# Columbia Gas of Maryland, Inc.

## Comments on "Natural Gas Energy Efficiency Potential in Maryland" Draft Report

## Submitted to the Maryland Energy Administration

### July 31, 2012

## Introduction

Columbia Gas of Maryland, Inc. ("Columbia" or "the Company") is participating in a working group organized by the Maryland Energy Administration ("MEA") to determine the future direction of EmPOWER Maryland.

The MEA requested constructive feedback from the stakeholders on the draft study of potential natural gas energy efficiency and the feasibility of establishing energy saving targets. Columbia respectively provides these comments regarding the overall feasibility of the expansion of EmPOWER Maryland to include natural gas as well as specifics on energy savings targets and the efficiency programs examined.

Columbia notes that the MEA has also contracted GDS Associates, Inc. ("GDS") to study: 1) the technical and economic potential of fuel switching for residential and commercial classes; and 2) combined heat and power for commercial, industrial and institutional sectors. The MEA anticipates a report on these findings will be available at the end of August. Columbia supports fuel switching where available for a number of reasons including: 1) its low cost in comparison with alternatives; 2) the recent improvements in drilling that have made natural gas abundant, particularly in the northeast section of the country; and 3) the ability of natural gas to aid electric utilities in meeting and exceeding their EmPOWER Maryland goals.

### History

The EmPOWER Maryland Act of 2008 charged the MEA with reevaluating the success of the electric consumption reduction targets along with a recommendation to set future consumption targets beyond 2015. Additionally, the Act directed the MEA to study the potential of natural gas energy efficiency in Maryland and the feasibility of setting EmPOWER targets for natural gas utilities.

The MEA established a stakeholder group of gas and electric utilities, the Maryland Public Service Commission and other interested parties. The stakeholder group met on June 29, 2012 to discuss the progress the state has made towards the target goals of reducing electric consumption through EmPOWER Maryland and to discuss the potential of establishing goals that reach out to 2020. The group also reviewed a draft study on "Natural Gas Energy Efficiency Potential in Maryland" prepared for the MEA by GDS.

Columbia has offered energy efficiency programs since the enactment of Maryland's Demand Side Management statute.<sup>1</sup> Columbia's Low Income Weatherization Program ("LIWP") has been operating in compliance with the statute since 1995 and is currently being reviewed by the Maryland Public Service Commission.

Columbia values the benefits of energy efficiency and supports that customers should use natural gas wisely and have the opportunity to receive efficiency benefits as determined appropriate.

<sup>&</sup>lt;sup>1</sup> Md. Code Ann. Pub. Utilities § 7-211 requires each gas company and electric company to "develop and implement programs and services to encourage and promote the efficient use and conservation of energy by consumers, gas companies, and electric companies."

## Summary

Columbia could support the proposal of a statewide natural gas energy efficiency program in Maryland provided that certain conditions are considered that would make the offering of such programs beneficial to all ratepayers and the utilities. Below, Columbia discusses those conditions.

### Lost Revenue Recovery

Natural gas utilities, also known as Local Distribution Companies ("LDC"), could be negatively impacted by the loss of revenue resulting from reduced natural gas consumption resulting from the successful implementation of energy efficiency measures. Unlike the electric industry, the natural gas industry has experienced declining usage per customer over the past ten years. At the same time fixed costs for delivering natural gas continue to increase as aging infrastructure is replaced. It is critical that the MEA and the Maryland Legislature acknowledge that the recovery of any lost revenue for LDCs as a result of energy efficiency programs is necessary for the financial well-being of the utility and a critical component of any mandated energy efficiency program.

While some LDCs have Revenue Normalization Adjustments, Columbia does not. Given its existing rate structure, Columbia strongly recommends that any energy efficiency program should also allow for the recovery of the lost revenue from reduced throughput.

# **Requirements for Smaller Natural Gas Distributions Companies**

Columbia recommends that special consideration be given to smaller LDCs whose limited customer base may not support the deployment of cost-effective energy efficiency programs. Exemptions may be appropriate in these circumstances. If exemptions cannot be granted, Columbia suggests that the program standards specified in the draft report be modified to a more appropriate level for smaller utilities, particularly concerning the aspects of design, implementation, reporting and funding.

For example, one estimate provided in the MEA study suggests that programs would cost Maryland natural gas customers only \$1 per month. If that rate is used for Columbia with its customer base of 33,000 customers, it would equate to an annual budget of approximately \$396,000. This amount is solely for program administration and incentives, but does not include recovery of lost revenue.

Additionally, in contrast to larger utilities, a smaller utility may have a more difficult time proving cost effectiveness due to the lower revenues, lower benefits and higher percentage of administration costs. Flexibility in design and budget should be given to smaller companies to promote successful programs because maintaining lower administration costs assist smaller utilities in developing more cost effective programs.

# Potential Natural Gas Energy Efficiency Savings Targets

Columbia does not support a proposal for established natural gas energy efficiency savings targets for several reasons. One reason, as previously mentioned, is that the per customer usage, and in many instances total LDC usage, is declining in the natural gas industry thus making the need for natural gas reduction targets less critical. Instead the wise use of natural gas resources should continue to be encouraged.

Moreover, the abundance of new sources of natural gas to our region has contributed towards the increase in gas supply and decrease in gas costs. Columbia supports the premise that the selection of natural gas as a fuel choice in and of itself should be considered an energy efficiency measure, creating the opportunity for sustained energy savings overall. For this reason, Columbia supports the promotion of

switching to natural gas from an alternative, less efficient fuel source to promote energy efficiency. Columbia commends the MEA for its anticipated study on fuel switching to be released by the end of August 2012.

While fuel switching to natural gas may lower energy use overall and contribute towards the electric energy reduction targets, it may result in higher consumption of natural gas. Establishing reduction targets would discourage an LDC's interest in reasonable fuel switching. For this additional reason, Columbia does not recommend that EmPOWER energy saving targets be established for LDCs.

## **Fuel Switching**

Columbia supports the wise use of natural gas to promote energy efficiency from site to source. As stated above, the company encourages the use of energy efficiency measures to assist customers in making economically and environmentally wise choices and looks forward to reviewing GDS's study on fuel switching.

### **Reporting Requirements**

Although reporting requirements for natural gas energy efficiency programs are necessary for program monitoring and evaluation for continual improvements, the IT and administrative costs can drive up the overall cost of the program thus driving down the programs' cost effectiveness. Therefore, it is imperative that the mandated reporting requirements be designed to produce the desired data but avoid imposing burdensome costs on smaller LDCs in order to provide a cost effective outcome.

## Individual Design of Energy Efficiency Programs

Columbia recommends that LDCs be granted the flexibility to design programs beyond the ones identified within the study. That way, programs can be tailored to customer demographics to best suit their energy efficiency needs. This flexibility in design will promote the potential of greater participation, thus increasing benefits and contributing towards a TRC ratio greater than 1.

### **Proposed Natural Gas Energy Efficiency Programs**

Columbia offers comments to the six energy efficiency programs presented in the study by highlighting the positive impacts and the items to consider associated with those programs. The GDS draft report states that the programs were created by reviewing best practices of other utilities in the mid-Atlantic and northeastern region. They were chosen because they provide the largest potential reduction in natural gas usage. The programs are:

- 1. Residential Natural Gas Products Program
- 2. Residential Home Retrofit Program
- 3. Residential HVAC Efficiency Program
- 4. Residential New Construction Program
- 5. Commercial High-Efficiency Heating Program
- 6. Commercial Energy Efficiency Program

### Residential Efficient Natural Gas Products Program

*Positive Impacts:* Rebates and incentives for purchasing gas water heaters are beneficial to customers and the program promotes the wise use of natural gas; it appears to be a low cost program to administer since it provides only education and rebates.

*Items to Conside*: Incentives for clothes and dish washers are not a perfect fit with natural gas. While those appliances use water heated by gas, these incentives contribute more towards using less water

than less gas. The program is only available to existing natural gas water heating customers. The program does not include recovery of lost revenue from throughput reduction.

*Recommendation:* Columbia offers slight modifications, such as the inclusion of water heaters and no other appliances. If the incentives were set to cover the cost difference between electric and natural gas water heaters, it would provide an effective incentive to customers. The program should be open to all customers whether they currently have a natural gas appliance or not. It would then benefit customers who only have gas heat and could help encourage switching to natural gas for other appliances. Finally, the program should specifically allow the LDC to recover lost revenue as a result of the reduction in consumption.

#### Residential Home Retrofit Program

*Positive Impacts:* Promotes efficiency and provides incentives to lower the cost of insulation, air sealing and furnace replacement. Working with trade allies could lead to greater adoption/promotion of natural gas.

*Items to Consider:* The program does not allow for recovery of lost revenue from throughput reduction. The program requires a customer to pay the full cost of an energy audit, thus creating a high upfront cost that will discourage participation. Home Performance Programs are the most costly of energy efficiency programs, taking up a considerable part of an overall budget.

*Recommendation:* While having the customer pay for the energy audit would lower the administrative cost of the program for an LDC, the high cost to customers will discourage participation and produce lower results. In order to make such a program more attractive the home audit could be replaced with a home walkthrough or an on-line audit. Either of those could be offered at a reduced cost or at no cost to the customer. The rebates could also be offered at the lower end (~30% of the cost) to keep costs down. The program could also be expanded to include small commercial customers and multifamily dwelling units. While this program will take the majority of the energy efficiency budget (65% - 70%) it would provide the most value in terms of promoting energy efficiency. With the suggested changes, Columbia could support this program design.

#### Residential HVAC Program

*Positive Impacts:* The program does not require an energy audit to replace a furnace. Working with trade allies could lead to greater adoption of natural gas.

*Items to Consider:* This is somewhat duplicative of the Residential Home Retrofit Program, since it also covers replacement of furnaces. Again, the program does not provide for the recovery of lost revenue from throughput reduction.

*Recommendation:* The main differences between this program and the Residential Home Retrofit Program are that the Residential HVAC Program does not require a home energy audit, and only covers the furnace and duct sealing. Given the difficulty in identifying customers who are about to replace a furnace, the program would require a large amount of advertising for small benefits. Therefore this program would not be appropriate for adoption by a smaller utility.

### Residential New Construction Program

Positive Impacts: Encourages natural gas use and energy efficiency in new homes.

*Items to Consider:* New homes generally will have a lower average usage than other homes. These programs are a little more expensive to administer.

*Recommendation:* While they are more costly, programs of this nature are successful and do help to educate consumers on the benefits of natural gas and energy efficiency. This program could be offered with some budget limits (approximately 20% - 25% of the total energy efficiency budget).

### Commercial High-Efficiency Heating Equipment Program

Positive Impacts: Promotes energy efficiency to commercial and industrial customers.

*Items to Consider:* This program could be difficult to target by LDCs that do not track space heat use for commercial and industrial customers. The program does not provide for the recovery of lost revenue from throughput reduction.

*Recommendation:* The experience of Columbia's affiliates has shown that it is difficult to attract commercial and industrial customers to energy efficiency programs.<sup>2</sup> The larger commercial and industrial customers typically pursue energy efficiency individually and can justify the expense with the rebates being offered. It may be a better use of funds for a natural gas utility to add multifamily and small commercial customers to the Home Retrofit Program and not offer this to the other commercial and industrial customers. Columbia does not support offering this program.

#### Commercial Energy-Efficiency Program

Positive Impacts: Promotes energy efficiency.

*Items to Consider:* Program is expensive both to administer and for the rebates offered. The program does not provide for the recovery of lost revenue from throughput reduction.

*Recommendation:* This program could have very high costs even with the caps in place. Since most large commercial and industrial customers already look to energy efficiency on their own and can justify the expense with future cost savings, the incremental value of this program is low. Due to the potential cost of the program, it would not be viable for Columbia to offer this program.

### Conclusion

Columbia appreciates the opportunity to provide comments to the MEA study on natural gas energy efficiency potential in Maryland. Columbia looks forward to working together to create a policy that will mutually benefit natural gas consumers and utilities in Maryland while reducing the impact on Maryland's natural resources.

Columbia does not see a benefit in setting targets for reduction in consumption for natural gas utilities at this time. Customers using fuels that are less environmentally safe and more expensive to consume should have the opportunity to learn about natural gas alternatives. Natural gas utilities will shy away from promoting natural gas if they are required to limit consumption in the future.

<sup>&</sup>lt;sup>2</sup> Columbia Gas of Ohio, Columbia Gas of Virginia