates or bills will go up if revenues collected after program implementations are less than the total costs incurred by the utility in implementing the program. This test indicates the direction and magnitude of the expected change in customer bills or rate levels.

The Total Resource Cost Test: The Total Resource Cost Test measures the net costs of a demand-side management program as a resource option based on the total costs of the program, including both the participants' and the utility's costs. This test represents the combination of the effects of a program on both the customers participating and those not participating in a program. In a sense, it is the summation of the benefit and cost terms in the Participant and the Ratepayer Impact Measure tests, where the revenue (bill) change and the incentive terms intuitively cancel (except for the differences in net and gross savings).

The results of the Program Administrator Test, the Ratepayer Impact Measure, and the Total Resource Cost Test for the High-Efficiency Appliance Rebate Program and the Modified Low-Income High Efficiency Furnace Replacement Program will vary depending on the assumptions made regarding the extent to which the programs will induce customers not to switch to alternative sources of energy, such as electric energy for space heating. If it is assumed that a percentage of customers would have switched to an alternative energy source in the absence of the programs, then the impact of such effects should be considered in the analysis.

In the attached summaries, the standard tests were performed based on three sets of assumptions. In the first analysis, it is assumed that 2% of the customers receiving benefits under the High-Efficiency Appliance Rebate Program and the Modified Low-Income High Efficiency Furnace Replacement Program would have switched to an alternative energy source had the programs not been in effect over the analysis period. In the second analysis, it is assumed that 1% of the customers would have switched to an alternative energy source had the programs not been in effect over the analysis period. In the third analysis, it is assumed that none of the customers would have switched to an alternative energy sources had the programs not been in effect over the analysis period. The benefit/cost ratios for all three scenarios were calculated over a 20-year analysis period.

The Participant Test is greater than 1.0 for all programs. The Rate Impact Measure is less than 1.0 for all programs and for each of the three scenarios (or assumptions) regarding switching to alternative energy sources. It is Columbia's position that the programs should be continued despite the Rate Impact Measure being less than 1.0.

The Energy Audit Program and the High-Efficiency Appliance Rebate Program are available to all customers in Columbia's service territory. Therefore, these programs do not create subsidies from one type or class of customers to another.

At some point in the useful lives of their appliances or of their homes, all customers on Columbia's system could take advantage of these programs. Although the Modified Low-Income High Efficiency Furnace Replacement Program is only available to low-income customers (i.e., customer receiving LIHEAP funding), this program fulfills an important need in the communities served by Columbia. Because people receiving LIHEAP funding are typically the customers least able to replace their inefficient furnaces, this program makes it possible for those customers who cannot otherwise afford it to improve the energy efficiency of their appliances.

All of the programs create environmental and societal benefits by incentivizing customers to use energy more efficiently and to preserve a finite resource. The spending for each program is modest, and Columbia is not proposing to expand any of them at this time.

Columbia Gas of Kentucky

California Standard Tests

Assumed 2% Annual Customer Retentions for Furnace Rebates and Replacements

	Audit Program	High Efficiency Furnace Rebate Program	Low Income High Efficiency Furnace Replacement Program	All Programs
Cost/Benefit Test Ratios				
Participant Test	6.65	1.10	7.43	2.14
Program Administrator Test	2.63	1.77	0.88	1.66
Rate Impact Measure	0.42	0.58	0.70	0.52
Total Resource Cost Test	2.63	1.77	0.88	1.66
Participant Test				
Participant Benefits	\$ 2,126,483	\$ 1,650,266	\$ 163,476	\$ 3,940,225
Participant Costs	\$ 320,000	\$ 1,500,000	\$ 22,000	\$ 1,842,000
Program Administrator Test				
Avoided Costs	\$ 525,145	\$ 708,511	\$ 271,887	\$ 1,505,543
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000
Rate Impact Measure				
Avoided Costs	\$ 525,145	\$ 708,511	\$ 271,887	\$ 1,505,543
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000
Lost Revenue	\$ 1,058,657	\$ 821,575	\$ 81,386	\$ 1,961,618
Total Resource Test				
Avoided Costs	\$ 525,145	\$ 708,511	\$ 271,887	\$ 1,505,543
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000

KY PSC Case No. 2016-00107
 Staff's Data Request Set Two No. 1
 Respondent: William Steven Seelye
 Attachment 1

Columbia Gas of Kentucky

California Standard Tests

Assumed 1% Annual Customer Retentions for Furnace Rebates and Replacements

	Audit Program	High Efficiency Furnace Rebate Program	Low Income High Efficiency Furnace Replacement Program	All Programs
Cost/Benefit Test Ratios				
Participant Test	6.65	1.10	7.43	2.14
Program Administrator Test	2.63	1.40	0.51	1.36
Rate Impact Measure	0.42	0.46	0.40	0.43
Total Resource Cost Test	2.63	1.40	0.51	1.36
Participant Test				
Participant Benefits	\$ 2,126,483	\$ 1,650,266	\$ 163,476	\$ 3,940,225
Participant Costs	\$ 320,000	\$ 1,500,000	\$ 22,000	\$ 1,842,000
Program Administrator Test				
Avoided Costs	\$ 525,145	\$ 558,026	\$ 156,129	\$ 1,239,300
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000
Rate Impact Measure				
Avoided Costs	\$ 525,145	\$ 558,026	\$ 156,129	\$ 1,239,300
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000
Lost Revenue	\$ 1,058,657	\$ 821,575	\$ 81,386	\$ 1,961,618
Total Resource Test				
Avoided Costs	\$ 525,145	\$ 558,026	\$ 156,129	\$ 1,239,300
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000

KY 155L Case No. 2016-0016
 Staff's Data Request Set Two No. 1
 Respondent: William Steven Seelye
 Attachment 2

Columbia Gas of Kentucky

California Standard Tests

No Assumed Customer Retentions for Furnace Rebates and Replacements

	Audit Program	High Efficiency Furnace Rebate Program	Low Income High Efficiency Furnace Replacement Program	All Programs
Cost/Benefit Test Ratios				
Participant Test	6.65	1.10	7.43	2.14
Program Administrator Test	2.63	1.02	0.13	1.07
Rate Impact Measure	0.42	0.33	0.10	0.34
Total Resource Cost Test	2.63	1.02	0.13	1.07
Participant Test				
Participant Benefits	\$ 2,126,483	\$ 1,650,266	\$ 163,476	\$ 3,940,225
Participant Costs	\$ 320,000	\$ 1,500,000	\$ 22,000	\$ 1,842,000
Program Administrator Test				
Avoided Costs	\$ 525,145	\$ 407,541	\$ 40,371	\$ 973,057
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000
Rate Impact Measure				
Avoided Costs	\$ 525,145	\$ 407,541	\$ 40,371	\$ 973,057
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000
Lost Revenue	\$ 1,058,657	\$ 821,575	\$ 81,386	\$ 1,961,618
Total Resource Test				
Avoided Costs	\$ 525,145	\$ 407,541	\$ 40,371	\$ 973,057
Program Costs	\$ 200,000	\$ 400,000	\$ 308,000	\$ 908,000

KY PSC Case No. 2016-0010
 Staff's Data Request Set Two No. 1
 Respondent: William Steven Selig
 Attachment 3