May 31, 2017

VIA ELECTRONIC FILING

Rosemary Chiavetta, Secretary
Pennsylvania Public Utility Commission
Commonwealth Keystone Building
400 North Street, 2nd Floor North
P.O. Box 3265
Harrisburg, PA 17105-3265

Re: Columbia Gas of Pennsylvania, Inc.
Alternative Ratemaking Methodologies
Docket No. M-2015-2518883

Dear Secretary Chiavetta:

Pursuant to the Tentative Order Adopted March 2, 2017 by the Commission, enclosed please find the Comments of Columbia Gas of Pennsylvania, Inc. regarding the above captioned matter.

Should you have any questions, please do not hesitate to contact the undersigned at (717) 238-0463.

Very truly yours,

Andrew S. Tubbs

/kak
Enclosure

cc: Kriss Brown (e-mail kribrown@pa.gov)
    Marissa Boyle (maboyle@pa.gov)
    Andrew Herster (aherster@pa.gov)
BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

Alternative Ratemaking Methodologies : Docket No. M-2015-2518883 :

COMMENTS OF COLUMBIA GAS OF PENNSYLVANIA, INC.

I. INTRODUCTION

On March 16, 2016, the Pennsylvania Public Utility Commission ("Commission") held an en banc hearing at the above-captioned docket to seek information from interested stakeholders on the efficacy and appropriateness of alternatives to traditional ratemaking principles for public utilities. Interested parties, including Columbia Gas of Pennsylvania, Inc. ("Columbia," "the Company," or "CPA"), testified before the Commission, and provided their views on whether alternative ratemaking methodologies encourage utilities to implement energy efficiency and conservation programs, are just and reasonable and in the public interest, and are cost-effective. In addition to the testimony, the Commission requested that interested stakeholders file written comments on or before March 16, 2016, relative to alternative ratemaking methodologies. The Commission received numerous comments, from a variety of stakeholders, including utilities, environmental interests, low-income customer groups, residential customer representative, and small and large commercial and industrial customers.
On March 2, 2017, the Commission issued a Tentative Order continuing its investigation by seeking additional comments on potential processes to advance alternative rate methodologies that address issues each utility industry faces. ("March 2nd Tentative Order"). Columbia appreciates the opportunity to provide input on this important issue, and commends the Commission for soliciting additional comments on this important topic.

Columbia commits to working with the Commission and other interested parties to evaluate and implement alternative ratemaking methodologies that emphasize the traditional principles that guide the development of rate design. These principles include: efficiency, simplicity, continuity, fairness, and earnings stability. An efficient rate design provides an accurate basis for consumers’ decisions, and affords the Company a reasonable opportunity to recover the costs of providing distribution service. A simple rate structure is one that is simply understood by customers. The goal of rate continuity implies that customers will have an adequate opportunity to adjust their consumption patterns, as needed, allowing the opportunity to achieve conservation and energy efficiency goals. A fair rate design considers results of allocated cost of service studies in determining a customer class’s total revenue responsibility. Finally, earnings stability means that the Company’s revenue resulting from its rates should not vary significantly over the period of a few years.

The March 2nd Tentative Order identified a number of questions specifically addressed to natural gas distribution companies ("NGDC"). In the comments below, Columbia will respond to the questions contained in the March 2nd Tentative Order, as well as respond to specific questions posed by individual commissioners.
II. BACKGROUND

Columbia Gas of Pennsylvania, Inc. is engaged in the business of furnishing natural gas distribution service to approximately 423,000 customers pursuant to certificates of public convenience and necessity issued by the Commission. Columbia provides service to numerous communities in 26 counties in western and south-central Pennsylvania. Columbia is a subsidiary of NiSource, Inc. ("NiSource"). NiSource, headquartered in Merrillville, Indiana, is an energy holding company whose subsidiaries provide natural gas and electricity distribution services to approximately 3.9 million customers located within a corridor that runs from the Midwest to New England. The NiSource gas distribution companies are: Northern Indiana Public Service Company, Bay State Gas Company d/b/a Columbia Gas of Massachusetts, Columbia Gas of Kentucky, Columbia Gas of Maryland, Columbia Gas of Ohio, Columbia Gas of Pennsylvania, and Columbia Gas of Virginia.

To support the Company's substantial investment in its accelerated pipeline replacement program, Columbia has filed six base rate increases since 2008, and, in two of those cases, the Company submitted residential rate design proposals that sought to depart from traditional methods. In 2011, Columbia proposed the establishment of a monthly Levelized Distribution Charge ("LDC") for its residential customer class. As proposed, an LDC would have permitted Columbia to recover fixed costs through a higher monthly customer charge, while using volumetric rates to recover variable costs, such as gas costs and certain riders. However, since an LDC was not approved by the Commission, Columbia considered other residential rate design options in its next base rate proceeding.
In its 2012 base rate case, Columbia expanded its alternative rate design options to include proposals to implement a residential Revenue Normalization Adjustment ("RNA") and Weather Normalization Adjustment ("WNA"), as well as the LDC proposal as recommended by Columbia in its 2011 rate case. The WNA was approved in the 2012 case as a three-year pilot program. The three-year pilot program expired as of May 23, 2016, but the rate remains in effect until the Company’s next base rate proceeding. Columbia is currently considering rate making options for future cases.

III. COMMENTS

A. Commission Questions

In its March 2nd Tentative Order the Commission contained a number of specific questions intending to obtain additional comments on the reasonableness and efficacy of NGDCs utilizing alternative rate methodologies in a manner that balances the potential competing interests associated with system expansion and infrastructure replacement. Below are Columbia’s responses to the Commission’s questions:

1. Identify the alternative rate methodology(ies) each NGDC is currently using, including the number and types of automatic adjustment clauses, cost trackers and separate cost recovery mechanisms. Also identify, as a percentage of total costs or revenues, the costs or revenues each separate mechanism recovers.

Columbia and its sister NiSource affiliated gas distribution companies’ use or have had the opportunity to use several different ratemaking mechanisms and adjustments. These mechanisms include charges, riders, deferred regulatory assets, refunds, credits, adjustments and more. A list and subsequent explanation of each

---

1 Note: Stated percentages of total revenue are based on actual billed revenue in the month of December 2016. Some recovery mechanisms show 0.00% of total revenue because either the mechanism has been reset to zero as a result of a recent rate case or the mechanism simply defers cost to be included in the next rate case for future recovery through base rates.
mechanism, as well as an identification of the percentage of total costs or revenues, are used by the Company as follows:

**Columbia Gas of Pennsylvania, Inc.**

- **Distribution System Improvement Charge ("DSIC"): 0.00% of Billed Revenue**
  This charge recovers the reasonable and prudent costs incurred to repair, improve, or replace eligible property, which is completed and placed in service and recorded in the individual accounts, between base rate cases. This change also provides the utility with the resources to accelerate the replacement of aging infrastructure, to comply with evolving regulatory requirements, and to develop and implement solutions to regional supply problems. The costs of extending facilities to serve new customers are not recoverable through the DSIC. While Columbia is authorized to implement a DSIC, Columbia has not had a DISC in effect since July 1, 2013, due to the scale of Columbia's investments in replacement pipe. Specifically, due to the scale of Columbia's investments in replacement pipe, Columbia's requested overall distribution (i.e. exclusive of gas costs) revenue increases in its base rate cases since 2013 have exceeded the current 5% cap on DSIC surcharges. In addition, the DSIC does not permit recovery of O&M costs.

- **Universal Service Plan ("Rider USP"): 4.61% of Total Revenue**
  This rider recovers costs related to the Company's Universal Service and Conservation Programs. This rider is included in the pass-through charges on the customer's bill for Rate Schedules Residential Sales Service ("RSS") and Residential Distribution Service ("RDS"). It is applicable to all residential customers except customers in the Company's Customer Assistance Plan ("CAP").

- **Rider GPC-Gas Procurement Charge: 0.48% of Billed Revenue**
  The Gas Procurement Charge is a volumetric charge included in the Gas Supply Charge that reflects the Company's natural gas procurement costs. The rider identifies and removes the natural gas procurement costs from base rates and recovers the costs through the Gas Supply Charge on a revenue neutral basis.

- **Weather Normalization Adjustment ("WNA"): 0.59% of Billed Revenue**
  WNA is applied to Residential customers under Rate Schedules RSS, RDS, and CAP for the heating season October through May. The WNA for a billing period will apply only if the actual heating degree days are lower than 95% or higher than 105% of the normal heating degree days for the billing cycle.

- **Rider Customer Choice ("CC"): 0.00% of Billed Revenue**
  This rider recovers costs related to providing Customer Choice to customers in Pennsylvania. In addition to the charges provided in this Tariff, an amount is added to the otherwise applicable charge for each therm of sales quantities or
distribution quantities distributed by the Company to Customer receiving service under Rate Schedules, RSS, RDS, and SCD, SGSS, SGDS, and DGDS using less than or equal to 64,400 therms annually. The Rider CC rate is included as a pass-through charge on the customer bill.

- **Rider Merchant Function Charge ("MFC"): 0.25% of Billed Revenue**  
The Merchant Function Charge reflects the cost of uncollectibles associated with natural gas costs billed to applicable customers by the Company. The rider is applicable to residential customers taking service under Rate Schedules RSS, or CAP and commercial or industrial customers taking service under Rate Schedules SGSS. The rider MFC is included in the Gas Supply Charge on the customer bill.

- **Purchased Gas Cost Rider: 30.24% of Billed Revenue**  
Rider PGC recovers the purchased gas costs applicable to sales service customers, SGDS Priority One Customers, and charged to CHOICE Distribution Service Customers. The rates for recovery of purchased gas costs are subject to quarterly adjustments under Commission regulations. Calculated rates are for the recovery of both demand and commodity costs.

- **Alternative Rate Mechanisms Utilized by Other Columbia Companies**  
In addition to CPA, five of Columbia's affiliated companies have implemented alternative rate designs. These companies include Columbia of Kentucky, Maryland, Virginia, Massachusetts and Ohio. As described below, Columbia of Pennsylvania has a WNA with a 5% dead band. The Company is completing its fourth year of the WNA pilot. Columbia Gas of Maryland along with Kentucky and Virginia have WNA programs with no dead bands for adjustments.

In addition to WNA, Maryland and Virginia have also implemented RNA mechanisms. An RNA coupled with a WNA rate mechanism which includes no dead band is an effective method of limiting the billing adjustments needed through the RNA. Since the WNA adjustments occur in real time and are customer specific, Columbia prefers to utilize a WNA along with an RNA.

Columbia Gas of Massachusetts and Ohio have also implemented decoupling mechanisms. In 2009, the Massachusetts Department of Public Utilities approved an alternative rate design structured as a "revenue per customer" program. Under this approach, benchmark base revenues are calculated for each customer group for peak and off-peak seasons. Annually, Columbia of Massachusetts submits two decoupling filings and adjusts base rates to refund or collect any differences from the benchmark revenue levels.

In 2008, Columbia Gas of Ohio received approval from the Public Utilities Commission of Ohio for LDC. Ohio's LDC was phased in with an initial rate change occurring in December 2008. The first rate change included a higher fixed charge and a reduced volumetric rate. The second change became effective in December 2009, and the LDC has remained constant for new and existing customers since that date.
Columbia has determined that the use of alternative rate designs is appropriate and beneficial for its customers. Rate designs should be carefully analyzed by individual companies, since there is not a single rate design applicable in all circumstances.

2. If any, what alternative rate methodology(ies) could and should be used by NGDCs and explain why would they be beneficial? Regarding the proposed methodology(ies), please provide specific comments on:
   a. The potential advantages;
   b. The potential disadvantages;
   c. The effects on all rate classes, with a specific focus on small volume, low-income, income-challenged and large C&I customers, as well as a discussion regarding any potential inter-or intra-class cost shifting;
   d. The effects on existing energy efficiency programs; and
   e. The effects on the number and/or frequency of base rate case filings, as well as possible rate increases or decreases.

It is Columbia’s position that each Pennsylvania NGDCs’ rate design options should be individually analyzed, as no single rate design is applicable for all circumstances. Columbia has considered using a Levelized Distribution Charge (“LDC”), a Revenue Normalization Adjustment (“RNA”) and a Weather Normalization Adjustment (“WNA”). These rate design mechanisms, including some advantages and disadvantages, are described below:

2. (a) – (c):

**Levelized Distribution Charge**

An LDC is essentially a straight fixed variable rate design, which features a flat monthly fee for distribution service coupled with a separate volumetric charge for the gas commodity. Under the LDC previously proposed by Columbia, the gas cost portion of customers’ bills would remain subject to usage based rates. However, fixed costs – which are not impacted by customer usage – would be recovered through a fixed charge. Thus, the flat fee replaces both the “traditional” customer charge and the usage-based
distribution rate and allows the utility to have a steady revenue stream that is linked to customer count instead of gas throughput. Likewise, the customer pays the same fixed amount for distribution service each month.

As stated above, under the LDC gas costs would continue to be charged on the basis of commodity usage, as would the unbundled uncollectibles cost that relates to gas cost charges. In addition, Columbia’s Rider USP – Universal Service Plan would continue to be charged on a volumetric basis. Low income customers served under Columbia’s Rate CAP – Customer Assistance Program (“CAP”) would continue to be billed based upon their CAP payment.

Columbia recognizes that a residential LDC represents a substantial departure from the customer charge and volumetric base rate structure that Pennsylvania gas utilities traditionally have used for residential rate design. However, the Company respectfully submits that there are some advantages.

A residential LDC most accurately reflects cost causation. Simply stated, Columbia incurs costs to provide distribution service to residential customers that do not vary with customer usage. A gas utility designs and installs a distribution system to meet customers’ design day requirements. These distribution facilities include mains, regulators, services and meters. These costs are fixed and do not vary with the amount of gas consumed. A rate design should follow costs. Columbia submits that recovery of the same level of distribution costs from all residential customers, regardless of their levels of consumption, is consistent with that rate design principle. Traditional usage-based recovery of fixed costs improperly causes lower use customers to be subsidized by higher than average use customers and, as such, is out of step with cost causation. In
summary, a residential LDC removes existing intra-class cross subsidies that result from charging distribution costs on a volumetric basis.

Along with increasing the understandability of customers’ bills, a LDC provides many other benefits, including: (1) low implementation costs; (2) no need for rate adjustments or caps; (3) consistent treatment of existing and new customers; and (4) no requirement to have periodic proceedings to “re-link” revenue with other ratemaking inputs. Additionally, by using a customer-based fixed charge to align rates with the cost of service, rate cases would be simplified as issues such as weather normalization and volume forecasting would be eliminated for the residential class.

**Revenue Normalization Adjustment Charge**

The RNA provides benchmark distribution revenue levels regardless of changes in customers’ actual usage levels. As proposed by Columbia in its 2012 base rate case, a RNA would adjust actual non-gas distribution revenue to recover the Commission-approved non-gas distribution revenue for the non-CAP residential customer class. Columbia’s proposed RNA was designed to “break the link” between residential non-gas revenue received by the Company and gas consumed by residential customers. The adjustment was to be calculated every six months based upon a comparison of benchmark distribution revenue to the actual billed revenue. Benchmark distribution revenues would be established for non-CAP residential customers, whose bills would be adjusted on a per therm basis. It is important to note that residential customers’ bills would still vary with the RNA approach. However, like the LDC, under the RNA, gas cost recovery would still be subject to fluctuations and influenced by weather and customer behaviors.
The RNA promotes revenue stabilization because the RNA relies on revenue per customer, not usage per customer. Once a revenue requirement is set through a base rate case proceeding, then a baseline revenue per customer is established. The Company would refund any amount over the baseline revenue per customer and would be allowed to collect any amount below the baseline revenue per customer. Hence, the RNA is both fair and reasonable for the customer and the Company.

**Weather Normalization Adjustment Charge**

In the Columbia’s 2012 base rate proceeding, the Commission approved the establishment of a pilot WNA program. The WNA design adjusts a customer’s monthly revenue based on the actual temperature experienced during the month. Under the WNA, the Company and customers are only protected from variations due to weather. The WNA adjusts only the temperature-sensitive portion of customers’ bills to reflect normal weather levels. By distinguishing between base load and temperature-sensitive load, each customer’s bill is calculated to mitigate the undesirable impacts of warmer than normal or colder than normal weather.

While the WNA was a step in the right direction, Columbia notes that the WNA does not fully stabilize distribution revenues, as WNA only targets weather-related variances. The Company’s current residential rate design, even with WNA, is not optimal because it does not align the revenue recovered by the Company for providing gas delivery service with the costs incurred to provide that service. Further, variations in energy usage due to other factors, such as the economy and end-use energy efficiency may still occur and are not normalized through WNA. Consequently, the WNA does not provide the same bill and revenue stability offered through the RNA or the LDC. Additionally, Columbia’s WNA includes a 5% dead band, which means that a billing
adjustment will only occur if the variation of actual heating degree days is lower than 95% or higher than 105% of the normal heating degree days for an individual billing cycle.

Pursuant to Paragraph 41(b) of the Joint Petition for Settlement approved by the Commission Order entered on May 23, 2013 at Docket No. R-2012-2321748, Columbia has filed reports concerning the operation of the WNA for the 2013/2014, 2014/2015 and 2015/2016 heating seasons. These reports include the monthly computation and supporting data of the WNA. The first two heating seasons were colder than normal and, as a result, the Company billed less to residential customers than it would have billed without the WNA mechanism. For the 2013/2014 season, WNA revenue adjustment was ($9.36M), and for the 2014/2015 season, WNA revenue adjustment was ($10.98M). The 2015/2016 heating season was warmer than normal and, as a result, the Company billed more to residential customers than it would have billed without the WNA mechanism. For the 2015/2016 season, WNA revenue adjustment was $11.52M. The 2016/2017 heating season has been warmer than normal, and information through April shows a WNA revenue adjustment of $13.31M. This amount will change after the completion of May 2017. Columbia's four years of experience with the WNA demonstrate that this mechanism provides stability by adjusting bills for colder and warmer than normal weather. The WNA is effective at providing customer specific billing adjustments in a timely manner.

Of the alternative rate methodologies discussed, the LDC and the RNA above, only the WNA is currently in effect. Currently, the WNA only applies to the residential class and at this time any proposed RNA or LDC would apply only to the residential class and therefore there would be no revenue impact to the commercial and industrial
rate classes. Because CPA does not currently bill an RNA, CPA has used actual billed data and billing determinants from CPA’s 2015 rate case (R-2015-2468056) to illustrate in Table 1 below which shows the revenue impact per customer had an RNA been in effect as a result of case no. R-2015-2468056. Table 2 shows the impact per customer to residential revenue had an LDC been in effect as a result of case no. R-2015-2468056. Finally, Table 3 shows the impact to residential revenue impact per customer because a WNA was in effect as a result of case no. R-2015-2468056.

In each of the three tables the revenue effect to all residential customers, the Customer Assistance Plan ("CAP") customers, Non-CAP low-income customers, Income-challenged customers, and small customers are shown for the 12 months ending September 2017. Non-CAP low-income customers are those customers who are within 150% of the federal poverty level that are not enrolled in the CAP program, Income-challenged customers are those customers who are between 150% and 200% of the federal poverty level and small volume customers are those who theoretically use half the average volume usage each month during the 12 months ending September 2017. Please note: The tables below for CAP only details the revenue impact and not a reflection of the impact on a CAP customers’ required payment. Since CAP is based on income and other factors, the majority of CAP customers will not see a change in their CAP payment as a result of a rate change.
### Table 1 – Impact of RNA

<table>
<thead>
<tr>
<th>Category</th>
<th>Average $ Per Customer Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Residential Customers</td>
<td>$11.15</td>
</tr>
<tr>
<td>CAP Only</td>
<td>$0.00²</td>
</tr>
<tr>
<td>Low Income Non-CAP Only</td>
<td>$12.17</td>
</tr>
<tr>
<td>Income-Challenged Only</td>
<td>$12.72</td>
</tr>
<tr>
<td>Small Volume Customers</td>
<td>$5.59</td>
</tr>
</tbody>
</table>

² It is important to recognize those on CAP will be impacted differently based on program design. Two thirds of Columbia's CAP customers would not be impacted by any rate design or adjustment. The other third, those on percent of budget would be impacted at 50% of the total rate change at the point their budget is adjusted.

### Table 2 – Impact of LDC

<table>
<thead>
<tr>
<th>Category</th>
<th>Average $ Per Customer Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Residential Customers</td>
<td>$6.61</td>
</tr>
<tr>
<td>CAP Only</td>
<td>$0.00²</td>
</tr>
<tr>
<td>Low Income Non-CAP Only</td>
<td>($49.93)</td>
</tr>
<tr>
<td>Income-Challenged Only</td>
<td>($70.18)</td>
</tr>
<tr>
<td>Small Volume Customers</td>
<td>$212.74</td>
</tr>
</tbody>
</table>
Table 3 – Impact of WNA

<table>
<thead>
<tr>
<th></th>
<th>Average $ Per Customer Per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Residential Customers</td>
<td>$32.93</td>
</tr>
<tr>
<td>CAP Only</td>
<td>$0.00^2</td>
</tr>
<tr>
<td>Low Income Non-CAP Only</td>
<td>$36.71</td>
</tr>
<tr>
<td>Income Challenged Only</td>
<td>$38.36</td>
</tr>
<tr>
<td>Small Volume Customers</td>
<td>$16.47</td>
</tr>
</tbody>
</table>

Because the current WNA only applies to the residential rate class and because current thinking is that CPA would only apply either an RNA or a LDC to the residential rate class, there is no nor would there be any inter-class shifting of cost recovery as a result of the mechanisms discussed above. However, as discussed below, the current cross subsidization within the residential rate class will continue to occur absent the implementation of an LDC rate design.

As demonstrated below, the test year cost to provide gas distribution service for a residential customer is fixed regardless of the amount of gas consumed by the customer. Charging volumetric rates to recover fixed costs creates intra-class subsidies and does not properly reflect the actual cost of service. Ideally, residential customers would be charged a flat monthly rate for their distribution services, as it most accurately reflects the manner in which the Company incurs costs to serve residential customers. However, a gradual approach to allow customers to adapt may be preferable. Until then, residential customers are billed partially through a fixed monthly charge and partially through a usage-based charge. This creates subsidies within the residential
class because it causes those customers who use more than the average residential class, to pay more than their fair share of the Company’s costs of providing them distribution service, and it causes those customers who use less than the average residential class to pay less than what they truly should pay for residential service. The greater the Company’s Customer Charge (Fixed Monthly Charge) the less the subsidies between customers within the residential class.

The principle of rate stability typically applies to customer rates. This principle suggests that reasonably stable and predictable prices are important objectives of a proper rate design. It is important to measure stability by looking at both the percentage increase and the amount of the increase separate from the percentage increase. When subsidies exist in a utility’s current rates, and new rates seek to eliminate the subsidy, there is a need to find a method to move to the appropriate cost-based rate. This creates differing impacts among customers within a particular rate class. As a result, the Company would propose to increase the customer charge gradually over time.

Not only are distribution costs fixed, they are virtually the same for all residential customers based on the minimum size of main and service installed. The reason that these costs are the same is based on the economies of scale in a gas delivery system. Since the Company uses a common size of two inches as the smallest size of main, the Company has analyzed the ability of a two inch main to serve the Company’s residential customers using the system average density 10.9 (432,386 customers / 39,492,004 feet of mains x 1,000 feet) customers per thousand feet of main, the standard operating pressure of 60 pounds, and the standard pressure drop at the house regulator using data from CPA’s 2016 rate case (R-2016-2529660). By applying pipeline flow formulas, it is
possible to determine the amount of gas that would flow through the pipe under design day conditions and to estimate the maximum demand that the pipe would serve.

<table>
<thead>
<tr>
<th>Size of Main (inches)</th>
<th>Design Day Flow Capacity (Mcf/d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>202</td>
</tr>
<tr>
<td>4</td>
<td>1,111</td>
</tr>
</tbody>
</table>

Table 4 - Gas Distribution Scale Economies

CPA serves about 10.9 customers per 1,000 feet of main on average based on an average density within its service area of 58 customers per mile of main. This analysis shows that the minimum size of main will serve 18.5 Mcf of design day demand per customer (202 Mcf / 10.9 customers). Using a conservative 20% annual load factor for residential customers, the two inch main would serve all customers using less than about 1,351 Mcf per year (18.5 Mcf/day/customer x 365 days x 20% load factor). Based on the Company’s annual bill frequency for its residential customers, the minimum size of main will serve virtually all of its residential customers on the gas system. Thus, it is reasonable to conclude that it costs the same, on average, to serve all residential customers regardless of consumption.

2. (d)

Existing Energy Efficiency Programs would not be impacted by the implementation of an alternative rate design method. Customers electing to implement conservation measures would retain the opportunity to experience savings on their gas bills with rate design methods, including WNA, RNA and LDC. Charges related to gas supply would remain volumetric with all of the alternative rate design models and would provide customers accurate price signals for the commodity. Additionally, under WNA
and RNA, a significant portion of the Company’s base revenue requirement would continue to be billed using volumetric fees.

2. (e)

As noted in the responses to subparts 2 (a) – (c) above, the benefits associated with the alternative rate design methodologies considered in these comments include stabilizing customers’ bills and the Company’s revenue collections given an approved revenue requirement. These alternative rate design methodologies do not provide for the recovery of incremental capital expenditures associated with Columbia’s Long-Term Infrastructure Replacement Program.

3. How would the particular alternative rate methodology(ies) interact with existing mechanisms or traditional ratemaking principles currently in use or available to NGDCs (e.g., DSIC, FPFTY, etc.)?

Columbia has already implemented a WNA and is using this rate design mechanism in conjunction with a Fully Forecasted Rate Year (“FFRY”) in Pennsylvania. Both LDC and RNA could also be implemented along with a FFRY and/or a DSIC. Some of Columbia’s other state jurisdictions have already implemented alternative rate design methodologies along with forecasted test years and infrastructure trackers. For example, Columbia Gas of Virginia uses a forecasted test year, an infrastructure tracker, weather normalization and revenue normalization adjustments. Also, Columbia Gas of Ohio has a LDC and an infrastructure tracker.

4. Address the efficacy of weather normalization adjustments currently in use, what changes should be made to the adjustments to improve them and whether they should be expanded to other NGDCs.

Columbia’s current WNA adjusts a customer’s monthly revenues based on the actual temperature experienced during the month. Maintaining a WNA, along with the RNA, would ensure that deviations in delivery service revenue caused solely by warmer
or colder than normal weather are reflected in real time. As noted below, WNA adjustments are based solely on each customer's usage behavior, and assist in minimizing revenue adjustments required through the RNA.

Under the WNA, only the temperature-sensitive portion of customers' bills are adjusted to reflect normal winter levels. Columbia's existing WNA includes a 5% dead band, which provides for billing adjustments to occur if the variation of actual heating degree days is lower than 95% or higher than 105% of the normal heating degree days for an individual billing period. Columbia is evaluating changes to its existing WNA mechanism. Specifically, Columbia supports removing the existing 5% dead band and eliminating weather adjustments in the month of October.

Columbia Gas of Maryland, Inc. ("CMD") and Columbia Gas of Kentucky, Inc. ("CKY") have WNA mechanisms with no dead bands for adjustments. These WNA mechanisms are applied to residential and small commercial customers and are effective for the months of December through April.

The Company's existing WNA is a pilot program and expires in the Company's next base rate proceeding. Based upon the success of the WNA pilot, Columbia intends to request to permanently continue the WNA, with the modifications noted above, in the Company's next rate case.

5. **How would such a methodology be implemented? Specifically, in what timeframe? Is there a need for a gradual implementation or phasing-in process?**

Columbia would propose to implement the RNA, in conjunction with a WNA, beginning with the effective date of new base rates in the Company's next rate case. Baseline revenue levels approved by the Commission in a base rate case would be used
to set the billing determinants. For this specific rate design option, a gradual implementation or phasing-in process would not be necessary.

B. Vice Chairman Place’s Questions

1. Provide overall supportive or critical comments to the outlined NGDC decoupling structure.

Columbia suggests a RNA working in conjunction with a WNA. A RNA may serve as a compromise between competing rate designs and would benefit both Columbia and its customers. As noted by Vice Chairman Place in his March 2nd statement, “a “revenue per customer” model...would adjust the NGDCs volumetric rates in a manner that more closely enables the recovery of the cost of service authorized in a base rate case for those rate schedules subject to the rate adjustment mechanism.”

The RNA envisioned by Columbia would work in conjunction with the Company’s existing WNA. A RNA provides benchmark distribution revenue levels regardless of changes in customers’ actual usage. As proposed by Columbia in its 2012 base rate case, the RNA would adjust actual non-gas distribution revenue to recover the Commission-approved non-gas distribution revenue for the non-CAP residential customer class. As proposed, the RNA is intended to “break the link” between residential non-gas revenue received by the Company and gas consumed by residential customers.

2. Has this proposal been successfully or unsuccessfully implemented in other jurisdictions?

As discussed in the Company’s response to the Commission’s first question, Columbia has implemented similar rate design mechanisms in its other state jurisdictions. Generally, the alternative rate designs implemented by the Company have been successful. Experience from Columbia’s other jurisdictions has been considered in
the context of proposing a rate design mechanism for Columbia Gas of Pennsylvania, Inc.

3. **Are there any statutory or regulatory barriers in Pennsylvania to revenue-per-customer decoupling for NGDCs?**

Columbia is unaware of any statutory or regulatory barriers to revenue-per-customer decoupling for NGDCs in Pennsylvania.

4. **What are the general potential bill impacts associated with the form of decoupling?**

Because CPA does not currently bill an RNA, CPA has used actual billed data and billing determinants from CPA's 2015 rate case (R-2015-2468056) to illustrate in Table 5 below the revenue impact per customer had a RNA been in effect as a result of case no. R-2015-2468056 for the 12 months ending September 2017. Table 6 shows the month in which there would be the lowest impact to the customer during the 12 months ending September 2017. Table 7 shows the month in which there would be the highest impact to the customer during the 12 months ending September 2017.

**Table 5 - Annual impact of RNA**

<table>
<thead>
<tr>
<th></th>
<th>Average $ Per Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Residential Customers</td>
<td>$11.15</td>
</tr>
<tr>
<td>CAP Only</td>
<td>$0.00³</td>
</tr>
<tr>
<td>Low Income Non-CAP Only</td>
<td>$12.17</td>
</tr>
<tr>
<td>Income Challenged Only</td>
<td>$12.72</td>
</tr>
<tr>
<td>Small Volume Customers</td>
<td>$5.59</td>
</tr>
</tbody>
</table>

³ It is important to recognize those on CAP will be impacted differently based on program design. Two thirds of Columbia’s CAP customers would not be impacted by any rate design or adjustment. The other third, those on percent of budget would be impacted at 50% of the total rate change at the point their budget is adjusted.
Table 6 – Lowest Month impact of RNA

<table>
<thead>
<tr>
<th></th>
<th>Average $ Per Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Residential Customers</td>
<td>$0.11</td>
</tr>
<tr>
<td>CAP Only</td>
<td>$0.00³</td>
</tr>
<tr>
<td>Low Income Non-CAP Only</td>
<td>$0.11</td>
</tr>
<tr>
<td>Income-Challenged Only</td>
<td>$0.11</td>
</tr>
<tr>
<td>Small Volume Customers</td>
<td>$0.06</td>
</tr>
</tbody>
</table>

Table 7 – Highest Month impact of RNA

<table>
<thead>
<tr>
<th></th>
<th>Average $ Per Customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Residential Customers</td>
<td>$2.42</td>
</tr>
<tr>
<td>CAP Only</td>
<td>$0.00³</td>
</tr>
<tr>
<td>Low Income Non-CAP Only</td>
<td>$2.54</td>
</tr>
<tr>
<td>Income Challenged Only</td>
<td>$2.65</td>
</tr>
<tr>
<td>Small Volume Customers</td>
<td>$1.21</td>
</tr>
</tbody>
</table>

5. **Should the use of decoupling be limited to NGDCs that are offering conservation and energy efficiency programs and, if so, what should be the required types and scope of such programs?**

No. Even though Columbia offers a comprehensive energy efficiency program for its low income and income-challenged residential customers only, as more efficient appliances replace less efficient appliances, average use per customer declines across all residential customer sectors. Given that the average life of a furnace is between 20 and 25 years, the replacement rate for lower efficiency furnaces is between four and five
percent per year. Pilotless gas equipment eliminating the standing pilot light contributes directly to reduced use of natural gas. Other technologies such as tankless water heating (the second largest household use of gas) will reduce annual gas consumption even over highly efficient tank water heaters. Absent a decoupling mechanism such as a LDC or RNA, these conservation measures impair CPA’s opportunity to recover the revenue requirement approved by the Commission in a rate case simply because of the current volume-based rate structure. Columbia does not support the ideology that a decoupling mechanism such as LDC or RNA would encourage customers to use more gas, the commodity charge itself is enough to create an incentive to reduce usage. The decision to offer energy efficiency programs is a reflection of the desire to improve customer satisfaction and customer service for those wanting energy efficiency options.

6. **Should measures of success be included in the implementation and how should the Commission ensure the incremental conservation and efficiency program benefits exceed costs?**

Columbia supports goals and program measurement with any program design. Program design and management take careful and thorough consideration, including the development of any evaluation and measurement plan as it relates to the specific designated outcomes. An Evaluation, Measurement and Verification (EM & V) plan, including a benefits to cost analysis, should be pre-determined within the scope of any approved energy efficiency program.

7. **Should the Commission undertake periodic evaluations as a means for establishing the overall impacts, as well as the effectiveness of design and administration?**

If the Commission seeks to obtain additional information relative to the operation of alternative rate designs, Columbia recommends that the Commission
require annual informational filings supporting the operation and computation of the alternative rate design. Columbia currently submits this level of detail relative to the operation of its existing WNA.

8. **How should the Commission design the mechanism to true-up forecast and actual utility delivery service revenues?**

Under RNA, utility delivery service revenues could be trued-up to actual revenues by using the average usage per customer established as part of a base rate proceeding. Columbia proposes to establish monthly benchmark revenues for residential customers. The RNA credit/charge would be computed on a monthly basis, as actual information becomes available.

Monthly amounts would be accumulated for two six-month periods, the peak period and the off-peak period. The peak period is defined as October through March and the off-peak period is the remaining six months. The RNA credit / charge for each period will include the RNA revenues prior peak or off-peak period. Any resulting over or under collection would be included in the next RNA charge for the applicable period.

9. **To what rate classes should decoupling apply?**

Decoupling in the form of LDC or RNA should only be applied to customer groups with homogeneous costs to serve. The distribution costs associated with residential customers do not vary significantly with the amount of gas consumed by each customer. Therefore, an RNA could be developed for and applied to residential customers. Columbia would consider an RNA based on and applied to small commercial customers with homogeneous cost characteristics similar to the residential class.
10. What revenues streams should be excluded (e.g., Section 1307 automatic adjustments)?

It is Columbia's position that revenues associated with the recovery of natural gas costs via Section 1307(f) of the Public Utility Code should be excluded.

11. How should a “usage-per-customer” parameter be developed during the implementation of a revenue-per customer decoupling mechanism, and how should this parameter be used to adjust future rates? Should there be separate usage per customer values for new and existing customers?

Columbia proposes that usage per customer be determined as follows: 1) Weather normalized monthly usage should sum to the 12 month weather normalized monthly usage that was used to determine the volumetric base rate in the most recent rate case; 2) Monthly bill count that includes both active customer bills and final customer bills should sum to the 12 month bills that were used to determine the customer charge in the most recent rate case; 3) Usage per customer per month is calculated by dividing the weather normalized monthly usage by the monthly bills; 4) Calculated monthly usage per customer would then be used to calculate monthly benchmark revenue for both bills included in the rate case test year and incremental new customers since the rate case test year. Benchmark revenue would then be compared to actual billed base revenue in the determination of the revenue normalization adjustment.

12. What should be the frequency of the rate adjustment?

The frequency of rate adjustments could vary with a utility’s specific circumstances. Columbia would propose adjusting the RNA factor every six months. This is consistent with the decoupling mechanism utilized by Columbia Gas of Massachusetts. Adjusting bills twice per year provides customers with bill stability and
avoid the need to apply monthly adjustments generated during a winter month to customers' bills in the summer.

13. **Should the Commission incorporate caps on the rate adjustments?**

The need and appropriateness of incorporating a cap on rate adjustments could vary with a utility's specific circumstances.

14. **How soon after the conclusion of the future test year should the Commission allow adjustments?**

Consistent with other aspects of alternative ratemaking, implementation timing could vary with a utility's specific circumstances and the details of the rate design being implemented. Columbia proposes to begin tracking the RNA beginning with the effective date of new rates.

For illustrative purposes, assume new base rates are effective during the month of December. The RNA would be tracked on a monthly basis through the end of the peak period or March. The RNA charge or credit would be computed for the peak period and the applicable adjustment would be billed over the six month peak period beginning in October and ending in the following March. The same tracking would occur for the off-peak period including April through September. The RNA for the off-peak period would be accumulated and charged or credited during the following off-peak period. Any resulting over or under collections would be deferred for the next RNA rate change.

15. **Should the Commission periodically require a complete review of costs, sales, and revenues (i.e., a general rate case or equivalent)? Please describe the suggested review process and necessary time period.**

As discussed above, Columbia has proposed various alternative rate structures during in its past base rate proceedings before the Commission. It is Columbia’s position that it is appropriate for the Commission to review and approve such rate
structures in base rate proceedings. Indeed, Columbia’s existing WNA was approved in a base rate proceeding, and both the LDC and RNA proposed by Columbia in this proceeding require the Company to file a base rate case proceeding to implement. It is Columbia’s position that mandatory periodic review via a base rate case or similar proceeding is not required. For example, as proposed by Columbia, if an RNA is approved by the Commission, the Company would update the rate every six months. These updates would provide the Commission and interested parties with an opportunity to review and monitor the operation of the rate mechanism. The RNA would limit the Company’s revenue recovery to that approved by the Commission in the last base rate case. If the Commission seeks to obtain additional information relative to the operation of alternative rate designs, Columbia recommends that the Commission require annual informational filings supporting the operation and computation of the alternative rate design. Columbia currently submits this level of detail relative to the operation of its existing WNA.

16. Should there be carrying charges (interest) calculated on rate adjustments, both upward and downward? If so, how should these carrying charges be calculated?

Interest at a market rate could be applied to deferred RNA balances.

17. What would the range of cost impacts be, if any, for low income customers? Under a given model, what modifications should be made to Low Income/Customer Assistance Program participants to maintain affordability and ratepayer equity?

The tables within this document identify the cost impacts of each rate design on low income and income-challenged models. It is important to recognize those on CAP will be impacted differently based on program design. Two thirds of Columbia’s CAP customers would not be impacted by any rate design or adjustment. The other third,
those on percent of budget would be impacted at 50% of the total rate change at the point their budget is adjusted. Currently, the CAP and all Universal Service programs are evaluated every six years and reviewed every three years outside of any rate changes. In addition there is an investigation underway on the affordability and cost effectiveness of all Universal Service programs. The task of the initiatives listed above should include to make CAP affordable to low income customers regardless of the rate or its current design. The two processes, Ratemaking and Universal Service programs should remain separate to allow equal focus on both.

18. **What type of consumer education programs should be provided to customers when implementing a decoupling mechanism?**

Consumer Education with any change is key to adoption and understanding. Education related to a rate change should include direct mail, easily accessible written materials via the internet or upon request, as well as informed agents available by phone to answer any questions. The content of the materials should include a detailed explanation of the bill and how the new rate design would be displayed. Also, materials about what is within the consumer’s control, including usage and how a customer can impact and reduce their usage will be needed.

**IV. CONCLUSION**

Columbia Gas of Pennsylvania, Inc. appreciates the opportunity to provide these comments to the Tentative Order. For the reasons set forth above, Columbia Gas of
Pennsylvania, Inc. respectfully requests that the Commission enter a Final Order incorporating the Company's comments.

Respectfully submitted,

[Signature]

Andrew S. Tubbs (ID #80310)
Meagan Moore (ID #317975)
NiSource Corporate Services Company

800 North Third Street, Suite 204
Harrisburg, PA 17102
Phone: 717-238-0463
Fax: 717-238-0591
E-mail: astubbs@nisource.com

Date: May 31, 2017

Attorneys for Columbia Gas of Pennsylvania, Inc.