

August 5, 2024

VIA ELECTRONIC FILING

Brinda Westbrook-Sedgwick Commission Secretary Public Service Commission of the District of Columbia 1325 "G" Street, NW, 8th Floor Washington, D.C. 20005

> Re: Formal Case No. 1167 [Washington Gas's Response to Request for Reconsideration and Clarification]

Dear Ms. Westbrook-Sedgwick:

Pursuant to Order No. 21939 in Formal Case No. 1169,¹ and pursuant to Order No. 20662 in the above-referenced matter and in Formal Case Nos. 1142 and 1167,² Washington Gas Light Company ("Washington Gas") hereby submits its Proposal to Implement the District of Columbia's Climate Goals ("Proposal") to the District of Columbia Public Service Commission ("Commission").

The Proposal includes four (4) programs aimed at studying opportunities to deploy innovative decarbonization solutions, creating a procedural pathway to develop biomethane interconnection infrastructure in the District of Columbia, delivering immediate greenhouse emissions reductions, and enhancing emissions reporting. Washington Gas respectfully requests the Commission consider and accept the Proposal at its earliest convenience.

¹ Formal Case No. 1169, In the Matter of the Application of Washington Gas Light Company for Authority to Increase Existing Rates and Charges for Natural Gas Service, Order No. 21939, ¶ 430 (Dec. 23, 2023).

² Formal Case No. 1142, In the Matter of the Merger of AltaGas Ltd. and WGL Holdings, Inc. and Formal Case No. 1167, In the Matter of the Implementation of the Climate Business Plan, Order No. 20662 (Nov. 18, 2020).



Please direct questions regarding the Proposal to the undersigned.

Sincerely,

John Dodge

Associate General Counsel and Director, Regulatory Matters

Cc: Per Certificate of Service

BEFORE THE PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA

IN THE MATTER OF))
THE IMPLEMENTATION OF ELECTRIC AND NATURAL GAS CLIMATE CHANGE PROPOSALS	\

WASHINGTON GAS LIGHT COMPANY'S PROPOSAL TO IMPLEMENT THE DISTRICT OF COLUMBIA'S CLIMATE GOALS

Pursuant to the Public Service Commission of the District of Columbia's ("Commission") Order No. 20662,¹ Washington Gas Light Company, ("Washington Gas" "WGL" or "Company"), hereby files its Proposal to Implement the District of Columbia's Climate Goals ("Proposal"). Washington Gas respectfully submits this Proposal for the Commission's consideration in *Formal Case No. 1167* ("FC 1167"). This proposal supports the District of Columbia's ("the District" or "D.C.") climate goals.

I. <u>BACKGROUND</u>

Founded by Congressional Charter in 1848, Washington Gas recently marked its 175th year of providing safe, reliable natural gas service to over 1.2 million residential, commercial, and industrial customers in the District of Columbia (approximately 165,000

¹ Formal Case No. 1142, In the Matter of the Merger of AltaGas Ltd. and WGL Holdings, Inc. and Formal Case No. 1167, In the Matter of the Implementation of the Climate Business Plan, Order No. 20662, Nov. 18, 2020.

customers), Virginia (approximately 554,000 customers), and Maryland (approximately 515,000 customers).²

Washington Gas's decarbonization efforts continue to yield emissions reductions in the District and the surrounding region. These efforts have reduced Scope 1 emissions related to directly controllable infrastructure and reflect process improvements supporting the delivery of natural gas, as well as reductions in Scope 2 emissions. For example:

- Since 2016, the Company has used drawdown compressor technology during repair and maintenance activities, preventing more than 4.5 million standard cubic feet of natural gas from entering the atmosphere.
- From 2014 to 2023, Washington Gas's accelerated gas pipeline replacement program which replaces aged leak prone pipe with modern materials, has achieved a cumulative GHG emissions reduction of approximately 30,515 MT CO2e.³

II. INTRODUCTION

The District has ambitious climate goals: a 60% reduction in emissions by 2030 and carbon neutrality by 2045. In addition, the Clean Energy DC Omnibus Amendment Act of 2018 mandates that the Commission consider the climate impacts of utility service.⁴ Achieving the District's climate goals while preserving affordable and reliable energy access necessitates the development of a portfolio of both immediate and long-term

² Customer numbers as of August 1, 2024.

³ Environmental Protection Agency. <u>Greenhouse Gas Equivalencies Calculator</u> (Jan. 2024). 30,515 metric tons CO2e is equivalent to greenhouse gas emissions from 7,263 gasoline-powered passenger vehicles driven for one year.

⁴ District of Columbia Council. <u>CleanEnergy DC Omnibus Amendment Act of 2018</u> (Mar. 22, 2019). Section 103 *See also* D.C. Code §34-808.02.

emission reduction strategies. Given the urgency of climate change, the Commission should encourage immediate actions, where feasible, that reduce emissions and help position the District to achieve its 2030 and 2045 targets. With the Commission's support, Washington Gas can achieve further emissions reductions to help the District transition to a carbon neutral future.

This Proposal outlines four (4) programs designed to achieve emissions abatement, reduction, and removal and to enhance emissions data accuracy and transparency for the District's energy customers and policymakers. The proposed programs align with the seven (7) principles outlined in the Commission's *Modernizing the Energy Delivery System for Increased Sustainability* ("MEDSIS") proceeding,⁵ which promotes the development of a well-planned, safe and reliable, secure, affordable, interactive, and equitable energy system as the District works towards addressing climate challenges. The Company urges the Commission to approve these programs to continue progressing toward the District's climate goals. Below is a summary table describing the four (4) proposed programs. Additional detail on each program is included in the proceeding sections.

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⁵ District of Columbia Public Service Commission. <u>Formal Case 1130: In the Matter of the Investigation into Modernizing the Energy Delivery System for Increased Sustainability</u>

Table 1: Proposed Washington Gas Programs

Program	Brief Description
Program I: Lower Carbon Technology Studies	Support studies to assess the emissions reduction potential and feasibility in the District of the following technologies and solutions: Networked geothermal Sewage heat recovery Carbon capture Hybrid heating In-District biomethane resources
Program II: Expedited Consideration for Biomethane Infrastructure	Adopt a procedural process framework that will allow Washington Gas to propose and develop infrastructure necessary to interconnect biomethane production to the distribution system.
Program III: Carbon Neutral Credits	Allow Washington Gas to procure carbon credits to offset Scope 3 combustion emissions.
Program IV: Enhance Emissions Reporting Transparency and Accuracy	Require natural gas competitive service providers ("CSPs") and Washington Gas to report to the Commission the known emissions intensity of their supplies of certified gas and biomethane as well as the volume and type of carbon credits procured to offset customer emissions.

III. PROPOSED PROGRAMS

A. Program I: Lower Carbon Technology Studies

The Company is requesting Commission support to develop and fund a series of studies to assess the feasibility, costs, and emissions reduction benefits of implementing networked geothermal, sewage heat recovery, carbon capture, hybrid heating, and in-District biomethane resources.

Rationale

In light of the District's aggressive climate goals, and the associated challenges relating to widespread electrification, the Company believes it is prudent and in the public interest to investigate alternative GHG emissions reduction strategies. The Company does not want to place extra costs on customers to fund these studies and believes the Sustainable Energy Trust Fund ("SETF") is an appropriate funding source to cover incurred costs. The D.C. Sustainable Energy Utility ("DC SEU"), which is funded through the SETF, stopped offering customers rebates for efficient gas appliances and support for gas-related efficiency programs in 2021.6 7 Since October 2021, Washington Gas customers have paid approximately \$38.8 million into the SETF⁸ without receiving any direct benefits associated with the funds being collected. The Company seeks a Commission finding that redeploying a portion of the SETF funds to study thermal energyrelated projects to reduce GHG emissions in the District is in the public interest. This proposal aligns with the SETF's directive to provide funding for, "projects and programs intended to increase climate change resilience in the District through the use of sustainable energy resources, including infrastructure and structural improvements and energy storage devices or equipment." The studies proposed herein would assess the

⁶ DC SEU. <u>Home Heating and Cooling</u> "After August 20, 2021, in line with District policy and the Clean Energy DC Plan, the DCSEU will no longer offer rebates for residential natural gas equipment in the Efficient Products program."

⁷ DC SEU. <u>HVAC</u> "After September 30, 2021 ... the DCSEU will no longer offer rebates/incentives for the following new gas equipment installed in market-rate commercial, institutional, and multifamily buildings: Gas Boilers - hot water conventional and condensing; Gas Boilers - Steam; Gas Furnaces; Rooftop Units

Gas heating; Gas Instantaneous Water Heaters; Gas Storage Water Heaters; Gas Clothes Dryers"
 Code of the District of Columbia. § 8–1774.10. Sustainable Energy Trust Fund Natural gas fees found

⁸ Code of the District of Columbia. § 8–1774.10. Sustainable Energy Trust Fund Natural gas fees found under (b)(1). Total value of approximately \$38.8M based on internal Washington Gas analysis of total system level deliveries (October 2021 – May 2024).

⁹ Code of the District of Columbia. § 8–1774.10. Sustainable Energy Trust Fund (c)(19)

ability for the energy resources identified to increase climate change resilience in the District through a reduction in energy usage and GHG emissions.

The rationale for each study is as follows:

- New and innovative technologies with lower carbon footprints are needed to achieve GHG emissions reduction goals. Networked geothermal¹⁰ and sewage heat recovery¹¹ technologies are being piloted in other jurisdictions and have shown promise in reducing GHG emissions but require further study to assess the potential for implementation within the District.
- Carbon capture systems may be cost effective and viable in large commercial settings
 where compliance with the District's building energy performance standards, or
 emissions reductions, may be difficult to achieve. Carbon capture systems may also
 provide opportunities to support emissions reductions in the built environment or other
 processes by productively using captured carbon.¹²
- Hybrid heating systems can reduce GHG emissions, peak load on the electric grid, and energy-related costs for both gas and electric customers.¹³ The purpose of the study would be to investigate District-specific factors such as climate and building types to determine the best path forward for implementation.
- The Company's March 2020 Study on the Use of Biofuels 14 should be updated to

¹¹ The Seattle Times. Seattle pilot project uses the sewer to warm office buildings (Oct. 19, 2023).

¹⁰ Eversource. Geothermal Pilot Project in Framingham

¹² Chemical & Engineering News. New York City is becoming an unlikely carbon capture hub (Mar. 15, 2024).

¹³ Energy and Environmental Economics. <u>How Hybrid Heat Pumps Can Help Electrify Buildings</u> (May 28, 2024).

¹⁴ ICF. <u>Study on the Use of Biofuels (Renewable Natural Gas) in the Greater Washington, D.C. Metropolitan Area</u> (March 2020).

assess opportunities in the District to productively utilize biomethane. This study update would complement Program II, Expedited Consideration for Biomethane Infrastructure, by helping the Company identify and prioritize opportunities to develop local biomethane interconnection infrastructure.

The proposed studies complement the near-term and ready-now initiatives outlined in Programs II, III, and IV by exploring the viability of multiple alternative emissions reduction solutions.

Implementation and Timeline

All study results will be delivered within 12 – 24 months of receipt of funds from the SETF. As a part of the study process, the Company seeks to collaborate with key stakeholders to analyze the identified emerging lower carbon technologies. The Company proposes to complete the following steps to perform the studies:

1. Convene Study-Specific Working Groups

Washington Gas recognizes the need to enhance partnerships within the energy research community and related sectors to deliver customer benefits from emerging lower carbon technologies. The Company plans to convene working groups to identify and sequence the areas of inquiry, resources, and steps needed to perform a comprehensive study for each area. The Company expects these working groups to be comprised of members of the energy technology community, as well as interested stakeholders.

2. Secure Technical Resources

After forming the study-specific working groups, the Company will secure any technical resources needed to complete the studies. This may include hiring an external consultant to manage the study process.

3. Conduct the Studies

Washington Gas will conduct studies with input from the respective working groups for the following areas:

Networked Geothermal – The suitability and viability of networked geothermal systems to reliably and affordably heat and cool homes and businesses in the District.

Sewage Heat Recovery – The suitability and viability of sewer heat recovery as an energy strategy for heating and cooling homes and businesses, and for facilities with significant domestic hot water requirements.

Carbon Capture – The suitability and viability of utilizing carbon capture as an emissions reduction strategy for different building types and conditions.

Hybrid Heating – The suitability and viability of installing hybrid heating configurations that combine the use of high-efficiency gas-fired appliances with an electric heat pump in residential and commercial applications.

District Biomethane Resources – The suitability and viability of connecting to new and existing biomethane sources within the District, building upon the Company's March 2020 *Study on the Use of Biofuels*. ¹⁵

Through a structured process for each study, the Company will identify critical issues, key areas of concern, metrics for evaluation of feasibility and cost, regulatory and policy analogs, implementation insights, and other valuable data points that will be useful in determining whether a technology or strategy should be implemented. This

¹⁵ ICF. <u>Study on the Use of Biofuels (Renewable Natural Gas) in the Greater Washington, D.C. Metropolitan</u> <u>Area</u> (March 2020).

includes an assessment of the potential emissions reduction cost effectiveness in a manner that would allow comparison to other SETF programs.

Benefits

The benefit of Program I's inclusive stakeholder process is that it will ensure a thorough and practical evaluation of the lower carbon technologies identified by capturing broad input and leveraging the unique expertise of participating stakeholders. A thorough and practical evaluation will lead to better informed execution of emissions reducing activities, including the development of well-conceived pilots, at-scale implementations, or abandonment of options that are not feasible or cost-effective prior to the application of additional resources by the Company, the Commission, or other parties.

Cost

The Company anticipates that the cost of the studies will be approximately \$2.0 million, and that these funds should be provided from the SETF. The funding will cover the cost to perform all of the proposed studies, including costs related to managing stakeholder input, facilitating requests for proposals, and completing the full analyses. The \$2.0 million in funding represents approximately 16% of the annual SETF funding provided by Washington Gas customers. ¹⁶

B. Program II: Expedited Consideration for Biomethane Infrastructure

The Company is requesting approval of a procedural process for expeditiously

¹⁶ Based on internal Washington Gas analysis of total system level deliveries for CY2022 (16.282%) and CY2023 (16.051%).

obtaining approval and cost-recovery for infrastructure necessary to interconnect upgraded biomethane¹⁷ production to the Washington Gas distribution system. Upgraded biomethane must meet pipeline quality gas standards and have a lower lifecycle GHG emissions intensity than conventional natural gas.

Rationale

The District's GHG inventory notes that the waste sector accounted for 8% of the District's emissions in 2021. 18 Recent research suggests methane emissions from U.S. landfills may be up to 40% higher than previously reported by the Environmental Protection Agency ("EPA"), 19 and solutions that can help reduce the emissions from the waste sector are needed to achieve the District's climate goals. As noted by the EPA, biomethane infrastructure can play a significant role in reducing emissions from the waste sector. 20 By approving Program II, the Commission can help facilitate emissions reductions from the District's waste sector.

The technology to capture, treat, and upgrade raw biomethane (including digesters) is mature and has been commercially used for decades.²¹ The Company is already leveraging its infrastructure to advance the delivery of biomethane sourced from area wastewater and landfill facilities, such as a project in Prince William County, Virginia.

¹⁷ Washington Gas is borrowing from the terminology used in the Virginia Energy Innovation Act ("VEIA") to discuss biomethane in this Proposal and encourages the Commission to do the same. "Biomethane" (referred to as "biogas" in the VEIA) means a mixture of hydrocarbons that is a gas at 60 degrees Fahrenheit and one (1) atmosphere of pressure that is produced through the anaerobic digestion or thermal conversion of organic matter. "Upgraded biomethane" means biomethane that has been captured and upgraded to meet pipeline-quality standards and has a lower greenhouse gas emissions intensity than conventional natural gas.

¹⁸ D.C. Department of Energy & Environment. <u>Greenhouse Gas Inventories</u> (2021).

¹⁹ Scientific American. <u>Landfill Leak More Planet-Baking Methane Than We Thought</u> (Apr. 1, 2024).

²⁰ Environmental Protection Agency. Renewable Natural Gas (Feb. 12, 2024).

²¹ Penn State Extension. <u>A Short History of Anaerobic Digestion</u> (Mar. 9, 2023).

Biomethane interconnection projects enable the productive use of biomethane that would otherwise be released into the atmosphere, provide a local source of energy, and displace the use of fossil natural gas. The Company is proposing in Program I to study the suitability and viability of connecting to new and existing biomethane sources in the District, and Program II will help deliver the important benefits that biomethane resources can provide to the District.

Jurisdictions such as Oregon, California, and Washington, that have comparable GHG reduction targets to the District also have active biomethane programs that allow natural gas utilities to propose and develop biomethane infrastructure. In Oregon, the legislature passed a law directing the Oregon Public Utility Commission to adopt rules to enable the state's natural gas utilities to procure increasing amounts of biomethane through 2050.²² ²³ The Washington legislature also passed a law encouraging natural gas companies to incorporate purchases of biomethane into their gas resource portfolios, and the Washington Utilities and Transportation Commission has since established formal program rules to achieve that goal.²⁴ In California, the Public Utilities Commission established both short-term and medium-term biomethane procurement targets designed to help divert organic waste from landfills and displace increasing amounts of fossil natural gas usage for residential and small commercial customers.²⁵ By approving Program II, the Commission can help align the District with other climate-conscious jurisdictions that are relying on biomethane projects to help achieve their climate goals.

²² Oregon Legislative Assembly. Senate Bill 98 (Jul. 31, 2019).

²³ Oregon Public Utility Commission. Chapter 860, Division 150: Renewable Natural Gas (Jul. 17, 2020).

²⁴ Washington Utilities and Transportation Commission. <u>Report and Policy Statement on Investigation of Renewable Natural Gas Programmatic Design and Pipeline Safety Standards</u> (Dec. 16, 2020).

²⁵ California Public Utilities Commission. CPUC Sets Biomethane Targets for Utilities (Feb. 24, 2022).

Implementation and Timeline

The Company proposes that the Commission should adopt a formal process for evaluating proposals to develop biomethane interconnection infrastructure. Washington Gas encourages the Commission to adopt a nine (9) month review timeline for biomethane interconnection applications. In addition, and consistent with the Virginia Energy Innovation Act ("VEIA"), ²⁶ the Company encourages the Commission to adopt an incentive structure for cost recovery associated with biomethane interconnection facilities that are ultimately approved by the Commission. These modifications will align proposals for biomethane interconnection infrastructure projects with neighboring jurisdictions to ensure that District resources are developed as expeditiously as non-District options. It will also provide a clear timeline for interested business partners, such that they can develop contracts and tap into available funding at the right time to successfully bring projects to fruition. Under Program II, Washington Gas would still submit individual biomethane interconnection infrastructure proposals for the Commission's consideration, and the Commission would then review and approve the specific proposal. Program II is merely a procedural pathway that will remove impediments that currently exist in the District that limit the development of biomethane production.

Benefits

Program II will promote the buildout of infrastructure that contributes to local emissions reductions and economic development, lower market barriers to developing

²⁶ Commonwealth of Virginia. <u>SB 565 Natural gas, biogas, and other gas sources of energy; definitions, energy conservation</u> (Apr. 27, 2022). The VEIA includes a 100-basis point equity adder associated with the development of biomethane projects.

infrastructure that has been identified by the federal government as being in the public interest and provide greater timing certainty for infrastructure project planners and stakeholders.

The VEIA, which was passed in 2022 and allowed gas utilities to invest in and own biomethane facilities, is indicative of the local emissions reductions and economic development benefits that Program II is designed to achieve. Under the VEIA, Washington Gas was able to support a project at the Prince William County landfill that is expected to reduce the landfill's emissions by approximately 30% while having only a small immediate increase in residential customer bills (approximately 0.1% or \$0.07 per month) in the first year, with overall net credits anticipated in future years.²⁷ Similarly, Roanoke Gas received approval from Virginia's State Corporation Commission to develop a biomethane project with the Western Virginia Water Authority following the passage of the VEIA. The project is expected to reduce GHG emissions by over 13,500 MT CO2e per year, cost customers only \$21,000 over the first nine months (or \$0.04 per month for residential customers), create economic development benefits in the form of project construction jobs, and produce increased revenue for the City of Roanoke through property taxes assessed against the project.²⁸ Biomethane infrastructure projects can facilitate the development and productive use of localized sources of energy in the District and create additional revenue stream opportunities for municipal facilities that sell

²⁷ Washington Gas Light Co. <u>Pt. 1 - Appli. for Approval of a biogas supply investment plan & for a rate adjustment clause designated RNG Rider & related tariff provisions pursuant to Chapters 10.1 & 30 of Title 56 of Code of Va (Pt. 1 of 2). (Dec. 4, 2023). Pages 2-3</u>

²⁸ Roanoke Gas Company. Application of Roanoke Gas Company for approval of a certificate of public convenience and necessity to construct, own, and operate a digester gas conditioning system and for a rate adjustment clause designated Rider RNG and related tariff provisions pursuant to Chapters 10.1 and 30 of Title 56 of the Code of Virginia (Aug. 3, 2022).

biomethane by-products for habitat restoration, tree planting, and other infrastructure projects.²⁹ ³⁰ Municipal landfill and wastewater treatment facilities have also received economic benefits by producing upgraded biomethane, which is eligible for state and federal economic incentives. By approving Program II, the Commission will foster the development of biomethane resources in the District by reducing the barriers to project development that currently exist.

The Commission's approval of Program II will also play an important role in lowering barriers to market entry for biomethane interconnection projects that state and federal governments have signaled are in the public interest. For example, state and federal governments offer several funding programs for biomethane projects, such as the EPA's Climate Pollution Reduction Grants³¹ and Renewable Fuel Standard, and California and Oregon's Low Carbon Fuel Standards programs.³² Federal attention to organic waste and landfill methane management strategies, as noted by RMI,³³ has already led to biomethane projects receiving federal funding.³⁴ In addition, the EPA recognizes that biomethane projects offer significant fuel diversity, economic development, local air quality, and GHG emission reductions benefits.³⁵ Together, these points reinforce that states and the federal governments are supportive of developing

²⁹ DC Water. <u>DC Water's Thermal Hydrolysis and Anaerobic Digester Project</u> (Sep. 2015).

³⁰ DC Water. <u>DC Water Leverages Technology First in North America to Generate Clean, Renewable Energy from Wastewater</u> (Oct. 7, 2015).

³¹ Environmental Protection Agency. Climate Pollution Reduction Grants. (Mar. 28, 2024).

³² Environmental Protection Agency. <u>Project Planning and Financing – Renewable Fuel Standard (RFS)</u> and Low Carbon Fuel Standard (LCFS). (Jun. 30, 2023).

³³ RMI. Priority Climate Action Plan Guide: Organic Waste & Landfill Methane Strategies. (Oct. 6, 2023).

³⁴ United States Department of Agriculture. <u>USDA Rural Development Rural Energy for America Program.</u> (Nov. 1, 2023).

³⁵ Environmental Protection Agency. Renewable Natural Gas (Feb. 12, 2024).

biomethane infrastructure and increasing public access to the benefits they can create.

The Company's suggested proposal review period will also lower barriers to project deployment resulting from uncertain proposal review timelines. A defined review timeline allows the Company's project planners and various District stakeholders to identify how much time is available to participate in the proposal review process and anticipate when the Commission will rule on a specific proposal, enable the Company to better coordinate its project planning activities, and ensure proposals advance through the review process at a consistent pace. Greater timing certainty will also help the Company identify and pursue potential project funding opportunities that are aligned with the Commission's review timeline, and these supplemental funding opportunities can play an important role in minimizing costs to ratepayers. Lowering barriers to developing biomethane interconnection infrastructure is an important public good that the Commission can and should support.

Costs

There are no immediate costs associated with adopting this program. Specific project costs will be project-dependent and will be included with any application filed seeking Commission approval of a biomethane interconnection. All details surrounding the costs and cost-recovery associated with any biomethane interconnection will be addressed in the Company's application.

C. Program III: Carbon Neutral Credits

The Company's Carbon Neutral Credits Program seeks approval of funds that will

be used to move Washington Gas toward the District's carbon neutral goal through the purchase of credits associated with carbon avoidance, reduction, and removal projects. The program will be funded through a charge assessed to all customers that use natural gas in the District.

Rationale

Renewable Energy Certificates, or "RECs", are the primary tool used by electricity suppliers to meet the District's RPS targets. In 2023, electricity suppliers submitted over 3.8 million RECs for RPS compliance, totaling \$166.8 million in REC purchases. Program III will provide Washington Gas with a similar opportunity to offset a portion of GHG emissions using market mechanisms. Program III will utilize carbon credits generated from a diverse portfolio of targeted GHG emissions reduction or removal projects, including local projects where feasible. Just as RECs and other market mechanisms, including Regional Greenhouse Gas Initiative carbon credits, have long been accepted as useful tools to achieve emissions reductions associated with electricity, carbon credits can and should be adopted as a useful tool to achieve immediate emission reductions in the gas sector in support of the District's goal of carbon neutrality.

As discussed above, the Company already has achieved significant emissions reductions in key areas relating to its direct operations and fuel procurement. The

³⁶ Environmental Protection Agency. Renewable Energy Certificates (Jan. 15, 2024). The federal Environmental Protection Agency ("EPA") describes a REC as "a market-based instrument that represents the property rights to the environmental, social, and other non-power attributes of renewable electricity generation. RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource."

³⁷ District of Columbia Public Service Commission. <u>Renewable Energy Portfolio Standards: A Report for Compliance Year 2023</u> (May 1, 2024). Page iii and 17

Company has prioritized a hierarchy of emissions reduction strategies, focusing first on the sources of greatest emissions within its control to reduce its Scope 1 emissions: its infrastructure and operations, as well as its fleet and facilities. These actions include the direct generation and purchase of renewable electricity and RECs to completely neutralize its Scope 2 emissions.

With respect to Scope 3 emissions, the Company has prioritized programming to help its customers save energy, lower monthly bills, and reduce GHG emissions through the energy efficiency programs put forth in Formal Case 1160, which are currently pending before the Commission. Program III seeks to immediately accelerate GHG emissions avoidance, reductions, or removals through the use of carbon credits.

The District's most recent GHG emissions inventory (from 2021) reports that 1,524,482 MTCO2e emissions were attributable to natural gas use, representing approximately 22% of total GHG emissions.³⁸ Of this amount, over 94% is attributable to combustion of natural gas, whereas less than 6% is attributable to the Company's infrastructure and operations.³⁹ Program III seeks to address a portion of the emissions from the combustion of natural gas delivered to Washington Gas customers in the District through the use of market mechanisms.

³⁸ D.C. Department of Energy & Environment. <u>Greenhouse Gas Inventories</u> (2021). The inventory states there was 610,795 MTCO2e from residential gas usage, 823,550 MTCO2e from non-residential gas usage, and 90,137 MTCO2e from fugitive fossil gas distribution emissions, which totals 1,524,482 MTCO2e. This is 22.65% of the total 2021 GHG emissions (1,524,482/6,731,633 = 0.226465).

³⁹ D.C. Department of Energy & Environment. <u>Greenhouse Gas Inventories</u> (2021). 90,137 MTCO2e from fugitive fossil gas distribution emissions is 5.9% of the total 1,524,482 MTCO2e. 610,795 MTCO2e from residential gas usage and 823,550 MTCO2e from non-residential gas usage, which totals 1,434,345 MTCO2e, is 94.1% of the total 1,524,482 MTCO2e.

Implementation and Timeline

The Company proposes to implement a well-supported, credible, and transparent program subject to ongoing Commission oversight. The Company proposes the following steps, which mirror the Company's certified gas procurement procedure, to ensure the carbon credits procured represent a verifiable and high-quality offset to gas-related GHG emissions:

1. Establish Carbon Credit Quality Criteria

The Company will establish a transparent framework to identify the criteria that will guide the selection of brokers and programs offering carbon credits. In order to ensure validity and avoid double-counting, the framework will align with well-established standard-setting carbon credit procurement bodies and registries such as the American Carbon Registry, 40 the Climate Action Reserve, 41 and Verra. 42 The framework will create GHG emissions avoidance, reduction, or removal that would not have taken place in the absence of the purchase 43 and provide transparency relating to the year of the project start 44 and the total amount of time the emissions reduction is expected to last. 45 In alignment with registry standards, the proposed framework will ensure that credits purchased have undergone third-party validation and verification. The Company estimates that this step will be completed within three (3) months after

⁴⁰ American Carbon Registry. <u>Home</u>

⁴¹ Climate Action Reserve. Home

⁴² Verra. Home

⁴³ This concept is commonly referred to as "additionality".

⁴⁴ The year that a carbon credit project starts is commonly referred to as the "credit vintage".

⁴⁵ The total amount of time that carbon dioxide is kept out of the atmosphere after it has been removed or avoided is commonly referred to as "durability".

approval.

2. Identify Carbon Credit Suppliers and/or Project Developers

The Company will solicit bids from qualified suppliers, brokers, and/or project developers to acquire carbon credits of the type and quality best suited for achieving emissions reductions within the cost parameters of the program. ⁴⁶ The Company will develop a portfolio of carbon credits that represent a diverse group of projects and price points and will seek to include carbon credits from existing or planned local projects where feasible. The Company estimates that this step will be completed within five (5) months after Step 1, and that it will need to repeat this step intermittently as credits are retired.

3. Third-Party Program Assurance

The Company will also annually report, with third-party assurance, the emissions avoided, reduced, or removed, the type of credits procured, their vintages and retirement dates. The report will confirm that the credits purchased adhere to the Company's framework criteria and have been appropriately retired. The time to verify and audit carbon credits can vary, but the Company estimates the third-party program assurance step will be completed within two (2) to four (4) months. The Company will use a high-quality, well-recognized method for tracking and verifying the carbon credits being procured, such as the M-RETS Tracking Platform.⁴⁷

⁴⁶ Examples of carbon credits are provided on Climate Action Reserve. <u>Home</u>

⁴⁷ M-RETS. About M-RETS (2024).

Benefits

The benefits of Program III will result in a verifiable and cost-effective reduction or removal in GHG emissions to offset a portion of the emissions resulting from customer combustion of natural gas. To enhance its efforts, the Company is seeking Commission support to expand the range of available tools for deployment. The importance of carbon credits as a climate tool has been championed by the International Panel on Climate Change. He credits purchased are also expected to result in a range of other positive economic and environmental impacts. The Biden-Harris Administration recently reiterated support for the use of market mechanisms and the purchase of voluntary carbon credits, stating they, "can and should play a meaningful role in global greenhouse gas emissions reductions," while also noting that the procurement of carbon credits can support economic development, local communities, and conservation of land, water resources, and biodiversity. He

Cost

The Company is proposing to limit the annual total cost of Program III to \$5 million and to recover costs on an ongoing basis by placing a charge on the therms delivered by the Company to all customers. The per therm charge is consistent with principles of cost causation, cost signaling and timely recovery of all costs including credit purchases, auditing and verification, and related administrative overhead. The proposed annual cost cap of \$5 million reflects a reasonable starting point for entry into the carbon market.

⁴⁸ The Intergovernmental Panel on Climate Change. <u>AR6 Synthesis Report: Climate Change 2023</u> (2023).

⁴⁹ The White House, Department of the Treasury, Department of Energy, and the Department of Agriculture. <u>Voluntary Carbon Markets Joint Policy Statement and Principles</u> (May 2024). Page 1.

Based on the Company's normal weather throughput, the charge for this program would be approximately \$0.017 per therm.⁵⁰ This is much lower than the charge assessed to Washington Gas customers by the SETF of \$0.07515 per therm for fiscal year 2024 and each fiscal year thereafter,⁵¹ which currently does not provide a program for Washington Gas customers to reduce GHG emissions associated with natural gas usage.

While the exact carbon credit price will not be known until the portfolio has been assembled, the Company intends to develop a portfolio well below the social cost of carbon of \$160 per MTCO2e (2023 dollars) that was identified by the Commission as an appropriate benefit cost value in its December 8th, 2023 Order in GD-2019-04-M.⁵²

D. Program IV: Enhance Emissions Reporting Accuracy and Transparency

The Company is requesting approval of a program to require Commission-approved CSPs to self-report to the Commission the volume and known emissions intensity⁵³ of certain gas supplies delivered to District customers via Washington Gas's pipeline system. Such reporting should include the following non-exhaustive list of products: differentiated natural gas (i.e., gas certified for lower upstream emissions intensity compared to the average associated with natural gas extraction and production),

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⁵⁰ Washington Gas Light Company. <u>Formal Case No. 1169 Revised Compliance Filing</u> (Jan 9, 2024). Page 1 of 1, Line 11. Total Normal Weather Therms – Throughput is 289,555,759. \$5,000,000 / 289,555,759 therms = \$0.017268/therm.

⁵¹ Code of the District of Columbia. § 8–1774.10. Sustainable Energy Trust Fund (b)(1)(F).

⁵² District of Columbia Public Service Commission. Order No. 21938 (Dec. 8, 2023). Page 13

⁵³ In *Formal Case No. 874* ("FC 874"), the Company identified several limitations to fulsome reporting of GHG emissions across the entire natural gas lifecycle. The programs included in this Proposal are not intended to address those limitations. However, the reporting requirements outlined in Program IV align with some of the recommendations made by OPC in FC 874, such as providing additional detail on how Washington Gas and CSP procurement strategies are evolving to meet and demonstrate measurable progress towards achieving the District's climate targets, and providing detailed accounts of Washington Gas and CSP investments in innovative practices that mitigate the climate impacts of gas procurement. As stated in FC 874, the Company advocates for increased transparency into, and reporting on, how the procurement of gas can assist with meeting the District's climate targets.

treated biomethane, and market mechanism paired products (e.g., gas molecules that have been matched with carbon credits). Other differentiated natural gas supplies or products that the Company may be unaware of should also be given consideration. If Program IV is approved, the Company will meet the same reporting requirements as CSPs.

Rationale

Program IV aligns with the Commission's directive that the Company, in conjunction with the Gas Procurement Working Group, pursue minimum reporting criteria for determining the impact of the Company's gas procurement activities on the District's climate goals⁵⁴ and reporting on its procurement of lower emissions intensity natural gas. Aligning and enhancing reporting requirements across all gas providers in the District ensures fairness and consistency and will enable the District to better understand the GHG emissions associated with natural gas usage. This is especially important given that CSPs supply a high proportion of natural gas to District consumers without providing fulsome reporting on the emissions intensity of those supplies. The Company only procures gas supply on behalf of firm sales customers, representing roughly half of delivered gas throughput volumes each year for the last five (5) years. CSPs that sell gas through the District's choice programs account for the remaining delivered supply and emissions each year, representing an average of over 830,000 MTCO2 in combustion-related emissions per year during this period.⁵⁵ CSPs may be providing differentiated

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⁵⁴ See FC 874, Order No. 21921, ¶ 1.

⁵⁵ Environmental Protection Agency. <u>GHG Emission Factors Hub 2024</u>. (Feb. 22, 2024). Data are based on natural gas delivery volumes reported by Washington Gas in Energy Information Administration Form 176 Part 6a for the period 2019 - 2023. Emissions are calculated using the EPA factor of 53.1 kg CO2 per mmBtu.

products with lower emissions intensities than fossil natural gas, but the Company and the District currently lack visibility into the volume or known emissions intensities of those products.⁵⁶ Program IV will lead to a clearer understanding of the emissions associated with the Washington Gas customer base by requiring CSPs to meet additional reporting requirements.

Program IV also aligns with electric supplier reporting processes in the District.⁵⁷ The Company acknowledges that the District's electricity supplier reporting program and the proposed Program IV are different, but the Company's intent is to achieve the same goal. The reporting requirements for electricity suppliers aim to understand the emissions intensity of the electric grid, and Program IV seeks to better understand the emissions intensity of the natural gas system. However, the Company notes that the electric sector only reports combustion emissions from generation, not emissions resulting from the purchase of the upstream fossil fuel used to generate electricity. Program IV offers a starting point to capture equivalent data for both the natural gas and electricity sectors, a data collection priority supported by the Commission in the GD-2019-04-M proceeding.

Implementation and Timeline

Reporting requirements and processes for electricity suppliers in the District can

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⁵⁶ Product offerings may include the purchase of carbon credits, RECs, or biomethane on behalf of customers.

⁵⁷ The Commission oversees a rigorous and transparent review of electricity supplier activities in the District. For example, electricity suppliers must submit two (2) reports to the Commission each year detailing their generation portfolio and the associated pounds of carbon dioxide, nitrogen oxides, and sulfur dioxide per megawatt-hour. Electricity suppliers must also disclose any RECs associated with generation in the reporting period and the PJM average residual fuel mix statistics by generation resource. Reporting requirements and process for the District's electricity suppliers are outlined in Chapter 42 of the District's Municipal Regulations.

be leveraged to inform reporting requirements and processes for CSPs and the Company under Program IV. The Company proposes that all natural gas commodity suppliers should file annual reports with the Commission that detail the volume and known emissions intensity of the products described herein. The report should be filed in June each year. The Company will work with CSPs and the District Department of Energy and Environment ("DOEE") to align on a reporting methodology that captures the consolidated actions taken by customers, CSPs, and Washington Gas to avoid, reduce, and remove GHG emissions which can then be added as a line item to the District's emissions inventory.

<u>Benefits</u>

The benefits of Program IV include increased access to data describing the known upstream emissions intensity of the natural gas system, more accurate reporting in connection with the District's emissions inventory, increased protection for District consumers, and potentially greater adoption of fuel supply-related carbon abatement solutions.

The importance of understanding and addressing upstream emissions from the natural gas system has received considerable attention. According to the EPA, the production stage of natural gas is responsible for the greatest volume of emissions in the natural gas value chain,⁵⁸ and therefore provides a significant opportunity to reduce emissions. The International Energy Agency estimates that over 70% of methane

⁵⁸ Environmental Protection Agency. <u>Inventory of Greenhouse Gas Emissions and Sinks</u> (2024). Page 3-97, Table 3-72. In 2022, production accounted for approximately 47% of GHG emissions (CH4, CO2, and N2O) from natural gas systems.

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emissions from global oil and gas operations could be avoided with existing technology.⁵⁹ Program IV will help ensure the application of a consistent and transparent methodology for emissions reporting that will give the Commission greater insight into the upstream emissions of gas companies that provide natural gas with known, third-party validated emissions intensity levels below the national average. Enhanced reporting will also allow the Commission, the District, and the Company to identify opportunities to drive further emissions reductions throughout the natural gas value chain that are not currently addressed by Washington Gas or CSP initiatives.

DOEE regularly tracks the District's GHG emissions in an emissions inventory to measure the District's progress towards achieving its climate goals. Currently, the procurement of differentiated gas is not captured in the emissions inventory, per customary reporting protocols. Purchases of biomethane and carbon credits that either displace or offset emissions related to the combustion of natural gas are similarly unaccounted for. Capturing this information in the emissions inventory will offer a more accurate picture of efforts that the Company and individual customers and businesses are undertaking to reduce global GHG emissions to address climate change, a priority identified by the Commission in the GD-2019-04-M proceeding.

Enhanced reporting will also protect customers who buy differentiated gas products that are designed to reduce or offset emissions, including differentiated gas that has been certified for lower emissions, biomethane, carbon credits matched to offset combustion emissions, and other products. A reporting framework that appropriately

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⁵⁹ International Energy Agency. Strategies to reduce emissions from fossil fuel operations (2022).

tracks and verifies differentiated gas products will add transparency and a level of oversight to the market, helping to ensure that customers are getting the benefits they pay for, and, in many cases, are entitled to claim within their own emissions reporting.

Transparent reporting could catalyze broader acceptance, promotion, and utilization by CSPs and their customers for differentiated gas products or associated market mechanisms. With the appropriate guardrails, methodology, and transparency, enhanced reporting on differentiated gas products and associated market mechanisms can serve as an effective and affordable emissions reduction tool to add to the District's portfolio of solutions. Fulsome reporting will better inform the District regarding its progress in achieving emissions reductions relating to natural gas use and will help direct policy and actions to increase opportunities to leverage fuel supply-related carbon abatement solutions to achieve climate goals.

<u>Cost</u>

The Company is not requesting recovery for any program-related costs at this time.

The Company estimates the cost of Program IV will not cause customer bills to increase, as there is little set up and administrative expense associated with the program and no new infrastructure required.

IV. CONCLUSION

The Company appreciates the opportunity to submit this Proposal for four (4)

programs aimed at studying opportunities to deploy innovative decarbonization

strategies, creating a procedural pathway to develop biomethane interconnection

infrastructure in the District, delivering immediate GHG emissions reductions, and

enhancing emissions reporting. The Company's infrastructure provides a stable

foundation for implementing these programs and advancing a lower carbon energy

transition. The Company believes that achieving the District's climate goals expeditiously

while maintaining safety, reliability, affordability, and customer choice requires pursuing

policies and programs that support an integrated, multi-fuel energy ecosystem.

Respectfully Submitted,

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August 5, 2024

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CERTIFICATE OF SERVICE

I, the undersigned counsel, hereby certify that on this 5th day of August, 2024 I caused copies of the foregoing to be hand-delivered, mailed, postage-prepaid, or electronically delivered to the following:

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