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January 17, 2023

Andrew S. Johnston, Executive Secretary Public Service Commission Of Maryland 6 St. Paul Street, 16th Floor Baltimore, Maryland 21202

Re: ML#242360 – Authorization to Modify Tariff to Establish Green Path Rider program – for January 18, 2022, Administrative Meeting

Dear Mr. Johnston:

On September 16, 2022, Columbia Gas of Maryland filed a proposed tariff change with the Public Service Commission to establish a Green Path Rider program. Columbia claims that under the program, customers could pay an additional per-therm fee to offset either 50 percent or 100 percent of the CO2 emissions of their gas consumption. The offsets would be obtained by a third-party supplier under a contract negotiated with Columbia's affiliate, NiSource Corporate Services Company.

The Commission should reject Columbia's proposal. As further detailed below, a voluntary, fee-based emissions offset program is functionally a retail product that should not be offered to customers by a monopoly utility. Additionally, the program is potentially misleading to customers who are concerned about the environment and climate change. Moreover, the program provides little value to Columbia's customers, does not contribute to in-state greenhouse gas emission reductions, and unjustifiably burdens all Columbia ratepayers with program-specific costs.

The Commission has enough information now to deny the GPR. Given the proposal's novelty and the need for regulatory scrutiny about claims of carbon offsets, if the Commission does not deny the proposal, the Commission should establish a docketed proceeding to allow for further discovery and an evidentiary hearing on the merits of Columbia's proposal.

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Background

Columbia's Green Path Rider proposal would establish the first "fee-based, optin" emissions offset program offered by a Maryland utility. Under the proposal, Columbia customers could elect to pay a per-therm fee to offset either 50 percent or 100 percent of CO2 emissions of their monthly gas consumption. The per-therm rate would be updated annually. Emissions would be offset through the procurement of renewable natural gas ("RNG") attributes (5 percent of program need) and carbon offsets (95 percent of program need). Columbia will not be involved in the administration and management of this program. Rather, Columbia's affiliate, NiSource Corporate Services Company ("NCSC") will work with Anew Climate LLC—a third party supplier—under a pre-negotiated contract to procure the RNG attributes and carbon offsets.

Columbia states that the purchase, sale, or retirement of RNG and carbon offsets will be verified by Anew Climate, LLC ("Anew"). For RNG attributes, Anew will use the Midwest Renewable Energy Tracking System ("M-RETS"). For carbon offsets, Anew will use an "internationally recognized carbon offset registry" selected at its discretion.²

Columbia further states that the majority of program administration costs will be handled by Anew and are thus included in the per-therm customer fee. While company-specific costs—such as customer education and enrollment—will be tracked separately, the company plans to seek recovery of such costs from all its customers in a future rate base proceeding.

Comments

Achieving Maryland's climate goals requires dramatically curtailing emissions from end-use gas consumption. Columbia's Green Path Rider proposal, however, will not help the State achieve its greenhouse gas emissions reduction goals. The program promotes a less certain way for customers to reduce carbon emissions, and, as such, provides little benefit to Columbia's customers. The company fails to demonstrate sufficient customer demand for this program, yet it plans to spread certain program costs across all customer classes. Moreover, the program would allow a monopoly utility with captive customers to compete in the gas commodity market—a market that the Commission has determined should be a competitive marketplace.

² *Id.* at 2.

1. A fee-based opt-in emissions offset program is a retail product that the Commission should not authorize an incumbent utility to offer.

Columbia Gas's potential entry into the carbon offset market is inappropriate because the carbon offset market is a competitive market. The proposal creates risks that customers will be harmed by reduced competition in that market.³ A regulated utility is able to leverage its resources—employees, equipment, customer data, business relationships and reputation—to gain and maintain an unearned advantage over others competing in the market.⁴ Relative to competitive firms, the advantages that utilities have are unearned. Recognizing these concerns, the Commission has carefully scrutinized utility forays into retail markets.⁵ While utilities sometimes are permitted to participate in competitive markets, that permission is strictly regulated to ensure that utility customers do not subsidize such activities, that customers are appropriately compensated for the competitive use of ratepayer-funded utility resources, and the utility's entry does not lead to customer price increases or service degradation.⁶

Columbia's proposal harms its customers in two ways. *First*, under Columbia's proposal, utility customers would subsidize Columbia's entry into a competitive market but Columbia would not compensate customers for providing that subsidy. Columbia has a captive audience and market with its existing customers. The company can leverage its brand name and its captive customer base to promote and foster its own business goals through consumer engagement regarding carbon offsets and RNG attributes. Columbia has that brand name recognition and its captive customer base as a result of its government-granted monopoly franchise, not because it has earned it. Moreover, the company plans to spread its program administrative costs amongst all customer classes—another advantage.

Second, customers are harmed when a market's competitiveness is reduced due to a monopoly utility's participation. Effective competition encourages economic pricing

⁵ Order No. 74038, Case No. 8747, *In the Matter of the Investigation by the Commission into Affiliated Standards of Conduct of Companies Providing Gas or Electric Service*, 89 Md. PSC 54 (1998) ("[I]f regulated markets are to be supplanted, customers must be assured that the rigors and protections provided by true competition take their place."); Delmarva Power & Light Co. v. Pub. Serv. Comm'n of Md., 370 Md. 1, 11–17 (2002) (discussing development of Commission's regulation of restructured energy markets).

³ Affidavit of Alice Napoleon at 7–8.

⁴ *Id.* at $7 \, \P \, 12$.

⁶ See COMAR 20.40.02.01 et seq. (Utility Code of Conduct); Order No. 8747 ("[I]t remains the Commission's duty to ensure that customers of the regulated utility are protected from price increases or service degradation arising from non-regulated activities of the utility's affiliates.).

⁷ Napoleon Affidavit at 7 ¶ 12.

and innovation that may lead to higher quality products. A competitive market for carbon offsets may afford Columbia's customers the ability to purchase higher quality offsets—those more likely to result in actual emissions reductions—at a better price. Promoters of higher quality offsets may leave or never enter the market. For RNG attributes, Columbia's procurement of cheaper out of-state RNG attributes may restrain the development of in-state RNG and, accordingly, limit any in-state GHG emissions reductions. Thus, the utility's unearned advantages undermine competition and harm customers.

While it may be that carbon offsets can achieve actual and credible emissions reductions, that achievement is more likely gained through a competitive offset market that facilitates the development of cost-efficient, higher quality offsets. Allowing a monopoly utility to enter the carbon offset market may limit the market's development, to the detriment of consumers.

2. The Green Path Rider program is likely to deceive customers into paying for emissions reductions that will never occur.

The Green Path Rider proposal promises emissions reductions from carbon offsets and RNG attributes, but that promise is overstated and misrepresents to consumers the greenhouse gas emissions reduced. This type of deception, designed to make consumers feel better about actions with little actual environmental benefit, is known as "greenwashing." The Green Path Rider raises two greenwashing concerns: (1) it deceives customers about the actual emissions reduced through carbon offsets and RNG attributes; and (2) it induces customers seeking to reducing their carbon footprint to engage in activities that actually increase emissions.

A. Overstating Emissions

i. Carbon Offsets

Known and longstanding quality issues call into question the veracity of carbon offsets to reduce greenhouse gas emissions. These issues are present with the Green Path Rider program, raising significant concerns about the veracity of the emissions reductions promised to customers. As OPC's expert explains in the affidavit accompanying these comments, credible offsets should satisfy the "PAVER" criteria:

⁸ Order No. 74038 ("If [competitive] markets can be achieved, consumers should benefit through lower prices and expanded choices for these services."). Notably, Columbia provides no justification for its offset rates and has no information about how much a consumer may pay of these offsets on the open market. Napoleon Affidavit at 23 ¶ 41.

⁹ Napoleon Affidavit at 7 ¶ 12.

- (1) **Permanent**: emissions reductions or removals should not be reversible;
- (2) **Additional**: the emissions reductions should not occur but for the offset;
- (3) **Verifiable**: emissions reductions should be monitored and regularly verified by an independent third-party;
- (4) **Enforceable**: ownership of an offset should be enforceable to ensure that only one credit is claimed for an offset; and
- (5) **Real:** emissions reductions should reflect actual net emissions reductions without carbon leakage occurring.¹⁰

While offset programs may strive to provide trustworthy offsets, as noted in Staff's comments, "many carbon credits fail to live up to their promise." Even offsets purchased through the most respected offset programs may still overstate the actual emissions reduced. Despite a company's good faith efforts to comport with offset quality standards, a significant risk remains that customers will pay for emissions reductions that never occur.

At least three of the registries identified in Columbia's proposal— Verra, the American Carbon Registry, and the UN Clean Development Mechanism—have verified and sold offsets that do not meet PAVER criteria. For example, as reported by Pro Publica in 2019, Verra sold offsets for a forest protection project launched in Cambodia. The project claimed 88 percent of the forested area was protected; 10 years later, only 46 percent of the forest was standing. A recent study of the UN Clean Development Mechanism found that 85 percent of the certified emissions reduction projects analyzed were unlikely to be additional. In 2020, offsets sold through the American Carbon Registry concerned the protection of forests owned by the Nature Conservancy and thus not under threat of removal. Moreover, a recent analysis released in December 2022 detected no real climate benefit over 10 years for forest carbon offsets

 $^{^{10}}$ Napoleon Affidavit at 5–6 ¶ 10. Staff identifies four similar criteria underlying the quality of carbon offset. *See Staff Comments on Columbia Green Path Rider*, TG-486 at 4.

¹¹ TG-486 at 5 (footnote omitted) (quoting Derik Broekhoff *et al.*, Stockholm Environmental Institute & Greenhouse Gas Management Institute, *Securing Climate Benefit: A Guide to Using Carbon Offsets* at 18 (November 13, 2019)). *See also* Last Week Tonight with John Oliver, *Carbon Offsets*, YOUTUBE (Aug. 22, 2022), https://www.youtube.com/watch?v=6p8zAbFKpW0.

¹² TG-486 at 5.

¹³ Napoleon Affidavit at 10–14.

¹⁴ *Id.* $10 \ \P \ 17$

¹⁵ *Id.*..

¹⁶ *Id.* at 11 ¶ 18.

¹⁷ *Id.* at $10 \ \P \ 17$.

administered by the American Carbon Registry and the Climate Action Reserve. ¹⁸ Though offset providers are making efforts to improve the quality of offsets available—such as no longer accepting renewable energy projects, which are plagued with dubious additionality claims ¹⁹—some registries have grandfathered in older, non-additional, projects and will continue to offer offsets for such projects until 2030. ²⁰

Given the known quality and credibility issues with carbon offsets, it is likely that the emissions reductions benefits promised to GPR participants will not be fully realized. While Staff correctly notes that the carbon offsets require regular scrutiny, a post-purchase independent audit does little to assure customers that carbon emissions have actually been offset. To avoid lower quality offset credits, offset purchasers should vet offset projects or limit the purchase of offsets to lower-risk project types and ensure that any offset programs provide long-term benefits and exhibit additionality. Columbia, however, has no plans to impose additional quality requirements or restrictions on the offsets procured for the GPR.

ii. RNG Attributes

Similarly, it is likely that the emissions benefits of RNG attributes may be overstated. While RNG may "repurpose" methane gas that may otherwise escape into the atmosphere, many types of RNG are not carbon negative. RNG from landfills and wastewater, for example, typically produces net increases in carbon emissions. ²⁵ And while RNG from animal manure may result in emissions reductions, such supply is typically limited. In short, not all types of RNG produce zero emissions energy and any associated attributes should not be considered as emissions reducing. Columbia could improve the certainty that the RNG attributes it procures actually reduce emissions by limiting attribute procurement to certain RNG feedstock types. ²⁶ But, Columbia does not plan to do so. Absent such restrictions, the emissions reductions associated with RNG attributes procured through the GPR will be overstated.

B. Inducing Customers into Emissions-Increasing Activities

¹⁸ Napoleon Affidavit at $10 \ \P \ 17$.

¹⁹ *Id.* at $11 \, \P \, 18$.

²⁰ *Id*.

²¹ *Id.* at 15–16 ¶ 22.

²² A further void in the GPR proposal is any plan for addressing carbon offsets that are later learned to be overstated or non-existent.

²³ Napoleon Affidavit at 14–15 ¶¶ 22, 24.

 $^{^{24}}$ *Id.* at $14 \ \ 22$.

²⁶ *Id*.

In the absence of measures to reduce emissions from gas consumption, Columbia's reliance on carbon offsets may encourage environmentally conscious consumers to continue consuming gas, thereby "locking in" higher emissions over the long run. Thus, customers may believe the company's purchase of offsets is mitigating climate change when, in fact, customers' continued gas consumption is contributing to it.

Moreover, the GPR incentivizes customers and businesses to defer GHG reductions. As numerous studies have found, the most effective way to reduce GHG emissions from natural gas is to stop consuming it.²⁷ Maryland's policy preference for electrification recognizes the need for residential customers to shift off of fossil gas.²⁸ But residential customers seeking to reduce the emissions of their gas use may be dissuaded from electrifying their home heating and household appliances because they are led to believe they can offset their natural gas emissions through the GPR. Similarly, commercial and industrials customers may be disincentivized from reducing the emissions intensity of their business practices by Columbia's assurances that their natural gas emissions are being offset.

In short, Columbia proposes to take advantage of customers' good intentions with the likely effect of retaining customers and maintaining higher volumes of natural gas consumption. As discussed above, under no circumstances can procurement of carbon offsets and RNG attributes completely offset the emissions resulting from a customer's gas consumption. Through the GPR, Columbia seeks to leverage consumer environmental consciousness to maintain its gas business. The GPR is not needed to make it "easier" for a customer to reduce GHG emissions: customers already have cost-effective alternatives—such as reducing overall consumption or electrifying—outside of the GPR that can more effectively reduce GHG emissions. Columbia, however, is

²⁷ See Energy + Environmental Economics (E3), Maryland Building Decarbonization Study (October 20, 2021),

 $https://mde.maryland.gov/programs/Air/ClimateChange/MCCC/Documents/MWG_Buildings\%20Ad\%20Hoc\%20Group/E3\%20Maryland\%20Building\%20Decarbonization\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20-lding\%20Study\%20Study\%20Study\%20-lding\%20Study\%20Stud$

https://opc.maryland.gov/LinkClick.aspx?fileticket=9bGKYWhy2C4%3d&tabid=55&portalid=0&mid=1487.

^{%20}Final%20Report.pdf; Baltimore Gas & Electric, *Integrated Decarbonization Strategy* (October 2022) https://www.bge.com/SafetyCommunity/Environment/Documents/BGE%20Integrated%20Decarbonization%20White%20Paper_FINAL%202022-10-06.pdf; Maryland Office of People's Counsel, Climate Policy for Maryland's Gas Utilities: Financial Implications,

²⁸ Climate Solutions Now Act, 2022 Md Laws Ch, 38, §§ 10(a)(1)-(2) ("(1) the General Assembly supports moving toward broader electrification of both existing buildings and new construction as a component of decarbonization; and (2) it is the intent of the General Assembly that the State move toward broader electrification of both existing buildings and new construction on completion of the study required under subsection (b) of this section.").

promoting a far less certain method for customers to mitigate their impact on climate change. This makes the GPR proposal misleading and contrary to the public interest.

3. The emissions offsets offered through the Green Path Rider proposal do not benefit Columbia's customers.

The Green Path Rider program provides no service or product that customers cannot acquire on their own. Carbon offsets are widely available to individual consumers through offset marketers. These marketers procure offsets for their customers using the same verification registries that will be used for the Green Path Rider. In fact, 95 percent of Columbia's offsets would be procured from the same pool of verified offsets already available to customers through other providers.²⁹

Moreover, compared to purchases from an independent offset marketer, GPR participants have less transparency regarding the type of offsets procured on their behalf. Many offset marketers allow customers to select offsets based on the type or location of the project that the offset will fund. Columbia's proposal would provide no such option for its customers—neither Columbia, nor its customers, have any input in the types of offsets Anew would be procuring.

Further, as addressed above, there are significant questions about the actual emissions reduction benefits carbon offsets will achieve. Absent any heightened criteria for offset procurement or pre-purchase vetting of offsets, it is unlikely that the emissions reduced by the offset-funded activities will equal the emissions generated by GPR program participants. The GPR provides little, if any, assured emissions reductions benefits to Columbia's customers.

4. The Green Path Rider proposal will not reduce GHG emissions in Maryland and may impede achievement of the State's climate goals.

The Green Path Rider will not contribute to the State's efforts to reduce greenhouse gas emissions, for at least two reasons. First, the program only compensates for CO2 emissions rather than methane, and Columbia does not plan to offset any methane emissions from its distribution system. 30 Methane is a far more potent greenhouse gas and reducing methane emissions in the short term would have a more appreciable impact on Maryland's greenhouse gas reduction goals.³¹ Reducing gas consumption is the most cost-effective way to reduce methane emissions from natural gas

 30 *Id.* at $20 \, \P \, 33$.

²⁹ Napoleon Affidavit at 11 ¶ 21.

³¹ EPA, *Importance of Methane*, https://www.epa.gov/gmi/importancemethane#:~:text=Methane%20(CH4)%20is%20a,%2Dinfluenced)%20and%20natural%20sources.

use, but the promise of CO2 emissions reductions could disincentivize customers from curtailing their natural gas use and thus have little impact on statewide methane emissions. Though Columbia tracks fugitive methane emissions from the distribution system and could offset methane emissions using this data, the GPR's focus is strictly limited to less potent (and more limited) CO2 emissions.³²

Second, the majority of any emissions reductions achieved by the company's proposal would likely occur outside of Maryland. Columbia has no plans to restrict offset projects by location, and the offset projects included in the registries the company plans to use are located nationally and internationally.³³ Through the GPR, Columbia's customers would be funding projects that will not reduce in-state greenhouse gas emissions.³⁴ The emissions reductions promised would not count towards the emissions reductions targets set forth in the Climate Solutions Now Act.³⁵ Nor would the proposed offsets provide long-term Maryland-specific benefits and support further emissions reductions initiatives in Maryland that may otherwise not occur. Here, offsetting would likely not result in actual emissions reductions in Maryland, because Columbia's and the customers' emissions would continue unabated.³⁶

The company may point to the proposed RNG attributes as potentially able to reduce in-state GHG emissions. However, RNG attributes would only comprise 5 percent of the procured emissions offsets. Columbia would not itself be selecting the RNG attributes and has no intention to restrict the location or feedstock type of the RNG associated with the procured attributes. Accordingly, the company has no control over whether any emissions reductions attributable to RNG attributes occur within Maryland. Since different RNG feedstocks have different carbon intensities—for example, RNG from landfills creates net emissions comparable to those generated from fossil gas—any assessment of GPR emissions reductions attributable to RNG attributes would likely be inaccurate.

The offsets procured through the GPR would not contribute to meeting Maryland's greenhouse gas reduction goals, and the availability of offsets may ultimately frustrate efforts to lower in-state GHG emissions through reduced gas consumption.

 $^{^{32}}$ Napoleon Affidavit at 20 ¶ 33.

³³ *Id*.

 $^{^{34}}$ *Id.* at 20 ¶ 32.

 $^{^{35}}$ Id. at 19, $^{\circ}20$ ¶¶ 30, 32.

 $^{^{36}}$ *Id.* at 20 ¶ 32.

 $^{^{37}}$ *Id.* at 19 ¶ 31.

 $^{^{38}}$ *Id.* ¶ 30.

 $^{^{39}}$ *Id.* ¶ 31.

5. Columbia Gas has not adequately demonstrated existing demand for the Green Path Rider program.

Whether Columbia's customers are actually interested in a carbon offset program is uncertain. While the company conducted a survey to assess customer interest in renewable energy and a green path program, only 23 customers responded. The questions on the survey primarily concerned customer interest in "renewable natural gas" and their willingness to pay extra each month to reduce their emissions. It failed to explain that any gas they consume under the program would continue to be fossil gas, not RNG. More critically, the survey did not ask about customers' awareness of or interest in carbon offsets as a means for emissions reductions, a critical inquiry given that the GPR proposal consists predominantly of offsets. Columbia thus asks the Commission to approve a program that it claims customers are interested in without adequately gauging whether any customers would be interested in it.

6. Recovery of GPR-related expenses should be limited to participating customers.

Columbia's costs associated with the Green Path Rider should be borne by the cost-causers—Green Path Rider program participants. The Commission—and regulatory principles more generally—favors utilities recovering costs from the cost-causers. 44 Columbia, however, plans to spread GPR-related program administration among all customers. As proposed, the company would separately track its program administration costs for consideration in a future base rate proceeding. 45 These costs would include customer enrollment and education. 46 Given the lack of demonstrated interest in the program, it would be inappropriate for the company to spread program-specific costs across all customer classes. Since Columbia has yet to provide any educational or marketing materials, the extent to which any program-specific customer education would benefit all eligible customers remains unclear. 47

Unless the company can show how all eligible customers—not just participants—would benefit from the administrative costs incurred by this program, program costs should only be recovered from program participants.

⁴⁰ CMD Response to OPC DR 1-017, Attachment A.

⁴¹ Napoleon Affidavit at 22 ¶ 36.

⁴² *Id*. ¶ 37.

⁴³ *Id*.

⁴⁴ E.g., Order No. 81260, In re Southern Md. Elec. Co-op., 98 Md. P.S.C. 71 (Feb. 13, 2007).

⁴⁵ ML# 242360 at 3.

⁴⁶ Napoleon Affidavit at 22 ¶ 38.

⁴⁷ *Id.* at 23 \P 39.

7. If not rejected outright, the Commission should require an evidentiary proceeding to address the Green Path Rider's significant legal and policy concerns.

Columbia's Green Path Rider program is the first fee-based, opt-in emissions offset program proposed by *any* public utility in Maryland. ⁴⁸ The proposed program raises a number of significant and broad legal and policy issues, including, among others: (1) whether emissions offsets are in the public interest; (2) whether utilities should be permitted to offer carbon-offset products; and (3) what regulatory standards should apply to carbon offset programs It raises similar issues about RNG attributes.

The Commission's order in this proceeding has significant implications for Maryland's utility customers as well as Maryland's climate goals. An administrative meeting is not the proper forum in which to address such broader issues. ⁴⁹ If the Commission does not choose to immediately deny approval of the GPR, a docketed proceeding is necessary to afford stakeholders greater opportunity to weigh in on the merits of this program.

Recommendation

The Commission should reject Columbia's Green Path Rider proposal. Absent immediate denial, the Commission should establish a docketed proceeding and allow for additional discovery and an evidentiary hearing on the merits. OPC appreciates the Commission's consideration of its comments.

Respectfully submitted,

/electronic signature/
Michael F. Sammartino
Assistant People's Counsel

cc: Kenneth Albert, Counsel for Commission Staff
Ted Gallagher, Counsel for Columbia Gas of Maryland

⁴⁸ While certain electric utilities in Maryland offer "Green Riders," these programs allow customers to reduce carbon emissions through purchasing additional renewable energy rather through procuring carbon offsets.

⁴⁹ See Order No. 90057 at 6 ¶ 18.

Attachment 1

BEFORE THE PUBLIC SERVICE COMMISSION OF MARYLAND

ML# 242360

COLUMBIA GAS OF MARYLAND *

TARIFF REVISION

ADDITION OF SHEET NO. 114— *

GREEN PATH RIDER

*

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AFFIDAVIT OF ALICE NAPOLEON

I, Alice Napoleon, provide this Affidavit in the above-captioned matter pending before the Maryland Public Service Commission and state as follows:

1. My name is Alice Napoleon. I am a Principal Associate at Synapse Energy Economics. My business address is 485 Massachusetts Avenue, Cambridge, MA 02139. I have worked at Synapse Energy Economics since 2005. I am at least 18 years of age, I am competent to testify in these proceedings, and I have personal knowledge of the facts stated in this Affidavit.

I. INTRODUCTION AND QUALIFICATIONS

2. Since joining Synapse in 2005, I have provided economic and policy analysis of electric and gas programs and policies, as well as emissions regulations, on behalf of a diverse set of clients throughout the United States and in Canada. I led an investigation and authored a report on supply- and demand-side alternatives to fossil gas use in Maryland's buildings and the rate recovery challenges facing the state's gas

utilities as customers electrify their end uses. I am leading or contributing to similar investigations in the District of Columbia, Hawaii, and New York. I was also co-author of two white papers on natural gas regulatory reforms that are needed if New York is to meet its carbon reduction targets. With my colleague Asa Hopkins, PhD, I provided expert testimony in the Consolidated Edison rate case regarding the company's proposed gas-side investments as greenhouse gas ("GHG") mitigation strategies and the need for long-term planning for the gas system, among other things.

3. Before joining Synapse, I worked at Resource Insight, Inc., where I supported investigations of electric, gas, steam, and water resource issues, primarily in the context of reviews by state utility regulatory commissions. I hold a Master's in Public Administration from the University of Massachusetts at Amherst and a Bachelor's in Economics from Rutgers University.

II. OVERVIEW OF COLUMBIA GAS OF MARYLAND'S FILING

4. This affidavit assesses issues with Columbia Gas of Maryland's ("CMD," "the Company," or "Columbia") proposed Green Path Rider ("GPR") program, an optional program for CMD customers to allow CMD to purchase "Renewable Natural Gas" ("RNG") attributes and carbon offsets on the participants' behalf. Columbia's September 16, 2022 filing¹ describes the Company's proposed GPR program. Section III of my affidavit identifies and details the deficiencies of this program.

¹ GAS P.S.C. MD No. 12 (Columbia Gas of Maryland, Inc.), Sheet No. 114 (ML # 242360).

- 5. According to CMD's filing, the GPR program is a fee-based program that customers may opt into to reduce some or all of their emissions from natural gas usage through RNG attributes and carbon offsets.² Under the proposed program, customers can elect to offset either 50 percent or 100 percent of the carbon emissions associated with their monthly natural gas usage. The GPR program will not change customers' service, as it will not physically deliver RNG to customers, or change the energy that is physically delivered to customers. RNG attributes will satisfy 5 percent of the program needs, and carbon offsets will satisfy the remaining 95 percent of the program needs. The offsets and attributes will be procured by a third-party supplier, Anew Climate, LLC ("Anew"). The program will be offered to residential, commercial, and industrial customers that use under 523,000 therms annually and are not in arrears.
- 6. Customers that elect to participate in the GPR program will receive a monthly charge for the program based on the customer's energy usage. In the first year of the program, customers who elect to offset 100 percent of their carbon emissions from natural gas use will be charged an additional \$0.30000 per therm; customers who elect to offset 50 percent of their carbon emissions will be charged an additional \$0.15000 per therm. CMD is also proposing to file annual updates to the GPR program that adjust the per therm price charged to program participants.
- 7. The third-party supplier, Anew, will use the Midwest Renewable Energy Tracking Systems ("M-RETS") to verify the purchase, sale, and retirement of RNG attributes.

² RNG attributes are intended to represent all environmental characteristics of RNG resources produced whereas offsets represent just avoided or captured carbon emissions.

The supplier will use various third-party offset registries to verify the purchase, sale, and retirement of carbon offsets. These registries include Verra, Climate Action Reserve, American Carbon Registry, The Gold Standard, the Global Carbon Council, and the United Nations Clean Development Mechanism.

III. MAIN ISSUES WITH COLUMBIA GAS OF MARYLAND'S FILING

- 8. CMD is proposing to provide customers with a mix of carbon offsets and RNG attributes to offset their carbon emissions from fossil gas use. In general, it is questionable whether offsets and RNG attributes actually offset carbon emissions. Offsets are purchasable credits from projects intended to either reduce GHG emissions, increase carbon storage, or increase GHG removals from the atmosphere. One offset represents one metric ton of carbon dioxide equivalent ("CO₂e") emissions reduced. A purchaser can credit offsets against his or her emissions, with the intention of negating or reducing those emissions on net. However, many offsets on the market today do not actually lead to GHG emissions reductions. Purchasing an offset that is not associated with a real emission reduction will fail to achieve the buyer's objective of decreasing net GHG emissions. Later in this affidavit, I discuss issues relating to carbon offsets and the specific offset registries the GPR program will use.
- 9. Attributes of RNG, hydrogen, or other alternative fuels can be purchased as Renewable Thermal Certificates ("RTC"). An RTC represents all environmental attributes of a

dekatherm of non-fossil thermal generation, such as RNG.³ However, not all types of RNG produce zero emissions energy, and many RNG attributes should not actually be considered zero emissions. Similar to renewable energy credits (RECs), RNG attributes do not represent gas that is physically delivered to the customers purchasing the attributes, which means that their individual fossil gas emissions are not actually being reduced. Issues relating to RNG attributes specific to the GPR program are also discussed later in this affidavit.

- 10. The proposed program has numerous deficiencies, including the following:
 - a. **Inconsistency with the role of a public utility**: CMD does not justify why a monopoly utility's entry into a competitive market is necessary, and CMD's entry into this market will likely inhibit competition and thus the cost-reduction and innovation benefits that competition provides.
 - b. Lack of benefit to customers: With the offset component—the largest portion—of the GPR program, CMD is proposing to provide a service to customers that they could procure on their own in a competitive marketplace. The GPR program is not designed to address customers' informational barriers. Further, CMD proposes to use third-party registries with known quality control issues to verify offsets delivered by the GPR program without making any effort to improve the quality of offsets delivered.

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³ M-RETS. "Renewable Thermal Tracking." https://www.mrets.org/m-rets-renewable-thermal-tracking-system/, accessed January 13, 2023.

- c. Inadequacy of potential emission reductions: RNG attributes and carbon offsets will not be restricted to Maryland sources, making it likely that emissions reductions spurred by the program will neither occur in Maryland nor count toward Maryland's emissions reduction targets. Furthermore, the ability of RNG attributes and offsets to provide any emissions reductions is unproven.
- d. Uncertain demand for the program: CMD has not adequately assessed whether there is demand for this type of program from its customers. The survey the Company is using to justify this program did not ask customers sufficiently targeted questions that would indicate their interest in the specific program CMD is proposing.
- e. Unjustified recovery of customer education costs from all ratepayers:

 CMD has not developed a customer education plan that would provide meaningful and useful information to customers, but the Company plans to include customer education costs in the rates of all customers.
- f. Inadequate analysis of cost impacts and risks to participants: CMD has not adequately assessed how the program costs will change in the future.

Inconsistency with Role of a Public Utility

- 11. In its application, CMD does not justify why a monopoly utility should be allowed to provide the GPR program. Generally, the prerequisite conditions for a public utility include "necessity and monopoly." The GPR program has no apparent characteristics of necessity: it is an optional service, and it does not impact the availability of energy for home heating or any other use. The GPR program also does not result from a natural monopoly. GHG offsets are readily available, and customers can purchase them with minimal effort on their own. The markets for RNG attributes are less developed. However, these attributes make up only 5 percent of the GPR program, and over time the market is likely to further develop and become more liquid as gas companies seek to respond to state decarbonization policies. Further, as discussed below, RNG's ability to reduce GHG emissions depends critically on the type of RNG, which CMD is not proposing to constrain.
- 12. In a state with retail competition for gas service, there should be a high bar for a regulated monopoly utility to justify its entry into a business area that can and, in the case of offsets, is being served by the private market. As a public utility, CMD has inherently greater ability to communicate with its customers, access to customer usage information, and brand recognition. CMD will likely use these advantages when embarking in this new line of business, raising concerns about intrusion on the competitive market and whether utility customers are properly compensated. For

⁴ Bonbright, James C. 1961. Principles of Public Utility Rates. Columbia University Press. P. 8.

example, the GPR's attribute-based product would likely cost less than in-state RNG production; thus, more expensive local RNG supply would likely not develop or be able to compete, and any associated emissions reductions would not materialize. However, as noted below, the GPR would likely not provide any emissions reductions in the state and thus would not count towards Maryland's GHG reduction targets, unlike carbon-negative in-state RNG production.

13. As is discussed below, the uncertainty of emissions reductions from the offsets and attributes that the GPR program provides may deceive customers about the actual emissions the program reduces. In allowing such a program, the Commission would run afoul of its duty to protect consumers from deceptive and anticompetitive acts and practices.

Lack of Benefit to Customers

As structured, the GPR program would not provide value to customers through quality emissions reductions.

- 14. The GPR program will provide customers with 5 percent RNG attributes and 95 percent offsets. The RNG attributes make up a very small portion of the overall program. Since the RNG attributes will be unbundled from the physical gas, customers will not be physically receiving RNG. 6
- 15. CMD will designate Anew, its third-party supplier, as responsible for sourcing offsets that are certified through independent nonprofit registries such as Verra and the

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⁵ ML# 242360.

⁶ CMD Response to OPC DR 2-001.

American Carbon Registry.⁷ However, online carbon offset marketplaces offer this same level of verification. Columbia customers interested in offsetting the emissions from their fossil gas usage could simply purchase carbon offsets verified by well-known registries on their own, and potentially benefit from lower prices in a competitive marketplace.

- 16. While the offset registries Columbia identifies are frequently used by other offsetting programs, there are significant concerns about the quality of the offsets these registries certify. Offsets should meet five criteria to ensure credibility and environmental integrity:
 - a. **Permanent:** Emissions reductions or removals should not be reversible, meaning that a reduction in emissions now will not be followed by an equivalent increase in emissions later.
 - b. Additional: The offset project should represent new emissions reductions.
 Offsets are additional if they enable carbon reduction to occur that would not otherwise occur without the offset funding.
 - c. **Verifiable:** Emissions reductions from offsets should be monitored and regularly verified by an independent third party.
 - d. **Enforceable:** To avoid double-counting, the ownership of an offset should be enforceable to ensure that only one credit can be claimed for the offset.

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⁷ CMD Response to Staff DR 1-003; CMD Response to OPC DR 1-029. *See* https://americancarbonregistry.org/

- e. **Real**: Offsets should represent one ton of carbon emissions reduced as the result of the offset project *without carbon displacement occurring*, which occurs when the offset results in the same emissions occurring elsewhere rather than actually reducing overall emissions. This ensures that the quantity of emissions reductions are not inflated and that accurate accounting takes place.⁸
- 17. Verified carbon offset registries, including those listed by CMD, receive heavy criticism for lack of transparency regarding the actual impacts of their carbon offset projects. Offsets and verification programs often present substantial concerns regarding permanence, especially for offset programs relating to forest protection. For example, an analysis of radar data from a carbon offset project launched in Cambodia in 2008, which claimed 88 percent of the protected areas were forested, revealed that only 46 percent of the forests in the protected area were still standing 10 years later. This project was verified by Verra and sold as offsets. Verra is one of the registries that will be used for the GPR program. Another satellite analysis released in December 2022 detected no real climate benefit from 10 years of forest carbon offsets administered by the American Carbon Registry and the Climate Action Reserve in

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⁸ World Resources Institute. 2010, The Bottom Line on Offsets. Available at: https://www.wri.org/research/bottom-line-offsets.

⁹ Song, Lisa. 2019. "An Even More Inconvenient Truth." *ProPublica*. May 22. Available at: https://features.propublica.org/brazil-carbon-offsets/inconvenient-truth-carbon-credits-dont-work-deforestation-redd-acre-cambodia/.

California. 10 CMD plans to use both the American Carbon Registry and the Climate Action Reserve for the GPR program.

18. Offsets do not mitigate carbon emissions unless they are additional. Dubious claims of additionality plague offset schemes: a study of the United Nation's Clean Development Mechanism found that 85 percent of the certified emissions reduction projects analyzed were unlikely to be additional, especially those that come from renewable energy projects. 11 CMD plans to use the Clean Development Mechanism as an offset registry for the GPR program. 12 Likewise, while the Gold Standard and Verra have stopped accrediting new renewable energy offset projects, they have grandfathered in older renewable energy projects and will continue selling offsets from these projects until 2030 despite acknowledging that these projects are non-additional because they likely to be profitable on their own. 13 Since the Gold Standard and Verra stopped accepting renewable energy projects, the Global Carbon Council, a new Qatari offset-certifier, has become the *de facto* certifier and provider for these non-additional,

¹⁰ Coffield, Shane and James Randerson. 2022. "Satellites detect no real climate benefit from 10 years of forest carbon offsets in California." *The Conversation*. December 1. Available at: https://theconversation.com/satellites-detect-no-real-climate-benefit-from-10-years-of-forest-carbon-offsets-in-california-193943; Coffield, S.R., Vo, C.D., Wang, J.A, Badgley, G. Goulden, M.L., Cullenward, D., Anderegg, W.R.L, & Randerson, J.T. 2022. "Using remote sensing to quantify the additional climate benefits of California forest carbon offset projects". *Global Change Biology* (Vol. 28, Issue 22). Available at: https://onlinelibrary.wiley.com/doi/10.1111/gcb.16380.

¹¹ Cames, M., Harthan, R. O., Füssler, J., Lazarus, M., Lee, C. M., Erickson, P., & Spalding-Fecher, R. 2016. How additional is the clean development mechanism? Analysis of the application of current tools and proposed alternatives, 2017-04. CLIMA.B.3/SERI2013/0026r.

https://www.verifavia.com/uploads/files/clean dev mechanism en.pdf.

¹² CMD Response to OPC DR 2-011.

¹³ Shifflett, S. 2022. "Companies Are Buying Large Numbers of Carbon Offsets That Don't Cut Emissions." *The Wall Street Journal*. September 8. Available at:

 $[\]underline{https://www.wsj.com/articles/renewables-carbon-credits-do-not-cut-emissions-united-nations-verra-gold-standard-11662644900}.$

low-quality offsets. Bloomberg calls the Global Carbon Council the "Certifier of Last Resort" because the organization certifies renewable energy projects that no other registry will certify. ¹⁴ CMD plans to use the Global Carbon Council, as well as the Gold Standard and Verra, to provide offsets for the GPR program.

19. Similarly, in 2020 *Bloomberg Green* reported that The Nature Conservancy had sold offsets using the American Carbon Registry claiming to protect forests that they owned and that therefore were not likely to have been threatened. ¹⁵ Columbia plans to use the American Carbon Registry as an offset registry for the GPR program. ¹⁶ In 2021, the *MIT Technology Review* reported that the Massachusetts Audubon Society had sold over 600,000 credits to California's Compliance Offset Program in exchange for preserving forests that were already under its care. ¹⁷ This appears to fail the additionality criterion. While it is possible that the Massachusetts Audubon Society would have decided to sell or log some of this land for revenue in the absence of the proceeds it received from the sale of offsets, it is highly likely that including forest preservation projects in offsetting programs led to a net increase in emissions because additional carbon emissions reductions (relative to the status quo) are not occurring to

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¹⁴ White, Natasha & Ratcliffe, Verity. 2022. "How the 2022 World Cup Rebuilt a Market for Dodgy Carbon Credits." *Bloomberg*. November 16, 2022. Available at: https://www.bloomberg.com/news/articles/2022-11-17/how-the-2022-world-cup-rebuilt-a-market-for-renewable-energy-carbon-offsets.

¹⁵ Elgin, Ben. 2020. "These Trees Are Not What They Seem." *Bloomberg*. December 9. Available at: https://www.bloomberg.com/features/2020-nature-conservancy-carbon-offsets-trees/.

¹⁶ CMD Response to OPC DR 2-011.

¹⁷ Song, Lisa. 2021. "A nonprofit promised to preserve wildlife. Then it made millions claiming it could cut down trees". *MIT Technology Review*. May 10. Available at: https://www.technologyreview.com/2021/05/10/1024751/carbon-credits-massachusetts-audubon-california-logging-co2-emissions-increase/.

offset the purchasers' emissions. In 2021, *The Guardian* reported that Verra's predicted emissions reductions for forest carbon offsets projects were inconsistent with previous levels of deforestation in the area and that in some cases, the threat of deforestation may have been overstated by Verra.¹⁸ Verra is one of the registries that will be used for the GPR program.

20. Under the California GHG reduction regulation, the California Air Resources Board ("CARB") issues Air Resource Board Offset Credits to qualifying projects that reduce or sequester GHGs pursuant to six Board-approved Compliance Offset Protocols. ¹⁹ CARB is required to consult with an advisory group, the Offset Protocol Task Force, to develop and periodically review the efficacy of established offset protocols. To obtain CARB offsets, the offset project operators must list their offset projects with an approved offset project registry to be eligible for CARB offset credits. The California offset compliance program relies on third-party registries "to help facilitate the listing, reporting, and verification of offset projects developed using the compliance offset

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 $^{^{18}}$ Greenfield, Patrick. 2021. "Carbon offsets used by major airlines based on flawed system, warn experts." *The Guardian*. May 4. Available at:

 $[\]underline{https://www.theguardian.com/environment/2021/may/04/carbon-offsets-used-by-major-airlines-based-on-flawed-system-warn-experts.}$

¹⁹ The approved offset protocols include the following: livestock projects; mine methane capture; ozone depleting substances; rice cultivation; U.S. forest projects; and urban forest projects. (California Air Resources Board, Compliance Offset Program. https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/compliance-offset-protocols. Accessed January 13, 2023.) Any carbon offsets may only credit emissions reductions that are "real, permanent, quantifiable, verifiable, enforceable" and "in addition to any greenhouse gas emission reduction otherwise required by law or regulation and any other greenhouse gas emission reduction that otherwise would occur." (2020 California Code, Health and Safety Code, Division 25.5, Part 4, Section 38562.

 $[\]underline{https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=38562.\&nodeTreePath=31.4\&lawCode=HSC)}$

protocols[.]"²⁰ CARB has approved three compliance offset registries to administer offset credits under the California GHG reduction regulation: the American Carbon Registry, the Climate Action Reserve, and Verra (formerly Verified Carbon Standard).²¹

21. The California Independent Emissions Market Advisory Committee, tasked with monitoring the performance and efficacy of the California GHG reduction program has noted "... offset credits can be issued by any regulator participating in the linked Western Climate Initiative (WCI) cap-and-trade program[;] California has issued about 99.5 percent of credits to date and is therefore the *de facto* offsets regulator [in the United States]."²² The Committee also notes that recognized California compliance offset credits have been issued under the following protocols: 81.7% (189,811,822 credits tCO2e) under the U.S. forest protocol; 10.5% (24,305,693 credits tCO2e) under the ozone depleting substances protocol; 3.9% (8,994,363) under the mine methane capture protocol; 3.5% (8,250,214 credits tCO2e) under the livestock manure digester protocol; and, 0.2% (473,615 credits tCO2e) under the landfill site methane destruction protocol.²³ The CARB is pursuing a review of the U.S. forest protocol, including the requirements of the current Board-approved protocol and the state of forest and forest

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²⁰ California Air Resources Board, Compliance Offset Registries, https://ww2.arb.ca.gov/our-work/programs/compliance-offset-program/offset-project-registries (accessed December 21, 2022).

²¹ Title 17, California Code of Regulations, section 95986.

²³ California Air Resources Board, Staff Presentation, Public Workshop U.S. Forest Projects Compliance Offset Protocol, November 30, 2022, https://ww2.arb.ca.gov/sites/default/files/2022-11/nc-CARBslides20221130.pdf.

²³ California Air Resources Board, Staff Presentation, Public Workshop U.S. Forest Projects Compliance Offset Protocol, November 30, 2022, https://www2.arb.ca.gov/sites/default/files/2022-11/nc-CARBslides20221130.pdf.

carbon science, data, and tools that are relevant to the protocol. The California Independent Emissions Market Advisory Committee notes that the U.S. forest protocol "has been criticized for issuing credits that may not reflect real climate benefits and for failing to adequately insure against the risk of wildfire and other carbon losses."²⁴

22. CMD plans to allow any offsets generated by projects included in the registries it is using, without imposing additional quality requirements or restrictions. However, certain types of projects are more likely to be additional than others. For example, offsets that fund renewable energy projects are unlikely to be additional because these projects would often be profitable without offset funding. In order to maximize the potential for additionality and permanence, the University of Oxford suggests prioritizing carbon removal offsets (e.g., direct air carbon capture and storage) over emissions reduction offsets (e.g., renewable energy generation projects) and prioritizing long-lived storage offsets (e.g., bioenergy with carbon capture and storage) over short-lived storage offsets (e.g., reforestation). Under the current GPR program design, CMD is not imposing any quality controls on offsets verified by third-party registries, despite the known quality issues with these registries that were discussed

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²⁴ California Independent Emissions Market Advisory Committee Annual Report – 2021 (February 2022), https://calepa.ca.gov/2021-iemac-annual-report/. p. 27.

²⁵ CMD Response to OPC DR 2-011.

²⁶ Cames, M., Harthan, R. O., Füssler, J., Lazarus, M., Lee, C. M., Erickson, P., & Spalding-Fecher, R. 2016. "How additional is the clean development mechanism? Analysis of the application of current tools and proposed alternatives, 2017-04." CLIMA.B.3/SERI2013/0026r. https://www.verifavia.com/uploads/files/clean_dev_mechanism_en.pdf.

²⁷ Allen, M., Axelsson, K., Caldecott, B., Hale, T., Hepburn, C., Hickey, C., & Smith, S. 2020. "The Oxford principles for net zero aligned carbon offsetting." *University of Oxford*. https://www.smithschool.ox.ac.uk/sites/default/files/2022-01/Oxford-Offsetting-Principles-2020.pdf.

earlier. As a result, the offsets included in the GPR will likely not amount to the emissions reductions claimed.

- 23. Carbon offset projects should be local to Maryland to support the goals of the *Climate Solutions Now Act*, which requires steep emissions reductions (60 percent relative to 2006 levels by 2031). Offset programs can be designed to ensure that emissions reductions are in state or in region. For example, Maine's requirements for eligible offset projects under the Regional Greenhouse Gas Initiative (RGGI) allow offset projects from any state participating in RGGI or any state that has entered into a memorandum of understanding with Maine, as long as more of the CO₂ equivalent emissions reduction or carbon sequestration attributable to the offset project is projected to occur in Maine than in any other participating state.²⁸
- 24. Carbon offset programs should also provide long-term benefits and exhibit additionality by supporting initiatives that would not have otherwise occurred. For example, carbon offsets corresponding to energy retrofits for low-income households are more likely to provide carbon benefits than forestry or renewable energy offset types, as they more often meet criteria as being additional, verifiable, enforceable, permanent, and real than the forestry and renewable energy projects discussed earlier.²⁹

²⁸ Maine Administrative Code, DEP Chapter 156: CO2 Budget Trading Program Regulations.

²⁹ Vereckey, Betsy. 2022. "How to choose carbon offsets that actually cut emissions." *MIT Sloan School of Management*. November 2. Available at: http://mitsloan.mit.edu/ideas-made-to-matter/how-to-choose-carbon-offsets-actually-cut-emissions.

- 25. As part of its justification for using a third-party supplier for the GPR program, CMD states that it would not be efficient or cost-effective to self-develop carbon offset projects and have them verified by a third party.³⁰ This begs the question of whether the GPR program would provide any value beyond what is offered by the existing online carbon marketplaces already available to customers.
- 26. CMD claims that because "[p]urchasing RNG attributes typically requires a minimum volume and a longer-term contract"—something that would be "very difficult" for customers to do on their own—customers will benefit by participating in the GPR program rather than procuring offsets themselves. However, CMD's responses address only RNG attributes and fail to address the ease with which customers could purchase carbon offsets. As noted previously, RNG represents only 5 percent of the overall service.

As currently designed, the program does not address informational barriers.

- 27. It is problematic that CMD provides no detail on how the company plans to educate customers about the quality of the proposed GPR program offsets and attributes. This raises concerns about whether customers might be misled or deceived about what they would pay for and receive through GPR participation.
- 28.CMD's responses to discovery requests raise concerns about its intentions to objectively educate customers about carbon offsets and environmental attributes. For

³⁰ CMD Response to Staff DR 1-032.

³¹ CMD Response to Staff DR 1-030.

instance, CMD gives no indication that it plans to inform customers that the GPR program is only designed to compensate for carbon dioxide, and that methane is a much more potent GHG.³² CMD cites an industry-funded group (the American Gas Association) in stating that RNG is carbon-neutral; and CMD cites the U.S. Environmental Protection Agency to support its claim that RNG "can be" carbonnegative, meaning that it is expected to reduce GHG emissions relative to a case in which the RNG is not produced and does not displace traditional fossil gas.³³ As discussed below on page **Error! Bookmark not defined.** of these comments, RNG can also be carbon-positive. Selectively providing information to customers does not provide them with sufficient information needed to make informed decisions about participating in gas offsetting.

There is no need for a regulated utility to enter the gas offsetting market.

29. Fuel choice programs in other states provide the same services as the GPR program. For example, WGL Holdings' unregulated supply arm, WGL Energy, allows customers in Washington DC, Maryland, and Virginia to select up to 100 percent certified natural gas and 100 percent certified carbon offsets, without the involvement of a regulated utility.³⁴ As discussed earlier, allowing a firm such as CMD that has a monopoly in gas distribution to provide a service that can be provided by the market will likely suppress competition and thus the cost-reduction benefits that competition

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³² CMD acknowledges this information because it is requested in OPC DR 1-030.

³³ CMD Response to OPC DR 1-033.

³⁴ WGL Energy provides retail supply service to customers in both Washington Gas and Baltimore Gas and Electric Company's service territory. https://www.wgl.energy.com/help-me-choose.

provides. This is because, among other reasons, CMD has an incumbent advantage and a captive audience for its new services. Despite the risk of quashing competition, CMD has not provided any justification for entering this business area, much less surpassed the high bar that the Commission should require CMD to meet for this proposed infringement on the market.

Inadequacy of potential emissions reductions from GPR program for meeting GHG targets

- 30. It is unlikely that the GPR program will reduce emissions within Maryland and contribute to achieving the state's GHG reduction goals. CMD will not be delivering RNG to Maryland customers, and the RNG attributes will be supplied from RNG projects across the United States.³⁵ As a result, any emissions reductions that do come from the RNG portion of the GPR program will likely not reduce emissions within Maryland and thus will not count towards compliance with the *Climate Solutions Now Act*. However, many types of RNG are not carbon negative, so it is unclear if there are emissions reductions to even claim.
- 31. CMD is not restricting RNG feedstock types.³⁶ This will not lead to an accurate assessment of emissions reductions from RNG attributes because different RNG feedstocks have different carbon intensities. Some types of RNG may be carbon neutral, but others create net emissions. For example, RNG from landfills typically creates net emissions that can be on par with emissions generated from fossil natural

³⁵ CMD Response to OPC DR 2-001.

³⁶ *Id*.

gas. RNG from wastewater typically also produces net increases in carbon emissions.³⁷ RNG from food and green waste can sometimes produce net emissions increases and sometimes produce net emissions reductions.³⁸ RNG from animal manure typically results in emissions reductions, but the supply of such RNG is typically limited.³⁹

- 32. CMD cannot claim the offset portion of this program will reduce emissions in Maryland either. CMD does not plan to restrict offset projects by location. 40 Offset projects included on the registries CMD plans to use are located both nationally and internationally, which means emissions reductions will likely not occur in Maryland.
- 33. Additionally, offsets provided under this program will only compensate for carbon emissions from fossil gas consumption. 41 CMD has no plans to estimate and track how much methane associated with each participating customer leaks from its gas distribution system. That means that the GPR will not include offsets of such fugitive gas emissions. Considering that Columbia does track its distribution systems' fugitive methane emissions, 42 the Company has the ability to offset methane emissions using this data but is choosing to only focus on end-use carbon emissions.
- 34. Even if RNG or offsets do provide additional benefits that the State can use for compliance with GHG targets, the quantities that it provides are limited. Based on its

³⁷ Chung, Emily. 2022. "Renewable natural gas could help slow climate change, but by how much?" *CBC*. February 13. https://www.cbc.ca/news/science/renewable-natural-gas-1.6346783.

³⁸ Ibid.

³⁹ ICF. 2019. Renewable Sources of Natural Gas. American Gas Foundation: https://gasfoundation.org/2019/12/18/renewable-sources-of-natural-gas/.

⁴⁰ CMD Response to OPC DR 2-011.

⁴¹ CMD Response to OPC DR 1-030.

⁴² CMD Response to OPC DR 1-031.

projected enrollment for GPR's first year, CMD indicates that a reduction of 1,895 tons could be achieved. Assuming the same enrollment in future years and that all participants stay in the program (an optimistic assumption), emissions savings from the GPR would total 53,060 tons CO₂e in 2030. In contrast, the Mitigation Working Group of the Maryland Commission on Climate Change developed and recommended a MWG Policy Scenario that calls for reducing direct building emissions by more than 4 *million* metric tons of CO₂e by 2030. As Based on CMD's share of gas sales in Maryland to the MWG Policy Scenario target emissions reduction for buildings, CMD's emissions reductions would be more than 180,000 metric tons CO2e—over 3 times what GPR would achieve based on the assumptions above.

35. The GPR could work against the state's efforts to reduce GHG emissions. If participants believe that it is easy to offset their emissions, they may increase their gas consumption, resulting in even higher GHG emissions. Recent research found that carbon offsets might be perceived as a moral license to behave in environmentally harmful ways. 45 If this is true of consumption that leads to GHG emissions, the availability of offsets could lead to an *increase* in consumption by GPR participants.

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⁴³ CMD's projection of 1,895 tons assumes that the Company hit the annual enrollment projection in the program's first month, the customers stay on for a full year, and the customers' usage is average for their classes. (CMD Response to Staff DR 2-007).

⁴⁴ Maryland Commission on Climate Change. 2021. Building Energy Transition Plan. Available at: https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Documents/2021%20Annual%20Report%20Appendices%20FINAL.pdf.

⁴⁵ Warburg, Johan, Britta Frommeyer, Julia Koch, Sven-Olaf Gerdt, and Gerhard Schewe. "Voluntary carbon off setting and consumer choices for environmentally critical products—An experimental study." *Business Strategy and the Environment.* Volume 30, Issue 7. p. 3009-3024.

Uncertain Demand for the Program

- 36. CMD has not adequately assessed customer demand for this type of program. CMD conducted a survey to assess customer interest in a program like the GPR program.⁴⁶ In the survey CMD attached to its answer, CMD asked survey respondents if they are in favor of expanding renewables, if they would like to get their energy from carbonneutral RNG, and about their willingness to pay for RNG. Only 23 customers responded to this survey out of 32,244 total gas customers.⁴⁷ This represents a very small sample size of 0.07 percent.
- 37. CMD surveyed customers about their interest in getting their energy from RNG. This is not what the GPR program will provide. The GPR program will provide customers with a small amount of RNG attributes unbundled from the RNG. Customers will continue to be provided with energy from non-renewable natural gas. CMD did not assess customer's interest in this type of program. Furthermore, most of the emissions reductions that CMD is claiming will come from offsets. CMD's survey did not assess customer's interest in offsets, which make up 95 percent of the program. Therefore, CMD has not assessed whether there is customer demand for the GPR program.

⁴⁶ CMD Response to OPC DR 1-017.

⁴⁷ CMD Response to OPC DR 1-017 and OPC DR 2-005.

Unjustified Recovery of Customer Education Costs from All Customers

38. Columbia believes the education costs to this opt-in, voluntary program should not be self-contained within the GPR program because the customer education will benefit all eligible customers and, therefore, these costs should be recovered from eligible customers.⁴⁸

39. Columbia has not created any educational or marketing materials. ⁴⁹ Therefore, there is no way to assess whether or not customer education will benefit all customers or if it will be misleading. CMD's survey for this program, as discussed earlier, did not ask respondents about their interest in a carbon-offset program. Without being able to review any sample language, it is impossible for the Commission to assess whether the education and marketing for this program will be adequate or will provide benefits to all eligible customers.

Inadequate Analysis of Cost Impacts and Risks to Participants and Ratepayers

40. As discussed above, Columbia plans to recover costs from all customers for the education and marketing costs of this program. Columbia estimates that the impact to rates of a future rate case to recover administrative costs from customer education would be \$0.007 per month per customer. ⁵⁰ It is not appropriate for all customers to bear these costs, since there are no clear benefits to all ratepayers or even to participants.

⁴⁸ CMD Response to Staff DR 1-006.

⁴⁹ CMD Response to OPC DR 2-014.

⁵⁰ CMD Response to OPC DR 1-008.

41. Additionally, Columbia provides no justification for its offset rates and states that it

does not have information about how much an individual customer would pay for

offsets on the open market.⁵¹ Columbia also is unable to predict how the rates for this

program will change after the first year.⁵² As a result, it is impossible to assess how

affordable this program will be and if it will still be viable to customers after its first

year.

42. This concludes my affidavit.

I solemnly affirm under the penalties of perjury that the contents of the

foregoing paper are true to the best of my knowledge, information, and belief.

/electronic signature/

Name: Alice Napoleon

Subscribed and sworn to, this 17th day of January, 2023.

⁵¹ CMD Response to Staff DR 1-030.

⁵² CMD Response to OPC DR 2-022.

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Question No. OPC 2-001 Respondent: A. Campbell Page 1 of 2

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 2

Question No. OPC 2-001:

Please refer to Columbia's response to OPC DR 1-002. With respect to the RNG attributes covered by the Anew contract, please provide detailed descriptions of the following for each unique RNG source:

- a. site, state, region, and country of origin;
- b. feedstock;
- c. production process;
- d. energy input needs for processing;
- e. energy input needs for refining; and
- f. end use for RNG and means of transporting to the site of end use.

Response:

RNG attributes covered by the Anew contract will be supplied from projects within Anew's dynamic managed RNG portfolio throughout the term of the agreement. Supply from a portfolio allows Columbia to procure volumes based on actual consumption without contract quantity minimums, risk of over- or undersupply, or reliance on the operations and production of a specific facility. Anew currently manages RNG supply from over 35 facilities.

For the portfolio of projects from which RNG attributes will be supplied:

- a. The projects are located within the continental United States.
- b. Feedstock type may be landfill waste, wastewater treatment plant waste, agricultural manure, food waste and/or biomass.
- c. Production Process: Solid and liquid waste is collected and delivered to the RNG processing facility. Methane generated by the natural breakdown of organic material is captured instead of escaping into the atmosphere. The raw biogas is subjected to purification and upgrading processes. Raw biogas has a methane content between 45 and 65 percent, depending on the source of the feedstock, and must go through a series of steps to be converted into RNG. Treatment

Question No. OPC 2-001 Respondent: A. Campbell Page 2 of 2

includes removing moisture, carbon dioxide (CO2) and trace level contaminants (including siloxanes, volatile organic compounds, or VOCs, and hydrogen sulfide), as well as reducing the nitrogen and oxygen content. Generally, RNG injected into a natural gas pipeline has a methane content between 96 and 98 percent.

- d. The capture, upgrade, and pipeline injection of RNG (i) avoids emissions of methane, a greenhouse gas with warming potential 28-36 times greater than carbon dioxide over a 100-year time scale and (ii) displaces conventional fossil fuels. While the energy input needs for processing vary for each facility and depend upon the feedstock type, system configuration, location, and other factors, RNG has a lower grams of CO2 equivalent per megajoule of energy than conventional fossil fuels.
- e. The capture, upgrade, and pipeline injection of RNG (i) avoids emissions of methane, a greenhouse gas with warming potential 28-36 times greater than carbon dioxide over a 100-year time scale and (ii) displaces conventional fossil fuels. While the energy input needs for upgrading vary for each facility and depend upon the feedstock type, system configuration, location, and other factors, the RNG has a lower grams of CO2 equivalent per megajoule of energy than conventional fossil fuels.
- f. The RNG is injected into the common carrier pipeline. The RNG attribute is unbundled from the physical natural gas commodity and is listed on the M-RETS registry. After Columbia uses natural gas physically delivered by the pipeline, the unbundled RNG attribute is retired on the M-RETS registry on their behalf.

Question No. OPC 1-029 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 1

Question No. OPC 1-029:

How will the company ensure that the claimed reductions from the RNG environmental attributes and carbon offsets are additional, and would not have occurred but for the generation and sale of the attribute or offset?

Response:

It is in the agreement with the supplier that they will be responsible for sourcing environmental attributes and carbon offsets that are legitimate and certified through third parties (Climate Action Reserve, Verra, Gold Standard, the Clean Development Mechanism, and the American Carbon Registry.) The company will be provided a copy of the certification.

Question No. OPC 2-011 Respondent: A. Campbell Page 1 of 2

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 2

Question No. OPC 2-011:

Please refer to Columbia's response to OPC DR 1-024.

- a. Describe in detail the methodology used by each proposed registry to ensure that offsets are:
 - i. permanent;
 - ii. additional;
 - iii. verifiable;
 - iv. enforceable; and
 - v. real.
- b. Describe the types of carbon offsets covered by each registry.
- c. Explain if the company plans to allow any offsets issued by these registries to be used for this program, or if the company plans to limit offsets to a certain subset of characteristics (e.g., restrictions on type, project location).

Response:

a. Each registry has detailed program standards that define the processes and requirements projects must meet in order to generate carbon offsets.

For specific detail on the methodology applied at the program level to ensure these criteria, below are direct links to the applicable standards for each registry:

- Climate Action Reserve: <u>Climate Action Reserve Verification Program Manual</u>
- Verified Carbon Standard (a program of Verra): Verified Carbon Standard
- American Carbon Registry: ACR Validation and Verification Standard
- The Gold Standard: <u>Gold Standard for the Global Goals Principles and Requirements</u>
- Global Carbon Council: Project Standard
- United Nations Clean Development Mechanism: <u>CDM Project Standard for Project Activities</u>

Question No. OPC 2-011 Respondent: A. Campbell Page 2 of 2

b. Each registry has a number of carbon offset project types, which are governed by methodologies or protocols approved for use on that registry. There are over 350 distinct carbon offset project types, governed by over 350 unique, approved methodologies on these registries collectively.

Below are direct links to the list of methodologies approved for use on each respective registry:

- <u>Climate Action Reserve</u>
- <u>Verified Carbon Standard (a program of Verra)</u>
- American Carbon Registry
- The Gold Standard
- Global Carbon Council
- <u>United Nations Clean Development Mechanism</u>
- c. The criterion for carbon offsets under this program is that the carbon offset represents the destruction, avoidance or sequestration of greenhouse gas (GHG) emissions, including, without limitation, Carbon Dioxide (CO2), Methane (CH4), Nitrous Oxide (N2O), and Fluorinated Gases (Sulfur Hexafluoride (SF6), PFCs, and Nitrogen Trifluoride (NF3). No matter the GHG, all carbon offsets are normalized to one metric ton of carbon dioxide equivalent (CO2e). All carbon offsets transacted in a registry are verified in accordance with protocols adopted by the applicable registry. There are no specific restrictions on project type or location.

Question No. OPC 1-030 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 1

Question No. OPC 1-030:

Has the company included greenhouse gases other than carbon dioxide, such as methane, in the calculation of customer's offsets in the GPR?

- a. If yes, please explain in reasonable detail how greenhouse gases other than carbon dioxide are considered in the offset calculation.
- b. If no, please explain why not.

Response:

No, the program only offsets the customers carbon dioxide emissions and not any upstream methane emissions.

Question No. OPC 1-033 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 1

Question No. OPC 1-033:

Page two of Columbia's September 16, 2022 filing in footnote one states "RNG is a carbon-neutral (and sometimes carbon-negative), sustainable alternative to geologic natural gas that is produced from organic waste from sources like landfills, wastewater plants and farms."

- a. Please explain what specific type of alternative gaseous fuels fall under Columbia's definition of RNG.
- b. Please provide the research and data the company used to make the statement that RNG is carbon-neutral.
- c. Please provide the research and data the company used to make the statement that RNG can be carbon-negative.

Response:

- a. Renewable natural gas is the gaseous byproduct of the decomposition of organic matter from various resources that can be used for energy. These resources can include landfills, livestock operations, and wastewater treatment facilities. The gaseous byproduct is captured at the resource location and cleaned to remove impurities.
- b. The company used research and data from the AGA (American Gas Association).
 - <u>https://www.aga.org/research/reports/renewable-natural-gas-rng/</u>
- c. The company used research and data from the EPA (U.S. Environmental Protection Agency).
 - https://www.epa.gov/agstar/renewable-natural-gas-agricultural-based-adbiogas-systems

Question No. OPC 2-005 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 2

Question No. OPC 2-005:

Please refer to Columbia's response to OPC DR 1-009. What is the source of the Company's enrollment estimates? Please provide any and all related workbooks, unlocked with formulae intact and clearly showing methodology, assumptions, and sources.

Response:

The company received information on its customers related to their attitude towards the environment. This allowed for the company to segment into subsets of customers from highest likely to participate to the lowest. The company then calculated a subset of the most environmentally aware customers to develop an enrollment projection. The attached spreadsheet (CMD Green Path Rider – OPC 2-5) shows the calculations.

Question No. OPC 04-5 Respondent: E. Evans

Page 1 of 1

Residential Estimate	MD	0.1% Yr 1	1% 2023	1% 2024	1.25% 2025	1.50% 2026
1	8,741	1	87	87	87	87
2	8,202					

Total Potential

Commercial Estimate
Customers

MD	2022	2023	2024	2025	2026
3,745	0	38	38	38	38

GreenAware Segmentation targeting system includes attitudes, opinions, lifestyle, buying behavior, and media usage. Based on the distinctive mindset towards the environment, we can better understand four distinct consumer segments:

1. Behavioral Greens: This group of people thinks and acts green, holds negative attitudes toward products that pollute, incorporate green practices These are our best opportunity to convert and highest likelihood to select Green Path.

2. Think Greens: This group of people thinks green but does not necessarily act green. May have a few of these convert but not confident to include o

MD

Total Gas Customers

32,244

TOTAL 348

TOTAL 152

of consumers

on a regular basis.

ur numbers.

0.30%

Question No. OPC 2-014 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 2

Question No. OPC 2-014:

Please refer to Columbia's response to Staff DR 1-007. Given that the marketing material itself has not been finalized, can the Company provide sample language that will be used in the advertising and educational material for this program?

Response:

The Company does not have any sample language to provide at this time but is willing to share it once it has been developed.

Question No. OPC 1-008 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 1

Question No. OPC 1-008:

Please explain how the company anticipates recovering the "company-specific GPR program administration costs" associated with the GPR. Please include any estimates of the impact of the GPR administrative costs on rates.

Response:

If the GPR is approved by the Commission, the Company anticipates seeking approval in a future rate case to recover GPR-related administrative costs in base rates. Costs will be spread across all CMD sales customers. These costs include about \$2,900 per year for education costs. Currently, CMD has 33,406 Sales customers; thus, the estimated impact to rates would be approximately \$0.007 per month per customer.

Question No. OPC 1-017 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of People's Counsel - Data Request Set No. 1

Question No. OPC 1-017:

Has the company conducted or caused to be conducted any customer interest surveys or studies to determine whether there is an interest in a program like the GPR in Columbia's Maryland service territory?

- a. If yes, please provide copies of all surveys and a detailed summary of survey results.
- b. If no, please explain why not.

Response:

Yes, a survey was done to gather customer interest. Please see attachment A.

Survey: 2022 02 February - Renewable Energy / GreenPath Progran

Data Options: Complete

Do you favor expanding renewables (Single Choice)

Generally speaking, do you favor expanding U.S. renewable energy resources?

		CMD
	Total	23
1 Yes	3	20
		87%
2 No		1
		4%
3 Dor	n't know / not sure	2
		9%

Customer choice to use renewables (Single Choice)

Should customers be given the choice of using renewable energy compared to conventional fuels?

	CMD
Total	23
1 Yes	20
	87%
2 No	1
	4%
3 Don't know / not sure	2
	9%

Familiarity with renewable natural gas (Single Choice)

Are you familiar with renewable natural gas?

		CMD
	Total	23
1	Yes	6
		26%
2	No	12
		52%
3	Don't know / not sure	5
		22%

Would renewables (RNG) apeal to you (Single Choice)

If you could use natural gas that is carbon neutral, like RNG, would that appeal to you?

	CMD
Total	23
1 Yes	21
	91%
2 No	0
	0%
3 Don't know / not sure	2
	9%

Willingness to pay for renewables (Single Choice)

Would you be willing to pay more each month to get your energy from renewable energy sources such a

	CMD
Total	23
1 Yes	5
	22%
2 No	15
	65%
3 Don't know / not sure	3
	13%

Willingness to pay for renewables category (Single Choice)

You indicated you're willing to pay extra monthly to get your energy from renewable energy sources like

		CMD
	Total	5
1	\$6.00 to \$10.00 extra a month	2
		40%
2	\$11.00 to \$15.00 extra a month	1
		20%
3	\$16.00 to \$20.00 extra a month	1
		20%
4	None. It is too expensive.	1
		20%
5	None. It is not that important to me.	0
		0%

Maximum each month to reduce 50% (Single Choice)

I am willing to pay up to _____ dollars extra each month to reduce 50% of carbon emissions from my na

		CMD
	Tota	5
1	\$6.00	1
		20%
2	\$7.00	0
		0%
3	\$8.00	1
		20%
4	\$9.00	0
		0%
5	\$10.00	2
		40%
6	None. It is too expensive.	1
		20%
7	None. It is not that important to me.	0
		0%

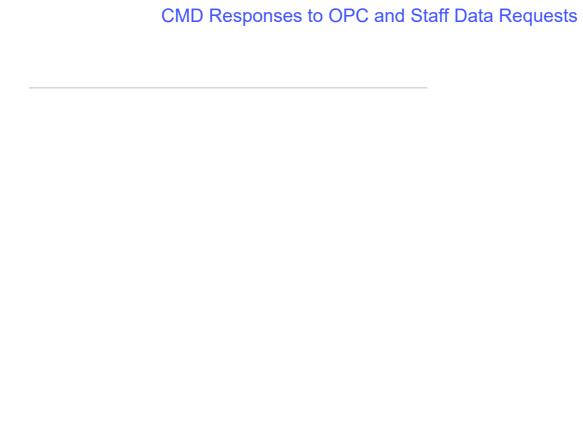
Maximum each month to reduce 100% (Single Choice)

I am willing to pay up to _____ dollars extra each month to reduce 100% of carbon emissions from my n

		CMD
	Total	5
1 \$11.00		1
		20%
2 \$12.00		0
		0%
3 \$13.00		0
		0%
4 \$14.00		0
		0%
5 \$15.00		1
		20%
6 \$16.00		1
		20%
7 \$17.00		0
		0%
8 \$18.00		0
		0%

9	\$19.00	0
		0%
10	\$20.00	1
		20%
11	None. It is too expensive.	1
		20%
12	None. It is not that important to me.	0
		0%

CMD Responses to OPC and Staff Data Requests renewable natural gas; which option might you consider?



Question No. Staff 1-003 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of Staff Counsel - Data Request Set No. 1

Question No. Staff 1-003:

- 1-3) Why is the fixed price per therm updated annually instead of on a shorter timeframe (e.g., quarterly, monthly)? Please explain why this is a prudent methodology for this program.
- 1-3-a) Should the market price for carbon offsets and RNG attributes change substantially (in either direction), would this allow CMD to change the fixed price per therm (i.e., are there any conditions that would allow this fixed price to fluctuate on a shorter-than-annual basis)? If not, please justify why not including these conditions is a prudent methodology.

Response:

- 1-3) The fixed price charge may only change on an annual basis in order to align with the supplier contract terms. RNG attributes and carbon offsets are not sold on a spot market. The only way to secure supply was to sign a five-year contract. Five years is the minimum contract length available.
- 1-3a) The contract only allows for annual price changes, so there will not be any changes on a shorter basis permitted. As stated above, RNG attributes and carbon offsets are not sold on a spot market. The only way to secure a supply was to sign a five-year contract. Five years is the minimum contract length available.

Question No. Staff 1-032 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of Staff Counsel - Data Request Set No. 1

Question No. Staff 1-032:

- 1-32) Did CMD/NiSource consider providing carbon offsets to customers without using a third-party supplier?
- 1-32-a) If yes, why was a third-party supplier chosen?
- 1-32-b) If no, why not?

Response:

1-32) Yes, NiSource did consider providing carbon offsets without using a third party supplier.

1-32-a) NiSource determined that it would be more efficient and cost effective to purchase the carbon offsets from a third party. In order for NiSource to provide carbon offsets, NiSource would have to self-develop projects that create carbon offsets and have the projects verified by a third party. In order to self-develop projects, NiSource would have to hire an external consultant who has experience in creating carbon offsets. The additional administrative expenses of hiring a consultant and obtaining third-party verification of projects would add costs to the GPR and take additional time to develop the GPR offerings to customers.

Question No. Staff 1-030 Respondent: E. Evans Page 1 of 2

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of Staff Counsel - Data Request Set No. 1

Question No. Staff 1-030:

- 1-30) How does CMD/NiSource and Element/Anew justify the proffered rates of \$3/dth and \$1.5/dth for 100% and 50% carbon offsets, respectively?
- 1-30-a) How does this price compare to the price a CMD customer would pay on the open market (e.g., directly from an accredited website) to 50% or 100% offset their carbon emissions from natural gas consumption?⁴
- 1-30-a-i) Please explain any price differences and why they may occur.
- 1-30-a-ii) Please explain what benefits a CMD customer would receive by opting into this program instead of purchasing carbon offsets themselves on the open market.

Response:

1-30) This is the price provided in the contract from Anew. No further breakout is provided.

1-30-a) CMD does not have the information to answer this question, but would assume that an individual customer would have difficulty in purchasing RNG or RNG attributes for their individual consumption.

1-30-a-i) Prices for both RNG, RNG attributes, and carbon offset are not available on public market. Therefore the prices are individually negotiated with each customer and supplier.

⁴ For reference, see https://marketplace.goldstandard.org/collections/projects. Gold Standard, originally found in 2003 by the World Wide Fund for Nature ("WWF") and other NGOs, is considered a reputable carbon credit marketer/validator. For more information on their standards see https://www.goldstandard.org/our-story/gold-standard-global-goals.

Question No. Staff 1-030 Respondent: E. Evans Page 2 of 2

1-30-a-ii) Purchasing RNG attributes typically requires a minimum volume and a longer term contract (5 to 20 years), from what NiSource found in locating a supplier for this program. This would make it very difficult for a customer to do this on their own. Therefore the customer benefits from CMD/ NiSource being able to develop the program and negotiate for prices on their behalf.

Question No. Staff 1-006 Respondent: E. Evans Page 1 of 1

COLUMBIA GAS OF MARYLAND INC.

Tariff Addition – Addition of Sheet No. 114 – Green Path Rider, ML No. 242360 Office of Staff Counsel - Data Request Set No. 1

Question No. Staff 1-006:

1-6) Please explain why CMD believes that the administrative costs to this optin, voluntary program should not be self-contained within said program.

Response:

1-6) The administrative costs can be split into two categories: the program development costs and the on-going costs. The program development costs are mostly the IT costs for the system modification to CMD's billing program related to the GPR. The GPR is available to all customers (except transportation customers), so these system modification costs should be recovered from eligible customers. The on-going costs consist of: (1) purchasing RNG attributes and carbon offsets; (2) monthly and annual reporting; and (3) customer education. The third-party supplier will purchase the RNG attributes and carbon offsets, and therefore, those costs will be included in the price per Dth paid by GPR-participating customers. The monthly and annual reporting costs are expected to be very minor and will be handled by existing CMD/NiSource employees. The customer education will benefit all eligible customers, and therefore, these costs should be recovered from eligible customers.