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Sandra Mattavous-Frye, Esq.
People's Counsel

June 17, 2022

Ms. Brinda Westbrook-Sedgwick
Commission Secretary
Public Service Commission
of the District of Columbia
1325 G Street, N.W., Suite 800
Washington, D.C. 20005

Re: Formal Case No. 1167, *In the Matter of the Implementation of Electric and Natural Gas Climate Change Proposals*

Dear Ms. Westbrook-Sedgwick:

Attached for filing in the above-referenced proceeding please find the *Office of the People's Counsel for the District of Columbia's Comments on Pepco's Combined Filings*.

If there are any questions regarding this matter, please contact me at 202.727.3071.

Sincerely,

/s/ Sarah Kogel-Smucker

Sarah Kogel-Smucker
Environmental and Climate Attorney

Enclosure

cc: Parties of Record

BEFORE THE
PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA

In the Matter of	§	
	§	
the Implementation of	§	**Formal Case No. 1167**
Electric and Natural Gas Climate	§	
Change Proposals	§	
	§	

THE OFFICE OF THE PEOPLE'S COUNSEL FOR THE DISTRICT OF COLUMBIA'S COMMENTS ON PEPCO'S COMBINED FILINGS

The Office of the People's Counsel for the District of Columbia ("OPC" or "Office"), the statutory representative of the District of Columbia utility ratepayers and consumers,[1] hereby respectfully submits comments on the Potomac Electric Power Company's ("Pepco") combined filings pursuant to Order Nos. 20754 and 21155.[2]

I. INTRODUCTION

The Commission opened Formal Case No. 1167 to examine District utilities' climate plans and will guide their efforts to meet or advance the District's energy and climate change goals. Over the past year, the District's regulated utilities—Washington Gas and Light Company ("WGL") and its parent company AltaGas LLC ("AltaGas")(collectively Gas Companies) and Pepco—have filed near-term (5-year) and longer-term (30-year) plans to advance the District's climate change

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1 D.C. Code § 34-804 (Lexis 2022).

2 *Formal Case No. 1167*, *In the Matter of the Implementation of Electric and Natural Gas Climate Change Proposals* ("*Formal Case No. 1167*"), Order No. 20754, rel. June 4, 2021; *Formal Case No. 1167,* Order No. 21155, rel. May 17, 2022.

goals, and technical studies, models, analysis, and supporting documentation as required by the Commission.

Pepco's combined filings offer a vision of Pepco as a "connector" or "platform" to a modernized, clean, and resilient grid. To aid that transformation, Pepco proposes 62 programs to be implemented over the next five years in the areas of: electrifying transportation; decarbonizing buildings; activating the local energy ecosystem by advancing community-based resources; and enhancing infrastructure (distributed energy and smart grid) for climate solutions. Pepco's benefit cost analysis ("BCA") for these programs concludes that their reduction in overall system costs and environmental benefits outweigh the program costs. In its 30-year plan, Pepco proposes to advance grid modernization, resilience and decarbonization in those same four areas to achieve the District's goals of 50% reduction of greenhouse gases ("GHG") by 2032 and 100% reduction by 2050 (from 2006 GHG emission levels). Collectively, Pepco's plans pursue a pathway of near-total electrification of the District, i.e. switching vehicles, appliances, and buildings that currently use natural gas over to electricity. Pepco's electrification study concludes that Pepco will be able to handle the anticipated increased load from such measures.

In the year since the Commission directed the utilities to develop and file detailed climate change plans in this proceeding, the drumbeat of warnings of the need to address climate change has continued, as has the evidence that climate change is being experienced unjustly due to societal racism and inequality. Yet, Pepco's current violations of its requirements related to billing for community solar programs and fundamental problems plaguing its third-party interconnection process, threaten to undermine progress in meeting the District's climate change goals. The Commission and Pepco must immediately resolve these issues. And to make progress, the

Commission must urgently advance key next steps in its own climate proceedings, particularly adopting the metrics it will use to evaluate the utilities' climate plans in this proceeding.

OPC retained Dr. Elizabeth A. Stanton, a climate change expert from the Applied Economics Clinic ("AEC") to review Pepco's plans and supporting documentation, and Dr. Stanton's affidavit is annexed hereto as Exhibit A.[3] In terms of Pepco's overall plans, as described herein and in Dr. Stanton's affidavit, OPC supports Pepco playing the role of "platform" or "connector" but Pepco must add specificity and constraints to its plans for this role. In particular, Pepco's plans lack key equity measures and a focus on affordability. By contrast, OPC opposes the breadth of Pepco's proposed expansion of its current role—offering programs that are better provided by third party providers and/or governmental entities, and is concerned about Pepco's failure to articulate how it will encourage robust third-party competition for clean grid technology services.

In terms of Pepco's BCA, it is an insufficient substitute for a Commission-directed uniform BCA developed through robust stakeholder engagement. Moreover, the BCA appears to underestimate impacts to ratepayers and overestimate potential benefits. Pepco's electrification study appears generally comprehensive but fails to address key equity questions, variations among neighborhoods, and post-COVID changes to vehicle usage.

As the District's consumer advocate, OPC requests the Commission require Pepco to improve these plans to ensure they will better serve consumers. Pepco should be required to ensure that it involves consumers in planning, address consumers' affordability needs, and includes plans

[3] Dr. Elizabeth A. Stanton's Affidavit is annexed as Exhibit A to these comments ("Stanton Aff"). Dr. Stanton is the Director and Senior Economist of the Applied Economics Clinic ("AEC").

to address existing inequities among consumers. Such changes are needed for Pepco to successfully fulfill its required role in supporting the District's climate change goals.

II. PROCEDURAL HISTORY

The Commission opened Formal Case No. 1167 to commence a climate policy proceeding to consider whether and to what extent utility or energy companies under the Commission's purview are meeting and advancing the District of Columbia's energy and climate goals and then take action, where necessary, to guide the companies in the right direction.[4] In Order No. 20754, the Commission directed next steps in the docket to ensure that the District's regulated utilities are on track to help the District achieve its climate change goals.[5] Pursuant to that order, as amended, Pepco filed:

- **Climate Solutions Plan:** *Pepco DC Climate Solutions Plan: Pepco's Blueprint to Support the District of Columbia's Climate and Clean Energy Goals* (7/20/2021)[6]
- **Pepco Electrification Study:** *An Assessment of Electrification Impacts on the Pepco DC System* (8/27/2021)[7]
- **5-Year Plan:** *Climate Solutions 5-Year Action Plan: Pepco's 5-Year Plan to Support the District of Columbia's Climate and Clean Energy Goals* (10/8/2021)[8]

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4 *Formal Case No. 1167*, Order No. 20662, ¶ 1, rel. Nov. 18, 2020.

5 *Formal Case No. 1167*, Order No. 20754, rel. June 4, 2021.

6 *Formal Case No. 1167,* Potomac Electric Power Company's DC Climate Solutions Plan, filed July 20, 2021 ("Pepco Climate Solutions Plans").

7 *Formal Case No. 1167*, Potomac Electric Power Company An Assessment of Electrification Impacts on the Pepco DC System, filed Aug. 27, 2021 ("Pepco Electrification Study").

8 *Formal Case No. 1167*, Potomac Electric Power Company's Climate Solutions 5-Year Action Plan, filed Oct. 8, 2021 ("Pepco 5-Year Plan").

- **30-Year Plan:** *30-Year Transition Strategy: Pepco's Long-Term Outlook at the Development of Climate Solutions in the District of Columbia* (11/30/2021)[9]
- **Pepco BCA:** *Pepco's Climate Solutions 5-Year Action Plan: Benefits and Costs* (1/31/2022)[10]
- **BCA Workpapers:** Pepco's BCA Workpapers for System Costs and Emissions (2/18/2022)[11]

WGL and AltaGas ("Gas Companies") have likewise filed: their Climate Business Plan (3/16/20);[12] required details and analysis regarding their Fuel Neutral Decarbonization scenario (9/1/21); Washington Gas Climate Change Action Program, Part 1 (12/15/21) providing a description of Washington Gas' near-term (5-year, 2021-2025) climate initiatives; and Climate Change Action Roadmap, Part 2 ("CCAR") (1/18/22) providing a 30-year roadmap.

Parties are permitted to file comments and reply comments on Pepco's combined filings by June 17, 2022 and the Gas Companies' combined filings by July 1, 2022.[13] The Commission has not yet directed what next steps will follow after the instant comment and reply comment periods.

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9 *Formal Case No. 1167*, Potomac Electric Power Company'30-Year Transition Strategy: Pepco's Long-Term Outlook at the Development of Climate Solutions in the District of Columbia, filed Nov. 30, 2021 ("Pepco 30-Year Plan").

10 *Formal Case No. 1167*, Pepco's Climate Solutions 5-Year Action Plan: Benefits and Costs, filed Jan. 31, 2022 ("Pepco BCA").

11 *Formal Case No. 1167*, Pepco's BCA Workpapers for System Costs and Emissions, filed Feb. 18, 2022.

12 *Formal Case No. 1142*, AltaGas, Ltd., Natural Gas and its Contribution to a Low Carbon Future Climate Business Plan for Washington, D.C., filed March 16, 2020 ("Climate Business Plan").

13 *Formal Case No. 1167*, Order No. 21155, ¶ 1, rel. May 17, 2022; *Formal Case No. 1167,* Order No. 21058, ¶ 1, rel. Nov. 10, 2021.

III. COMMENTS

A. *The climate crisis is becoming ever-more urgent.*

In the year since the Commission released Order No. 20754 directing the utilities to develop and file detailed climate change plans and supporting documents in this proceeding, news and reports continue to demonstrate the existential need to address climate change. For instance, in February the U.N.'s Intergovernmental Panel on Climate Change ("IPCC") released a report outlining the increasing risk that climate change poses.[14] The report concluded that currently in cities, "People's health, lives and livelihoods, as well as property and critical infrastructure . . . are being increasingly adversely affected by hazards from heatwaves, storms, drought and flooding . . . . "[15] As stated by the IPCC report co-author, Hans-Otto Portner, "The scientific evidence is unequivocal: climate change is a threat to human wellbeing and the health of the planet. Any further delay in concerted global action will miss a brief and rapidly closing window to secure a livable future."[16]

Likewise, a steady stream of news and reports continue to document how the effects of climate change are being felt unequally among race and income-level and will continue to be unless important policy changes are made. For instance, in light of increasing extreme heat in DC from climate change, a local nurse DeAysia Johnson, recently said, "From a nurse's perspective, unhoused residents are especially vulnerable to the extreme heat, which can start with something as mild as a heat rash or a cramp and can escalate to something as serious as heat exhaustion, life

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14 Intergovernmental Panel on Climate Change (IPCC), Climate Change 2022: Impacts, Adaptation and Vulnerability (Feb. 2022) *available at* https://www.ipcc.ch/report/ar6/wg2/.

15 Press Release, IPPC, Climate Change: A Threat to Human Wellbeing and Health of the Planet (Feb. 28, 2022), https://www.ipcc.ch/report/ar6/wg2/resources/press/press-release/.

16 *Id.*

threatening heat stroke or even death in the worst cases."[17] The ever-growing body of information about the dangers of climate change, and its unjust effects, further underscores the need for just, resilient, equitable, and affordable immediate action and mid- and long-term plans for decarbonization.

B. *Urgent near-term Commission and Pepco actions are needed to support the District's climate change goals.*

OPC commends the Commission and Pepco for demonstrating a commitment to advancing the District's climate change goals through this and other proceedings, but unfortunately outstanding issues are delaying effective next steps. Specifically, the following urgent actions are necessary to get on track to implement any additional climate change plans or programs.

1. Adopt a Commission-directed climate change BCA framework applicable to all utility proposals.

The Commission has made clear that the benefit cost analysis framework developed in *Docket No. GD-2019-04-M, In the Matter of the Implementation of the 2019 Clean Energy DC Omnibus Act Compliance Requirements*, will apply to the utilities' filings in Formal Case No. 1167. Specifically, in Order No. 20662, the Commission stated that for proposals filed in Formal Case No. 1167, the "proposal must also describe how it meets the metrics that will be developed in GD-2019-04-M."[18] In Order No. 20754, the Commission further stated that "the methodology to be used to review project proposals filed in Formal Case No. 1167" would be developed in Docket No. GD-2019-04-M.[19] And it stated that, "both WGL and Pepco will be directed to update

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17 Za'Kari Tucker et. al, *How Homelessness And Climate Change In D.C. Are Connected* DCIST (May 26, 2022), *available at* https://dcist.com/story/22/05/26/dc-homeless-housing-climate-change/.

18 *Formal Case No. 1167*, Order No. 20662, ¶ 12, rel. Nov. 18, 2020.

19 *Formal Case No. 1167*, Order No. 20754, ¶ 52, rel. June 4, 2021.

and supplement their filings consistent with the guidance received in the GD-2019-04-M docket."[20]

OPC strongly agrees with the Commission that a Commission-directed BCA framework developed in Docket No. GD-2019-04-M should be used to evaluate the companies' filings in this proceeding, and that Pepco and WGL filings must be updated to apply that framework when issued. OPC's concern, though, is that the Commission has not directed any next steps in Docket No. GD-2019-04-M since the Clean Energy Act Implementation Working Group ("CEAIWG") filed its working group report in that proceeding on November 16, 2021.[21] OPC respectfully urges the Commission to expeditiously complete the development of a Commission-directed uniform BCA framework in Docket No. GD-2019-04-M so that the Commission can use that framework to evaluate the utilities plans filed in this proceeding and appropriately fulfill the Commission's and OPC's parallel statutory obligations to consider the effects of climate change and achievement of the District's climate change goals when making policy determinations.[22]

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20 *Id.* ¶ 53.

21 *Docket No. GD-2019-04-M, In the Matter of the Implementation of the 2019 Clean Energy DC Omnibus Act Compliance Requirements ("Docket No. GD-2019-04-M")*, A report by the Clean Energy Act Implementation Working Group, filed Nov. 16, 2021 ("CEAIWG Report").

22 In *Docket No. GD-2019-04-M*, Pepco has a pending motion to submit comments. Pepco's proposed comments argue that Pepco's BCA filed in this proceeding should form the basis of the BCA in *Docket No. GD-2019-04-M*. *Docket No. GD-2019-04-M*, Pepco's Motion for Leave to submit Comments and Comments on the CEAIWG Report, at 14, filed Jan. 31, 2022. As described in more detail in their Reply to Pepco's motion, OPC, the DC Climate Action, The District of Columbia Department of Energy and Environment, Grid 2.0 Working Group, Sierra Club, and Solar United Neighbors of D.C. (collectively "Joint Parties") strongly disagree. *Docket No. GD-2019-04-M*, Joint Parties' Reply to the Potomac Electric Power Company's ("Pepco") January 31, 2022 Motion for Leave to Submit Comments and Comments on the CEAIWG Report, filed Feb. 10, 2022. For the reasons described therein, Pepco's BCA is not a sufficient substitute for a Commission directed BCA framework informed by detailed stakeholder input. *Id.* Importantly, the BCA framework from *Docket No. GD-2019-04-M* is intended to provide the analytical approach to meet the Commission's statutory obligation pursuant to Section 103 of the Act amends D.C. Code § 34-808.02 to require that, in supervising and regulating utility or energy companies, the Public Service Commission of the District of Columbia ("Commission") consider not only the public safety, the economy of the District, the conservation of natural resources, and the preservation of environmental quality, but also the "effects on global climate change and the District's public climate commitments. *Docket No. GD-2019-04-M*, Notice of Inquiry ("NOI"), ¶¶ 1-2, rel. November 25, 2019.

2. *Reconcile contradictory and competing aspects of Pepco and the Gas Companies' climate change plans.*

The next Commission action in this proceeding must start with reconciling the contradictory and competing aspects of Pepco's and the Gas Companies' climate change plans. The utilities present two very different paths to achieving the District's climate change goals. Pepco's plan advances near-100% electrification in the District and proposes significant infrastructure and distribution system upgrades. By contrast, the Gas Companies propose to keep the gas system intact and employ transportation electrification, energy efficiency, and the use of different gases than it does today (less GHG intensive natural gases and/or hydrogen). Pepco's proposed plans generally align with the District's Clean Energy DC Plan[23] and the District's draft proposed Carbon Free DC Plan[24] and the Gas Companies' plans do not. Time and ratepayer resources will be better spent advancing one pathway to carbon neutrality to avoid wasted investment. Advancing both utilities' plans in parallel without reconciling their contradictory aspects would be untenable—investments that are necessary to advance one pathway will be wasted under a different pathway.

OPC is keenly aware of how difficult it will be for the key parties in District decarbonization—the District government, the utilities, third-party vendors, DC Sustainable Energy Utility ("DCSEU"), consumer and environmental advocates, federal government building management, the Council and the PSC—to align and work to advance one general pathway toward decarbonization. Yet, given the time-frame left to meet the 2032 goal (less than a decade), the

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[23] DC Dep't of Energy and Envtl. ("DOEE"), Clean Energy DC: The District of Columbia Climate and Energy Action Plan *available at* https://doee.dc.gov/cleanenergydc ("Clean Energy DC").

[24] DOEE, Carbon Free DC, https://storymaps.arcgis.com/stories/034104405ef9462f8e02a49f2bd84fd9 (last visited June 13, 2022).

limited funds and resources available, and the severe burden energy bills impose on consumers facing acute financial hardship, parties must aim in a similar direction if we are to achieve the District's climate change goals justly, equitably, and affordably. One key step in aligning toward one pathway will be for the Commission to expeditiously resolve, or at least indicate how it will resolve, the competing aspects of the utilities' climate change plans.

If the Commission is considering a potential pathway to achieving the District's climate goals, but it determines that Council action would be required to achieve that pathway, the Commission should seek Council direction on whether the Council would take steps to enable that pathway.[25] Moreover, as OPC has advocated,[26] the Commission should more holistically look at what transformations are needed for decarbonization. Dr. Stanton avers that, "The District needs a single, integrated climate plan to minimize ratepayer costs and maximize emission reductions and related co-benefits." She cautions that, "Multiple, contradictory plans pointing the District in opposite directions and layering on duplicative measures can be neither affordable nor effective." Instead, multiple potential plans or measures should be selected based on the net cost and benefit impact to the ratepayer and on their distributional impacts. Decision-makers should choose among plans or measures that provide positive net monetary benefits and other qualitative benefits.[27]

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[25] *See, e.g.,* D.C. Council, Committee on Business & Economic Development, Performance Oversight Hearing, Kenyan McDuffie, Chairperson, Feb. 23, 2022 (testimony of Emile C. Thompson, Interim Chairman of the Public Service Commission, starting at 15:07) *available at* https://lawhawaii.libguides.com/c.php?g=125476&p=821697 (describing what power the PSC does and does not have regarding WGL's decarbonization activities and indicating that it does not have the power to disenfranchise Washington Gas but does have the power to make sure WGL has a viable plan to be a partner in meeting the District's climate change commitments).

[26] *See, e.g., Formal Case No. 1167*, *Office of the People's Counsel for the District of Columbia's Initial Comments on AltaGas Ltd.'s Filing Regarding Merger Terms Nos. 6 and 79*, at 4, filed June 26, 2020.

[27] Stanton Aff. ¶ 67.

3. Improve the interconnection process so that parties can more quickly, easily, and predictably connect distributed energy resources ("DER") to the grid.

In order to establish a more robust distributed grid, third-parties need to be able to easily, predictably, and affordably connect to the grid. As described in more detail in OPC's comments in Formal Case No. 1166 regarding energy storage and other distributed resources, the Commission should take key next steps to improve the interconnection process to support the expansion of energy storage and other DER in the District.[28] OPC believes that as a jurisdiction with solar as the major source of renewable energy, it is imperative to expedite the deployment of energy storage to achieve decarbonization. One key next step is for the Commission to make technical amendments to the interconnection rules for small generators and Net Energy Metering rules to address any technical barriers to behind-the-meter energy storage interconnection and to ensure a smooth process for interconnection.[29] Further, as described in OPC's comments in Formal Case No. 1163 regarding the regulatory framework for microgrids in the District, these rules should be updated to address how a microgrid can safely connect to the system for net metering and disconnect from the system, and use the microgrid's islanding capabilities during periods of disruption or to avoid periods of disruption.[30]

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[28] *Formal Case No. 1166, In the Matter of the Investigation Into Energy Storage and Distributed Energy Resources in the District of Columbia ("Formal Case No. 1166")*, The Office of the People's Counsel for the District of Columbia Comments regarding Energy Storage and Other Distributed Energy Resources, filed Nov. 16, 2020.

[29] *Id.* at 11.

[30] *Formal Case No. 1163, In the Matter of the Investigation into the Regulatory Framework of Microgrids in the District of Columbia ("Formal Case No. 1163")*, Office of the People's Counsel for the District of Columbia's initial comments regarding the Commission's role in the regulatory framework of microgrids in the District, filed Aug. 31, 2020.

Lastly, as described in OPC's comments on Docket No. RM40-2022-01-E regarding proposed amendments to the small generator interconnection rules, the Commission should resolve fundamental problems plaguing interconnection in the District, including whether Pepco is appropriately categorizing projects between Level 1 and Level 2 net energy metering projections, whether Pepco is appropriately identifying the purported upgrades that are needed to interconnect the solar system, and whether the claimed upgrade costs are appropriate.[31] As detailed in OPC's comments, PSC and OPC have been receiving a number of complaints from Pepco consumers regarding the size of distribution system upgrade costs that Pepco asserts are needed to interconnect individual solar systems to the distribution grid which need to be systemically addressed.[32]

4. Take immediate action to resolve the issues described in OPC and the District Government's Petition regarding Community Renewable Energy Facilities ("CREF").

Nearly three months ago, on March 23, 2022, OPC and the District Government ("Joint Parties") filed a petition with the Commission detailing Pepco's repeated violations of its legal requirements with respect to Community Renewable Energy Facilities ("CREFs") in the District of Columbia and the impact of Pepco's CREF practices on the District's Solar for All ("SFA") program.[33] CREFs allow Pepco customers who cannot install their own rooftop solar panels—due to property or financial constraints—to subscribe to an off-site CREF and earn monthly

[31] *Docket No. RM40-2022-01-E, In the Matter of 15 DCMR Chapter 40 – District of Columbia Small Generator Interconnection Rules ("RM40-2022-01-E")*, Office of the People's Counsel for the District of Columbia's Comments Regarding the Proposed Amendments to Small Generator Interconnection Rules, filed March 28, 2022.

[32] *Id.* at 2.

[33] *Docket No. GD-2022-01-E*, The Office of the People's Counsel for the District of Columbia and District of Columbia Government's Joint Complaint and Petition for Investigation into Potomac Electric Power Company's Community Renewable Energy Facility Practices, filed March 23, 2022 ("OPC and DG CREF Petition").

Community Net Metering ("CNM") credits proportionate to their share of the CREF's generating capacity.[34] And the SFA program provides the District of Columbia's most vulnerable residents—those with a total household income of 80% or less of Area Median Income—with access to solar energy by supporting the development of both personal and community renewable energy facilities.[35] The programs are linchpins in achieving the District's climate change goals because they allow widespread deployment of clean energy technology in a practical and affordable manner.

The CREF Petition details violations by Pepco documented by developers, consumers, and the District of Columbia Department of Energy and Environment ("DOEE"), including providing erroneous bills to CREF Subscribers and untimely and incorrect allocation reports to Subscriber Organizations; installing its own meters on CREFs that report different output than the production grade meters that are used to calculate the Renewable Energy Credits ("RECs") recorded in the Generation Attribute Tracking System ("GATS") run by PJM Interconnection, LLC ("PJM"); failing to account for, and appropriately pay for, unsubscribed CREF energy; issuing bills to CREFs that appear to be net energy bills; and other actions that are at cross-purposes with the District mandates for renewable energy and affordability.[36]

OPC and the District Government petitioned the Commission to use the full force of its regulatory authority to investigate and conduct a third-party audit of the Company's actions and compel Pepco to comply with the District's energy laws and regulations related to installing and

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34 According to the Census Bureau, only 42.5% of DC homes are owner-occupied. The majority of households (about 60%) may very well be only able to access solar and benefit from deployment of other technologies in the District through CREF and other programs. United States Census Bureau, Quick Facts, District of Columbia, https://www.census.gov/quickfacts/fact/table/DC/AGE295220 (last visited June 16, 2022).

35 OPC and DG CREF Petition at p.3.

36 *Id.* pp. 4-5.

reading CREF meters, payments for unsubscribed energy, CNM credits for subscribed energy, CNM billing, and bill error reporting. Joint Petitioners also requested the Commission assess sanctions for Pepco's repeated and systemic violations of the District's CREF-related energy laws and regulations.[37] As a start, the Commission should expeditiously grant Joint Petitioners' pending Joint Motion to Convene Pre-hearing Conference filed on May 20, 2022.[38]

Pepco has proposed several programs related to SFA, CREF, and net metering in its five-year plan including a Community Solar Automation Program and a Virtual Community Renewable Energy Facility ("VCREF") Automation Program.[39] Addressing the problems outlined in the CREF Petition are, at minimum, pre-requisites to potentially advancing any such proposals. If these proposals are even to be considered in the five-year time-frame, the Commission should first ensure that Pepco is able to follow the relevant law and held accountable for its violations.

C. *General Comments on Pepco's Proposals*

Pepco will likely play a central role in the clean energy transformation in the District for at least the next several decades. OPC applauds Pepco's seriousness in developing plans for this role and urges the Commission to require key reforms to Pepco's plans needed to enable this transformation.

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37 *Id.* ¶ 106.

38 *Docket No. GD-2022-01-E*, The Office of the People's Counsel for the District of Columbia and District of Columbia Government's Joint Motion to Convene Pre-hearing Conference, filed May 20, 2022.

39 *See* Pepco 5-Year Plan at 72-73.

1. While Pepco incorporates important equity considerations, its plans need key reforms to effectively promote equity.

a) Pepco should better incorporate equitable processes into its planning.

Environmental justice has two key components: (1) ensuring the same degree of protection from environmental and health hazards for all residents, and (2) ensuring equal access to the decision-making process to have a healthy environment in which to live, learn, and work.[40] This second tenant, procedural equity, is an important component of achieving justice, yet Dr. Stanton concludes that "Pepco fails to provide sufficient details regarding transparent stakeholder processes that would include a broad spectrum of utility customers in climate measure planning." She notes that, "Pepco makes broad statements about its past track record in stakeholder engagement but does not describe or commit to a specific plan for receiving input from ratepayers and other stakeholders in climate policy design or implementation."[41] The accompanying affidavit of Dr. Stanton provides recommendations to improve the planned procedural equity including describing the need for a plan for: stakeholders' involvement in the policy development process; low- and moderate-income household implementation; promoting equity in building and transportation infrastructure upgrades; and enhancing reliability and resilience in a just and equitable manner.[42] Pepco's plans must incorporate procedural equity planning through adopting Dr. Stanton's proposed recommendations.

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40 United States Environmental Protection Agency, Environmental Justice, https://www.epa.gov/environmentaljustice (last visited June 14, 2022).

41 Stanton Aff. ¶ 34.

42 *Id.* ¶¶ 31-36.

b) Pepco's climate change programs should not exacerbate the energy burden for low and moderate income ("LMI") ratepayers

Throughout the materials submitted by the utility in Formal Case No. 1167, Dr. Stanton concludes that "Pepco fails to specify a funding source for its proposed measures."[43] Instead, Pepco's 5-Year Plan mentions cost recovery through a multiyear rate plan, surcharge or regulatory asset treatment, and emphasizes that climate programs are contingent on utility cost recovery:

> Timely recovery of these investments will enable Pepco to implement the Climate Solutions Plan programs at the level and pace required to fully support and advance the District's leading climate goals.[44]

Pepco also asks for "regulatory certainty" (or pre-approval from the PSC) and explains that it will include requests for specific cost recovery mechanisms together with its request for approval to implement climate programs.[45]

And, Pepco notes the existence of other potential funding sources:

> Pepco also recognizes that there may be opportunities to offset program costs, including through existing federal grants, as well as potential funding that could be made available from the infrastructure and reconciliation bills now pending before Congress and will work with the District government and other stakeholders to identify and leverage these potential funds.[46]

Without specific plans to seek out non-ratepayer funds, the default funding source becomes ratepayer bills. Dr. Stanton notes that "this raises a number of important issues/questions related to Pepco's next planned rate application," including:

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43 *Id.* ¶ 23.

44 Pepco 5-Year Plan at 8.

45 *Id.* at 8-9.

46 *Id.* at 9. In its response to OPC data request No. 5, annexed hereto as Exhibit B, Pepco confirms that it has not yet identified specific sources of federal funding that it plans to pursue.

- How will climate measure-related rate increases be structured?
- Will every customer pay equally into the program? As a per customer charge? On a per kilowatt-hour basis?
- For programs in which rebates are contemplated to cover participant costs, will the same rebate amount apply to all participants? Or will rebates be means-tested, or assigned based on some other criteria?
- Will the distribution of rebates across the District be monitored and reviewed over time?

To achieve just and reasonable rates, it is important to answering the questions in tandem with project proposals and project development. As described in OPC's study, *Equity Assessment of Electrification Incentives in the District of Columbia*, filed in this proceeding, equitable electrification must have diversified sources of funding and avoid increasing the energy burden on LMI District residents.[47] Clean energy plans cannot equitably increase the already inequitable energy burden in the District.[48] Cost to ratepayers and the potential to increase LMI ratepayers' energy burdens, therefore, must be factored into any cost benefit evaluation to determine whether the program is, on balance, a good proposition for the District.

c) Pepco's plans should be more ward- and community-specific to ensure that residents in all eight wards have access to new technology and equitably benefit from clean energy opportunities.

Dr. Stanton finds that Pepco's plans, "tend[] to treat the District as a homogenous monolith, ignoring variation among DC neighborhoods' and households' needs, circumstances, and

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[47] *Formal Case No. 1167*, Office of the People's Counsel of the District of Columbia, *Equity Assessment of Electrification Incentives in the District of Columbia*, at 36, filed Dec. 3, 2021 ["OPC Electrification Study"].

[48] *See* OPC Electrification Study at 3-4; OPC Energy Affordability Study (Dec. 2020) *available at* https://opc-dc.gov/news-events/news/alerts/opc-releases-findings-of-energy-affordability-study.

means."[49] Yet, as OPC documents in its study *Equitable Electrification in the District of Columbia*, stark disparities exist among District communities. The study found that about 27% of the District's population resides in a so-called "environmental justice community."[50] They are more likely to be near environmental hazards, are disproportionately exposed to air pollution, and bear the brunt of climate change.[51] Wards 7 and 8, with by far the lowest median incomes, are more likely to have high rates of poverty, high energy expenditures, high percentages of racial/ethnic minorities, higher rates of eligibility for and participation in government assistance programs, higher shares of renters, and lower rates of college degree attainment.[52]

Plans should account for these disparities. Achieving acceptable equity outcomes will require transparent planning regarding: impacts on LMI customers; renters; public health; and the targeting of programs and their benefits to under-served and under-resourced communities; strategic sequencing of program roll out; and investment in underresourced communities.[53] For instance, in the Residential Behavior Based Program from the Five Year Plan, Pepco fails to address whether there would be different rates of return depending on where the customer lives. And, as one example from other states, administrators for the Massachusetts statewide energy efficiency programs identify equity as one of three main priorities in their three-year energy efficiency plans. To support this priority, Massachusetts utilities have developed strategies and measurable equity metrics for each sector that aim to target underserved communities.[54]

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49 Stanton Aff. ¶ 6.

50 OPC Electrification Study at 15-16.

51 *Id.* at 4.

52 *Id.* at ii.

53 Stanton Aff. ¶ 42.

54 *Id.* ¶ 42 (*citing* Mass Save. November 1, 2021. *Massachusetts Joint State Wide Electric and Gas Three-*

2. OPC generally agrees with Pepco's envisioned role as a "connector," but its plans lack specificity including key steps needed to succeed in that role

Pepco's 30-Year Plan offers a proposed vision of the grid and its role in the transition to a carbon-free economy:

> At its core, the Pepco Climate Solutions Plan advances the grid as a "platform," where Pepco facilitates and activates the connections between the grid, customers, and communities. As the "connector," Pepco is able to provide programs and opportunities for customers and communities to access and enable climate solutions equitably, inclusively, and affordably, while driving innovation and building resilience.[55]

OPC generally agrees that Pepco will need to play this important role, at least in the near- and mid-term, but that role should be better defined.

As described above, Pepco's plans should describe in more detail the steps it will take to play this role. As Dr. Stanton found, Pepco's platform/connector vision requires more detail to make clear the utility's intentions regarding its role in the development of distributed generation and storage, the facilitation of the development of distributed resources by both customers and third parties, and the utility's relationship and responsibilities vis-à-vis ratepayers.[56] Such detail will bring this role into better focus, allowing stakeholders to provide more effective input.

Moreover, Pepco's plans should include the internal reforms needed to effectively transition to the role of platform/connector. Such a role requires a more nimble and dynamic organization than required to play the role of a traditional transmission provider and Pepco should indicate that it has plans to make that change. For instance, the Smart Electric Power Alliance

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Year Energy Efficiency Plan 2022-2024).

55 Pepco 30-Year Plan at 2.

56 Stanton Aff. ¶ 19.

("SEPA") 2021 Utility Transformation Challenge assessed and presented on electric distribution utilities' progress in transforming the energy system towards a clean and modern energy future.[57] Its Corporate Leadership section explored how utilities are using their unique operational knowledge, expertise and influence to navigate change management, evolve, and pursue strategic solutions that move their organization to a modern, carbon-free grid. Based on SEPA's survey result, SEPA recommendations for utilities included the following internal reforms:

> - Address the transformation comprehensively across the organization through changes to processes, programs and structures that will accelerate clean energy adoption;
>
> - Embrace the clean energy transformation as a core element of the utility mission and culture. This will require changes, such as linking executive compensation to carbon reduction goals, establishing transparent emissions tracking and reporting, and pursuing internal carbon reduction initiatives.[58]

Pepco should indicate that it is considering such reforms and adopting the ones needed to play its transformed role.

In terms of DER, Pepco should describe in more specific detail how it will be a connector for DER. Dr. Stanton raises the questions: as the connector, will Pepco initiate its own investments in DER? What problems could arise from Pepco taking the roles of both developer and connector? What safeguards will be put in place to protect third-party DER developers competing with Pepco? What measures will the grid platform's connector take to foster DER development by customers

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[57] Smart Electric Power Alliance ("SEPA"), 2021 Utility Transformation Profile *available at* https://sepapower.org/utility-transformation-challenge/profile/.

[58] *Id.* at 9, 31.

and third parties? How will Pepco proceed with facilitating DER in the District without claiming utility ownership and operation of energy storage?[59]

> 3. *OPC opposes the breadth of Pepco's proposed expansion of its current role by offering programs that are better offered through competition, by third party providers, and/or governmental entities and is concerned about Pepco's failure to articulate how it will enable robust third-party competition.*

Pepco should enable competition and the provision of services from third-party providers, and District entities like the DCSEU, not reserve those roles for itself. "The Plan mentions third-parties as they relate to the development of DERs, non-wires alternatives, and a solar/battery demonstration program in Ward 8, but fails to address or commit to third-party competition in these instances or as it relates to the entire suite of programs more broadly."[60] Pepco's plans should more fully and more specifically explain how it will support third-party integration into Pepco's envisioned "platform."

As DER (hopefully) proliferates, one important type of third-party provider to integrate and support will be DER Aggregator. Recognizing the potential consumer and decarbonization benefits of the DER expansion, the Federal Energy Regulatory Commission ("FERC") issued Order No. 2222 to remove barriers to the participation of DERs that aggregate in the wholesale energy, capacity, and ancillary services markets.[61] Earlier this year, PJM Interconnection L.L.C. ("PJM") submitted its Order No. 2222 compliance filing. As OPC argued in its comments on PJM's FERC Order No. 2222 compliance filing, while Electric Distribution Companies ("EDCs"), such as Pepco, are essential for successful Order No. 2222 implementation, OPC is concerned with

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59 Stanton Aff. ¶ 50.

60 *Id.* ¶ 51.

61 PJM Interconnection, L.L.C. Order No. 2222 Compliance Filing; eLibrary No. 20220201-5120 (Feb. 1, 2022) ("Compliance Filing").

the level of deference given to EDCs in PJM's Compliance Filing.[62] This high level of deference, from coordinating what resources would be eligible to participate in the wholesale market to rules regarding operations and dispatch could unreasonably limit the participation of aggregated DERs in the wholesale market. While OPC recognizes the EDC has important control and operational responsibilities, its coordination should be subject to appropriate parameters and limits to enable DERs and DER Aggregators to competitively participate in the wholesale markets. Here, in line with these comments, Pepco should articulate how it will address potential conflict of interest in promoting a role for DER aggregators, and support clear rules to do so, to help enable third-party aggregator participation in District wholesale market opportunities.

Similarly, OPC appreciates that Pepco proposed data management and data collection programs to play the role of platform/connector systems in a modernized grid in its 5-year plan, but OPC is concerned by the 5-Year Plan's lack of detail regarding system construction to enable third-party integration. Specifically, the Plan lacks detail on any of Pepco's pilots, simulations, or preliminary 'snapshots' of existing (from Formal Case No. 1160) and "in-flight" programs and initiatives for system construction. Additionally, Pepco should follow best practices in system design for DER integration so that third-party providers can predictably, easily, and affordably make full use of Pepco's data analytics. Pepco should add specific details about its plans for system design to enable third-party integration in these plans, especially for the DER Hosting Capacity Map Program, Advanced Distribution Management System Program, and Advanced DER Analytics Program programs.

Moreover, OPC is generally concerned that if Pepco does not adequately, and supportively, plan for robust third-party competition, there is a risk that Pepco will become the only viable

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62 Comments and Limited Protest of the Joint Consumer Advocates; eLibrary 20220401-5514 (Apr. 1, 2022).

provider of certain clean energy solutions. The lack of viability of third-party provided services can become a self-fulfilling prophecy: if Pepco's "platforms" are not developed from inception to easily and cost-effectively support third-party participation, third-party participation will likely be costly and inefficient. And, if third-party competition becomes costly and inefficient, it may seem like Pepco's provision of services is needed to address cost concerns, when in actuality the additional costs of third-party participation are, indirectly, being generated by Pepco's system design. The Commission must therefore require Pepco to specifically address how it will avoid this potential outcome and to only advance plans that enable robust third-party participation.

Further, Pepco should clearly articulate why any proposed program benefits ratepayers specifically, not District residents generally. If a program is more geared to general District resident benefits, it raises the important question of whether it should be taxpayer and/or grant funded and conducted at the behest of District government, instead of being ratepayer funded and Pepco-initiated. For example, OPC opposes Pepco's proposed Resiliency Hub Program.[63] Community Resilience Hubs are community facilities that provide information and services to communities before, during, and after emergency events. As climate change brings more flooding, heat waves, and severe storms, Community Resilience Hubs will complement existing emergency response services and, critically, serve DC communities year-round by promoting health, providing meeting spaces, educating the community about risks and emergency preparedness, and supporting workforce development.[64] Such programs have the potential to provide lifesaving benefits to District communities such as refrigerating medicine during a power outage or

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[63] *See* Pepco 5-Year Plan at 75.

[64] DOEE, Community Resilience Hubs, https://doee.dc.gov/service/community-resilience-hubs (last visited June 14, 2022).

connecting displaced residents with available support while strengthening communities with ongoing programming during non-emergency times. Resiliency Hub development should remain under the behest of District government, not Pepco. Currently, a Resiliency Hub planning process is underway in Ward 7.[65] This, and future planned Hubs, should remain community-driven and District Government facilitated.

Similarly, Pepco should decline to pursue programs that are already conducted by the DCSEU. As described more fully in OPC's comments in Formal Case No. 1160, OPC is concerned about consumer confusion and additional duplicative administrative costs when overlapping programs are offered by both Pepco and DCSEU.[66] In enacting the Clean Energy DC Act of 2018, the Council was rightly concerned with overlap between Pepco and DCSEU's Energy Efficiency and Demand Response ("EEDR") offerings. The Council, therefore, required only approval of utility EEDR programs "that the company can demonstrate are not substantially similar to programs offered or in development by the SEU, unless the SEU supports such programs."[67] Here, in its June 10, 2022 comments in this proceeding, DCSEU identified several areas of potentially inefficient and confusing overlap.[68] The Commission should direct Pepco to avoid any unnecessary overlap. More broadly, Pepco should focus its planning on completely separate programming categories that do not have the potential to overlap with DCSEU in the first place.

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65 *See id.*

66 *See Formal Case No. 1160, In the Matter of the Development of the Metrics for Electric Company and Gas Company Energy Efficiency and Demand Response Programs Pursuant to Section 201(B) of the Clean Energy DC Omnibus Amendment Act of 2018 ("Formal Case No. 1160")*, Office of the People's Counsel for the District of Columbia's Comments on Pepco's Three-Year Energy Efficiency and Demand Response Program, filed Nov. 23, 2021.

67 D.C. Code § 8-1774.07(g)(4).

68 *See Formal Case No. 1167*, Comments of the District of Columbia Sustainable Energy Utility on Pepco's Climate Solutions 5-Year Action Plan and Benefits and Costs Report, filed June 10, 2022.

D. *Comments on Pepco's 5-Year Plan*

1. Brief Overview of 5-Year Plan Areas

Pepco's Five-Year Plan suggests 62 programs in four program areas:

- **Electrifying transportation:** Within this portfolio, the Connect Transportation initiative focuses on infrastructure investments in the District to enable transportation electrification, and the Smart Rates Transportation initiative provides rate designs specific to vehicle charging.[69]
- **Decarbonizing buildings:** This portfolio focuses on expanding efficiency programs.[70]
- **Activating the local energy ecosystem by advancing community-based resources:** These programs aim at advancing distributed energy resources (DERs).[71]
- **Enhancing infrastructure (distributed energy and smart grid) for climate solutions:** These programs aim at supporting the need to actively manage system demand as electrification in the District progresses. Programs focus on establishing and updating data-based tools to improve the usage of DERs and increasing the reliability of physical infrastructure linked to mass electrification.[72]

2. OPC Comments on Pepco's 5-Year Plan Programs

In Pepco's Five-Year Plan, Pepco proposes 62-specific programs across four portfolios. As described in Section III.B.1 above, these programs should be reevaluated through a uniform Commission-directed BCA framework before OPC can evaluate whether they are in consumers'

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69 Pepco 5-Year Plan at 12-13.

70 *Id.* at 38.

71 *Id.* at iii.

72 *Id.*

interests and provide input to the Commission from that perspective. And, as outlined in OPC's optional *Comments on Pepco's Climate Solutions 5 Year Action Plan*, there are additional key outstanding questions that must be answered to evaluate these programs.[73] Moreover, OPC has provided detailed comments on energy efficiency program proposals in Formal Case No. 1160 that should be addressed before advancing any related programs.[74] Further, as noted in Section III.C.3 above, OPC is highly concerned about the potential program overlap described by the DCSEU in its June 10th comments on Pepco's 5-Year Plan and its BCA Report filed in this proceeding.[75] In addition to the programs mentioned in Section III.C above, OPC, provides the following comments to aid in continued consideration of these programs.

3. Advanced Metering Infrastructure utilization and technical technological upgrades

While several of Pepco's proposed programs rely on AMI upgrades, Pepco neither discusses the needed upgrades nor addresses how to sequence and group potential programs to make sure to get the maximum benefits from any AMI upgrade costs. For example, in Pepco's interactive grid model, local solar, energy efficiency and active load management would require system device upgrade/enhancement for system compatibility and integration to work.[76] Pepco's plans should address details including: what is Pepco's current status in this process of AMI system enhancements, compatibility and integration? What testing, pilots and studies have Pepco

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73 *Formal Case No. 1167*, Office of the People's Counsel for the District of Columbia's Comments on Pepco's Climate Solutions 5 Year Action Plan, filed Dec. 7, 2021.

74 *Formal Case No. 1160*, Office of the People's Counsel for the District of Columbia's Comments on Pepco's Three-Year Energy Efficiency and Demand Response Program, filed Nov. 23, 2021.

75 *See Formal Case No. 1167*, Comments of the District of Columbia Sustainable Energy Utility on Pepco's Climate Solutions 5-Year Action Plan and Benefits and Costs Report, filed June 10, 2022.

76 *See* Pepco 5-Year Plan at 4.

conducted to ensure devices and programs will function in sync in the interactive Grid? Likewise, the Demand Charge Solution Program would require AMI data. Pepco should address: the type of AMI data it would needed to develop the rate design; Would the rate design be "stable" and remain consistent or would it vary and be "dynamic"? How does this help or support LMI consumers? In evaluating AMI related programs, OPC also notes that it supports further exploration of the Energy Engineers Program, which has the potential to use AMI data to help low-income residents save money, and therefore may be a worthwhile benefit to consumers.

Similarly, other programs relying on technological upgrades should explain how those upgrades will be done effectively and efficiently. For instance, in The Connect Infrastructure Initiative, the timeline for Hosting Capacity Improvement starts 5 years later (in 2040) later than when the Connect Data Initiative programs begins.[77] OPC questions whether the infrastructure initiative starts concurrently with Connect Data or before; Pepco should explain the planned sequencing. Likewise, in the Connect Data initiative, Pepco should provide information regarding whether there are any pilots already activated that are simulating how these new data tools will communicate with smart devices (Stage 1). Would Pepco have to implement any AI Integration software that monitors/controls DER systems and the smart devices (Stage II & III)? Will the updated load forecasting system drastically change Pepco's timeline for adding or upgrading substations, Primary Feeders and other major projects such as DC PLUG and Capital Grid?

4. Rate Design: Smart Rates Transportation Initiative and Smart Rates Buildings Initiative

Pepco's 5-Year Plan has two rate design initiatives: Smart Rates Transportation and Smart Rates Buildings. The three proposed programs in the Smart Rates Transportation Initiative,

77 *See* Pepco 5-Year Plan at 82-83.

Residential Electric Vehicle Charging Time-of-Use Rate Program, Demand Charge Solution Program and Transit Bus Rate Solutions Program, aim to use rate design to promote transportation electrification and better manage the load from EV charging. OPC agrees that rate design is an important tool in promoting electric vehicles but cautions that to equitably manage load and to provide equitable incentives, EV rates must be deployed in concert with broader planning. Specifically, rate design must be coordinated with distributed energy deployment, advanced data analytics, iterative analysis of effective behavioral modification, and quantitative analysis of distributional benefits and costs. For instance, regarding data, studies have shown that a peak:/ off-peak price differential of at least 2:1 appears to be effective in shifting the majority of load and that a peak:/ off-peak ratio of 4:1 is necessary to ensure sustained load shift.[78] Accordingly, to be effective Pepco's proposed TOU EV rate design should be informed by time series data on adoption patterns of EVs or TOU enrollment to realize load shift. Likewise, Pepco's proposed Demand Charge Solution Program aims to make community-based fast charging from Public Direct-Current Fast Charging ("DCFC"), a high-powered EV charging station that fully recharges EV's batteries within a short time (e.g., about 30 minutes), affordable and accessible. Yet, the high cost of fast charging,[79] the economics of such stations,[80] and the scheduling inflexibility of users

[78] Hurlbut, D., McLaren, J., Koebrich, S., Williams, J., and Chen, E., 2019; Electric Vehicle Charging Implications for Utility Ratemaking in Colorado, NREL, 2019; DOE, Electricity Delivery & Energy Reliability, 2016, Customer Acceptance, Retention, and Response to Time-Based Rates from the Consumer Behavior Studies, November 2016 Smart Grid Investment Grant Program.

[79] *See* Kampshoff, P., Kumar, A., Peloquin, S., and Sahdev, S., 2022, Building the electric-vehicle charging infrastructure America needs, Public & Social Sector Practice and the McKinsey Center for Future Mobility, April 2022.

[80] *See* Analytical White Paper: Overcoming Barriers to Expanding Fast Charging Infrastructure in the Midcontinent Region. Great Plains Institute, July 2019, https://scripts.betterenergy.org/reports/GPI_DCFC_Analysis_July_2019.pdf (finding that EV charging penetration has to reach a level charging of about 10 charging customers per day to break even).

who often need to charge during the day[81] all need to be addressed for a successful fast charging program.

Similarly, for buildings, Pepco proposed the implementation of a dynamic pricing program with incentives to residential customers to reduce energy at times when the grid is strained. Pepco plans to use a critical peak rebate ("CPR") program so that consumers will receive rebates for decreased usage during "peak events." Pepco's program proposal, however, needs to incorporate broader considerations such as strategies for effective customer engagement and coordination with governmental policies.[82]

Rate-based incentives for both EVs and buildings must be also designed equitably. Pepco's EV charging TOU rate targets customers who live in single family homes as does Pepco's proposal to expand the R-PIV to all residential Standard Offer Service ("SOS") customers. A beneficial rate for single family home dwellers should be paired with strategies that also benefit multifamily building residents and an analysis of impacts to overall rates. While Pepco's proposed Demand Charge Solution Program could benefit apartment dwellers, significant community-based input would be needed to make it actually accessible to many residents. And, while LMI residents would benefit from bus electrification, information regarding the impact on ratepayers is needed to evaluate the potential net benefit to them.

Lastly, OPC questions whether Pepco's plan to study the feasibility of re-introducing an "All-Electric" Residential Rate ("R-AE") Schedule is necessary as Pepco already has historical data on R-AE customers, both granular (since AMI) and non-granular (before AMI) data.

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81 Analytical White Paper: Overcoming Barriers to Expanding Fast Charging Infrastructure in the Midcontinent Region. Great Plains Institute, July 2019.

82 *See* Hu, Z., Kim, J-h., Wang, J., Byrne, J., 2015, Review of dynamic pricing programs in the U.S. and Europe: Status quo and policy recommendations. Renewable and Sustainable Energy Reviews, Volume 42, February 2015, at 743-751.

E. ***Comments on Pepco's Technical filings***

1. Pepco's BCA

As described in Section III.B.1 above, the BCA framework developed in Docket No. GD-2019-04-M should apply to Pepco's programs, not the BCA Pepco filed in this proceeding. A uniform Commission-directed BCA framework developed through robust stakeholder involvement is the only viable way for a BCA to adequately inform climate-related decision-making. Yet, Pepco's BCA differs significantly from the recommendations of the Clean Energy Act Implementation Working Group ("CEAIWG") final report filed in Docket No. GD-2019-04-M. In Pepco's BCA, Pepco develops a new cost-effectiveness test it coins the Climate Policy Enablement ("CPE") test.[83] The CPE test compares Pepco's program costs of its 5-Year Plan to the programs' projected benefits from reduced fuel and electricity consumption, and reduced greenhouse gas and criteria air pollution emissions. As described more fully in the affidavit of Dr. Stanton, Pepco's proposed CPE test looks at a reduction in system costs of supplying electricity and fuel, and the societal benefits of reduced emissions, and the utility-incurred costs for implementing programs, but excludes participant costs from the analysis.[84] Pepco argues that participant costs fall outside the scope of its Study because Pepco's objective should be to evaluate "the economics of how Pepco DC's proposed programs enable achievement of the District's decarbonization goals," rather than evaluating the cost-effectiveness of the goals themselves.[85]

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83 *Formal Case No. 1167*, Pepco's Climate Solutions 5-Year Action Plan: Benefits and Costs, at 3, filed January 31, 2021 ("Pepco BCA").

84 Stanton Aff. ¶ 42.

85 *Id.* (*quoting* Pepco BCA at 62).

Overall, Dr. Stanton concludes that, "Pepco's own BCA test appears to detract focus from the impacts of utility measures and programs on ratepayers."[86]

The CEAIWG Report includes a recommendation that the District's BCAs "should include metrics for social equity, racial equity, and environmental justice."[87] The Report calls for the inclusion of both energy and non-energy benefits, including access to clean energy, across income, race, and geography.[88] By contrast, Pepco's BCA does not include any of the specific equity factors recommended in the CEAIWG Report, including energy and non-energy benefits (access to clean energy, across income, race, and geography).[89] In addition, the Pepco BCA casts too wide a net in looking at societal benefits, counting as a "benefit" reducing local air pollution at the source where the energy is generated (for example, towns in Ohio, New Jersey, etc.) instead of prioritizing reduction of District air pollution. Moreover, Pepco's BCA should better reflect important uncertainties through sensitivities and ranges. For example, in the Brattle Group's California-focused BCA, variations in capacity prices, resource adequacy and frequency regulation were examined.[90]

2. Electrification Study

On August 27, 2021, Pepco submitted *An Assessment of Electrification Impacts on the Pepco DC System* (the Study), prepared by The Brattle Group.[91] Brattle's analysis provides an

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86 Stanton Aff. ¶ 63.

87 CEAIWG Report at 21.

88 Stanton Aff. ¶ 64; Pepco BCA at 21.

89 CEAIWG Report at 7.

90 Hledik R., et al. September 2017. *Stacked Benefits: Comprehensively Valuing Battery Storage in California*. The Brattle Group. Available at: https://www.brattle.com/wp-content/uploads/2017/10/7208_stacked_benefits_-_final_report.pdf

91 Pepco Electrification Study.

overview of the role electrification could play in making the District carbon neutral by 2050. The Study explores how implementation of energy efficiency and load flexibility practices can achieve carbon neutrality and moderate the impacts of electrification on overall energy load.[92] However, the Study does not describe how these benefits will be equitably applied to District residents. As described more fully in the affidavit of Dr. Stanton, the study fails to include discussion of: equitable cost sharing, equitable benefit sharing, investing in climate vulnerable communities, inclusive planning processes, promoting competition, providing green jobs, and reducing local air pollution.[93] While Dr. Stanton found that Brattle performed a technically sound electrification analysis, the Study contains some key flaws. Specifically, first, Brattle's Study does not "capture variations across the DC neighborhoods and households, or address how those variations may effect electrification on both the local (Ward) and city level."[94] Second, it uses a proprietary model to estimate the size and shape of peak electric load. A propriety model reduces transparency, making it impossible to verify Brattle's modeling or test the sensitivity of its results to changes in assumptions or modeling techniques.[95] And, Dr. Stanton found that, "assumptions regarding post-COVID commuting patterns, the effect of EV charger investment on EV adoption, and the expected vehicle milage range in the DC-specific context all warrant additional examination."[96]

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92 *Id.*

93 Stanton Aff. ¶ 70.

94 *Id.* ¶ 72.

95 *Id.* ¶ 73.

96 *Id.* ¶ 75.

IV. CONCLUSION

Pepco's plans are a serious attempt to support the District's climate change goals but they lack key components needed for success. By immediately resolving outstanding issues stymieing progress, and requiring more robust equity measures, a more wholistic focus on affordability, and effective plans to encourage third-party competition, the Commission can help Pepco to advance the District's climate change goals in a just, affordable, equitable and resilient manner.

WHEREFORE, the Office of the People's Counsel respectfully requests the Commission consider and adopt the recommendations discussed herein.

Respectfully Submitted,

/s/ Sandra Mattavous-Frye

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Dated: June 17, 2022

BEFORE THE
PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA

In the Matter of	§	
	§	
the Implementation of	§	**Formal Case No. 1167**
Electric and Natural Gas Climate	§	
Change Proposals	§	

AFFIDAVIT OF
ELIZABETH A. STANTON, PHD

Attachment A

On Behalf of the
Office of the People's Counsel
for the District of Columbia

June 16, 2022

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EXHIBIT LIST

Exhibit OPC (A)-1	CV

I. INTRODUCTION AND QUALIFICATIONS

1. My name is Elizabeth Stanton, and I have been retained by the Office of the People's Counsel for the District of Columbia (OPC) to review the materials filed by Pepco ("Company") with the District of Columbia Public Service Commission (Commission or PSC) in Formal Case No. 1167.
2. I am the founder and Director of the Applied Economics Clinic (AEC), a non-profit consulting group. AEC provides expert testimony, analysis, modeling, policy briefs, and reports for public interest groups on the topics of energy, environment, consumer protection, and equity. AEC also provides training to the next generation of expert technical witnesses and analysts through applied, on-the-job experience for graduate students in related fields and works proactively to support diversity among both student workers and professional staff.
3. I am a researcher and analyst with more than 19 years of professional experience as a political and environmental economist. I have authored more than 170 reports, journal articles, books and book chapters as well as more than 50 expert comments and oral and written testimony in public proceedings on topics related to energy, the economy, the environment, and equity. My articles have been published in Ecological Economics, Climatic Change, Environmental and Resource Economics, Environmental Science & Technology, and other journals. I have also published books, including Climate Change and Global Equity (Anthem Press, 2014) and Climate Economics: The State of the Art (Routledge, 2013), which I co-wrote with Frank Ackerman. I am also co-author of Environment for the People (Political Economy Research Institute, 2005, with James K.

Boyce) and co-editor of Reclaiming Nature: Worldwide Strategies for Building Natural Assets (Anthem Press, 2007, with Boyce and Sunita Narain).

4. My recent work includes Integrated Resource Plan (IRP) and Demand-Side Management (DSM) planning review, analysis and testimony of state climate laws as they relate to proposed capacity additions, and other issues related to consumer and environmental protection in the electric and natural gas sectors. I have submitted expert testimony and comments in state dockets in the District of Columbia, Florida, Indiana, Illinois, Louisiana, Massachusetts, Michigan, Minnesota, New Hampshire, New York, Pennsylvania, Puerto Rico, South Carolina, and Vermont, as well as several federal dockets. In my previous position as a Principal Economist at Synapse Energy Economics, I provided expert testimony in electric and natural gas sector dockets, and led studies examining environmental regulation, cost-benefit analyses, and the economics of energy efficiency and renewable energy. Prior to joining Synapse, I was a Senior Economist with the Stockholm Environment Institute's (SEI) Climate Economics Group, where I was responsible for leading the organization's work on the Consumption-Based Emissions Inventory (CBEI) model and on water issues and climate change in the western United States. While at SEI, I led domestic and international studies commissioned by the United Nations Development Programme, Friends of the Earth-U.K., and Environmental Defense Fund, among others. I earned my Ph.D. in economics at the University of Massachusetts-Amherst, and have taught economics at Tufts University, the University of Massachusetts-Amherst, and the College of New Rochelle, among other colleges and universities. My curriculum vitae is attached to this Affidavit as Attachment A-1.

II. SUMMARY OF AFFIDAVIT AND FINDINGS

5. As the District's electric provider, Pepco's role is to serve ratepayers, and its climate plans must reflect that. In this affidavit I recommend climate planning and benefit-cost analysis that is:

    - Focused on the needs of and impact to ratepayers,
    - Uniform across both utilities,
    - PSC-directed, rather than designed or led by the utilities, and
    - Integrated across both utilities to provide an accurate assessment for the District as a whole.

6. I also provide a critique of the materials submitted by Pepco in Formal Case No.1167 that includes the following main concerns:

    - Pepco proposed climate measures, and their BCA results, need to be presented and understood in the context of their funding sources—ratepayer bills or otherwise—and a detailed analysis of their impact on customer rates and bills.
    - Pepco needs to provide details of its planning to ensure that the most climate-vulnerable communities do not disproportionately fund mitigation and resiliency measures.
    - Pepco's climate plans fail to describe the inclusion of stakeholders in design, planning and evaluation; plans for outreach and education; targeting and sequencing of benefits; impacts on low- and moderate-income ratepayers, renters and public health; and intentional investment in under-resourced communities.

- Pepco’s climate plans do not include commitments related to the equitable distribution of costs and benefits, the promotion of competition with and among third-party DER vendors, the provision of green jobs and fostering small businesses, and the reduction of local pollution.
- Pepco’s planning—including its electrification study—tends to treat the District as a homogenous monolith, ignoring variation among DC neighborhoods’ and households’ needs, circumstances, and means.
- Pepco’s assumption that 95 percent of current building fuel use is electrified by 2050 is entirely contradictory to plans filed by WGL. It is difficult to comprehend how separate, contradictory climate and energy plans—affecting nearly all DC residents—can hope to result in an effective, affordable and equitable decarbonization plan.
- Pepco’s plans omit discussion of iteration or learning by doing. Good policy design needs to include evaluation, reassessment and retuning of programs over time.

7. The ratepayer (and the almost identical set of individuals and households: District residents) is the appropriate lens from which to understand the costs and benefits of DC climate plans and actions. Assessments that instead focus on impacts to the utility miss critical information needed by the Commission for good decision-making.
8. The PSC should require that Pepco provide additional information including, but not limited to: ratepayer impacts; stakeholder inclusion; DER competition; green jobs and small business impacts; low- and moderate-income household impacts; and intentionally designed climate programs aimed at achieving MEDSIS goals.

III. BRIEF OVERVIEW OF FORMAL CASE NO. 1167 PURPOSE, STRUCTURE AND REQUIREMENTS.

9. Formal Case No. 1167 was opened "to consider whether and to what extent utility or energy companies under [the Commission's] purview are helping the District of Columbia achieve its energy and climate goals."[1]

10. In terms of items that should be treated as a priority in this proceeding, the District's climate policy, as well as targets established by the District's clean energy plans, Clean Energy DC and Sustainable DC, must be the standard for each utility's climate business plan:

> *The Clean Energy Act establishes a requirement that the Commission consider the effects on global climate change and the District's public climate commitments in its supervision and regulation of utility or energy companies. Thus, the Commission is commencing a climate policy proceeding to consider whether and to what extent utility or energy companies under our purview are helping the District of Columbia achieve its energy and climate goals and then take action, where necessary, to guide the companies in the right direction. This new proceeding could include the development of a comprehensive plan for how utility or energy companies can help the District achieve its 2032/2050 goals and satisfy the directives of the Clean Energy Act.*[2]

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[1] *Formal Case No. 1167, In the Matter of the Implementation of the Climate Business Plan ("Formal Case No. 1167")*, Order No. 20662 ¶ 13, rel. November 18, 2020.

[2] *Formal Case No. 1167*, Order No. 20662 ¶ 11

11. Requirements for proposals filed under this proceeding include, at a minimum:

> *[A] detailed description of the proposal; an explanation of how the proposal would accomplish and advance the District of Columbia's climate change goals; and a rigorous cost-benefit analysis (using the Commission approved methodology) along with detailed descriptions of costs and a proposed recovery methodology. The proposal must also describe how it meets the metrics that will be developed in GD-2019-04-M and if applicable, Formal Case No. 1160.*[3]

12. In Formal Case No. 1130, the District of Columbia's Public Service Commission initiated a proceeding to investigate, establish and implement plans to modernize the distribution energy delivery system for increased sustainability (MEDSIS)[4], adopting the following vision statement:

> *The District of Columbia's modern energy delivery system must be sustainable, well-planned, encourage distributed energy resources, and preserve the financial health of the energy distribution utilities in a manner that results in an energy delivery system that is safe and reliable, secure, affordable, interactive, and non-discriminatory.*[5]

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[3] *Formal Case No. 1167*, Order No. 20662 ¶ 12.

[4] *Formal Case No. 1130*, Order No. 19275 ¶ 1, rel. February 14, 2018.

[5] *Formal Case No. 1130*, Order No. 19275 p. A-2.

13. One of the foundational principles of the MEDSIS initiative is modernizing energy delivery in the District sustainably, by creating a system that "will meet the energy needs of the present without compromising the ability of future generations to meet their own energy needs by focusing on the triple bottom line: environmental protection, economic growth, and social equality."[6]

14. Another goal of MEDSIS is to ensure that transmission and distribution systems are well-planned and developed "in a strategic manner that is data-driven, incorporates advanced technologies, and is collaborative and open—allowing for consumer and stakeholder input."[7]

IV. BRIEF OVERVIEW OF PEPCO'S 1167 FULL FILING.

15. In addition to comments on materials filed by other stakeholders, Pepco has submitted the following documents in Formal Case No. 1167:

- **Climate Solutions Plan:** *Pepco DC Climate Solutions Plan: Pepco's Blueprint to Support the District of Columbia's Climate and Clean Energy Goals* (7/20/2021)
- **Pepco Electrification Study:** *An Assessment of Electrification Impacts on the Pepco DC System* (8/27/2021)
- **5-Year Plan:** *Climate Solutions 5-Year Action Plan: Pepco's 5-Year Plan to Support the District of Columbia's Climate and Clean Energy Goals* (10/8/2021)
- **30-Year Plan:** *30-Year Transition Strategy: Pepco's Long-Term Outlook at the Development of Climate Solutions in the District of Columbia* (11/30/2021)

[6] *Formal Case No. 1130*, Order No. 19275 p. A-2.

[7] *Formal Case No. 1130*, Order No. 19275 p. A-3.

- **Pepco BCA:** *Pepco's Climate Solutions 5-Year Action Plan: Benefits and Costs* (1/31/2022)
- **BCA Workpapers:** Pepco's BCA Workpapers for System Costs and Emissions-2.16.22.pdf (2/18/2022)

16. Pepco's Climate Solutions Plan, 5-Year Plan, and 30-Year Plan describe four portfolios of decarbonization measures:

- **Electrifying transportation:** This portfolio has two initiatives: Connect Transportation and Smart Rates Transportation.[8] Connect Transportation focuses on infrastructure investments in the District to enable transportation electrification, and the Smart Rates Transportation initiative provides rate designs specific to vehicle charging.[9]
- **Decarbonizing buildings:** This portfolio focuses on expanding efficiency programs to reduce energy use and greenhouse gas emissions in the District.[10]
- **Activating the local energy ecosystem by advancing community-based resources:** This portfolio advances distributed energy resources (DERs) to reduce emissions and increase the supply of renewables in the District as required by the DC Renewable Portfolio Standard.[11]

[8] *Formal Case No. 1167*, Potomac Electric Power Company's Climate Solutions 5-Year Action Plan, p. 12-13, filed October 8, 2021 ("Pepco 5-Year Plan").

[9] Pepco 5-Year Plan at 12-13.

[10] Pepco 5-Year Plan at 38.

[11] Pepco 5-Year Plan at iii.

- **Enhancing infrastructure (distributed energy and smart grid) for climate solutions:** This portfolio supports the need to actively manage system demand as electrification in the District progresses. The first initiative in this portfolio focuses on establishing and updating data-based tools to improve the usage of DERs, and the second initiative focuses on increasing the reliability of physical infrastructure linked to mass electrification.[12]

V. MAIN ISSUES WITH PEPCO'S FILING

17. ***Role: Pepco's role in the climate planning and decision-making process.***
18. Pepco's 30-Year Plan offers a proposed vision of the grid and its role in the transition to a carbon-free economy:

> *At its core, the Pepco Climate Solutions Plan advances the grid as a "platform," where Pepco facilitates and activates the connections between the grid, customers, and communities. As the "connector," Pepco is able to provide programs and opportunities for customers and communities to access and enable climate solutions equitably, inclusively, and affordably, while driving innovation and building resilience.*[13]

19. It is difficult to assign actionable meaning to Pepco's proposed vision. A viewpoint of the grid as a "platform" and the utility as the "connector" leaves a lot open to interpretation. Pepco's platform/connector vision requires more detail to make clear the utility's intentions

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[12] Pepco 5-Year Plan at iii.

[13] Pepco 30-Year Plan at 2.

regarding its role in the development of distributed generation and storage, the facilitation of the development of distributed resources by both customers and third parties, and the utility's relationship and responsibilities vis-à-vis ratepayers.

20. Pepco's role should be focused on acting on behalf of ratepayers' interests. Ratepayers are subject to all the costs and benefits of climate programs, including providing the funds for climate programs through rates and bills (barring funding through as yet unidentified taxes or federal grants). Pepco's actions on behalf of ratepayers should be informed by and grounded in input from ratepayers and their advocates. For example, the Rhode Island Public Utilities Commission engaged expert support to involve National Grid, consumer advocates, low-income advocates, environmental advocates, and other participants in developing a stakeholder-informed BCA framework.[14]

21. A uniform, PSC-directed, integrated benefit-cost analysis is essential to serve the needs of DC ratepayers:

- **Uniform BCA framework:** The same BCA framework should be used for all District utility proposals impacting DC climate initiatives and emission reductions. For example, the New York Public Service Commission developed a BCA framework and guidance for assessment of utility planning decision to minimize cost while maximizing consumer options.[15]

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[14] Besser, J., Strickland, K., and Grossman, D. 2020. *Developing a Comprehensive Benefit-Cost Analysis Framework: the Rhode Island Experience. Smart Electric Power Alliance*. Available at: https://sepapower.org/resource/developing-a-comprehensive-benefit-cost-analysis-framework-the-rhode-island-experience/

[15] New York Department of Public Service. July 1, 2015. *Staff White Paper on Benefit-Cost Analysis in the Reforming Energy Vision Proceeding*. 14-M-0101. Available at:

- **PSC-directed:** Methods, framework, and standards for the District's climate BCA analyses should be set by the PSC, not by utilities.
- **Integrated:** Climate measure BCA analyses must be integrated: (1) across a portfolio of planned and proposed measures; and (2) across programs proposed by Pepco, Washington Gas, DC Sustainable Energy Utility (SEU), and any other relevant actors. Without integration, it is impossible for the PSC and stakeholders to compare net benefits or other metrics of viability across resource types and proposed measures.

22. ***Funding: Every program requires a specific funding source as part of the planning process.***

23. Throughout the materials submitted by the utility in Formal Case No. 1167, Pepco fails to specify a funding source for its proposed measures. Pepco's 5-Year Plan mentions cost recovery through a multiyear rate plan, surcharge or regulatory asset treatment, and emphasizes that climate programs are contingent on utility cost recovery:

> *Timely recovery of these investments will enable Pepco to implement the Climate Solutions Plan programs at the level and pace required to fully support and advance the District's leading climate goals.*[16]

https://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/c12c0a18f55877e785257e6f005d533e/$FILE/Staff_BCA_Whitepaper_Final.pdf

[16] Pepco 5-Year Plan at 8.

24. Pepco also asks for "regulatory certainty" (or pre-approval from the PSC) and explains that it will include requests for specific cost recovery mechanisms together with its request for approval to implement climate programs.[17]

25. Finally, Pepco notes the existence of other potential funding sources:

> *Pepco also recognizes that there may be opportunities to offset program costs, including through existing federal grants, as well as potential funding that could be made available from the infrastructure and reconciliation bills now pending before Congress and will work with the District government and other stakeholders to identify and leverage these potential funds.*[18]

26. Without specific plans to seek out non-ratepayer funds, the default funding source becomes ratepayer bills. This raises a number of important issues/questions related to Pepco's next planned rate application:

- How will climate measure-related rate increases be structured?
- Will every customer pay equally into the program? As a per customer charge? On a per kilowatt-hour basis?
- For programs in which rebates are contemplated to cover participant costs, will the same rebate amount apply to all participants? Or will rebates be means-tested, or assigned based on some other criteria?

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[17] Pepco 5-Year Plan at 8-9.

[18] Pepco 5-Year Plan at 9.

- Will the distribution of rebates across the District be monitored and reviewed over time?

27. Proposed climate measures, and their BCA results, need to be presented and understood in the context of their funding sources and a detailed analysis of their impact on customer rates and bills.

28. ***Detailed Planning: To permit decision making, climate program planning must be more detailed than what Pepco has offered.***

29. In public processes like the District's climate-related PSC dockets, adequate stakeholder participation and review require thorough information sharing. Utility climate proposals must include details on: the inclusion of stakeholders in design, planning and evaluation; plans for outreach and education; targeting and sequencing of benefits; impacts on low- and moderate-income ratepayers, renters and public health; and intentional investment in under-resourced communities.

30. <u>Plans presented by Pepco without sufficient detail.</u>

31. Each submission by Pepco in Formal Case No. 1167 has lacked sufficient detail for a level of assessment by stakeholders (and their third-party experts) in a public process. In particular, Pepco's descriptions of plans, measures and programs lack the following types of details:

    - **Stakeholders' involvement in the policy development process**: How will Pepco involve ratepayers and other stakeholders in the design, planning, implementation and evaluation of its proposed climate measures?

- **Low- and moderate-income household implementation**: How will Pepco serve low- and moderate-income customers, renters, and other under-resources and under-served populations in its proposed climate measures?
- **Promoting equity in building and transportation infrastructure upgrades**: How will Pepco design and implement building and transportation infrastructure upgrades that promote equity in the District and reduce inequality in energy burdens?
- **Enhancing reliability and resilience in a just and equitable manner**: How will Pepco tailor reliability and resilience upgrades to best meet the needs of all ratepayers?

32. Each measure should be presented with a detailed explanation and a commitment to reach specified goals. For example, as part of Massachusetts' joint statewide electric and gas three-year energy efficiency plans, Program Administrators provide detailed descriptions of each strategy they will use to accomplish each of their key priorities in order to meet their goals.[19]

33. <u>Planning process must be inclusive, permitting stakeholder input at every stage</u>

34. Pepco fails to provide sufficient details regarding transparent stakeholder processes that would include a broad spectrum of utility customers in climate measure planning. Pepco makes broad statements about its past track record in stakeholder engagement but does not describe or commit to a specific plan for receiving input from ratepayers and other stakeholders in climate policy design or implementation:

[19]Mass Save. November 1, 2021. *Massachusetts Joint State Wide Electric and Gas Three-Year Energy Efficiency Plan 2022-2024*. Massachusetts Department of Public Utilities, Docket Nos. 21-120 – 21-129, Exhibit 1. Available at: https://ma-eeac.org/wp-content/uploads/Exhibit-1-Three-Year-Plan-2022-2024-11-1-21-w-App-1.pdf

> *Pepco has worked to seek this expertise and align the 5-Year Action Plan's proposed programs with input received through direct engagement with dozens of stakeholders. Pepco will continue to engage with stakeholders across the District and in other jurisdictions for the remaining filings in this proceeding and prior to filing the Company's applications, as the Company recognizes that the initiatives and programs proposed must meet the needs and expectations of the customers and communities Pepco serves.*[20]
>
> *Pepco will rely, leverage, empower and seek guidance from communities, businesses, organizations and other District stakeholders to inform and execute the communications and outreach strategy. This continued partnership between Pepco and District stakeholders will contribute greatly to the success of the Climate Solutions Plan programs.*[21]

35. An intent to engage with stakeholders is apparent but specific goals for these engagements or metrics for evaluating their success are lacking. In building partnerships and collaborating with governmental and private-sector organizations, consumers must be involved in the planning process for the District's climate plans from start-to-finish to meaningfully weigh in on consumer interests. Inclusive practices also require communication in multiple languages and non-technical presentations easily understood by lay audiences.

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[20] Pepco 5-Year Plan at 9-10.

[21] Pepco 5-Year Plan at 11.

36. Pepco must provide specific plans to ensure that its stakeholder engagement will be robust, equitable, and inclusive, and provide details that include:

- What specific categories of stakeholders will be included in "stakeholder input" process?
- How will stakeholders be selected for inclusion?
- Will stakeholders include representatives from under-resourced and under-served communities?
- Will stakeholders include representatives from heat island affected communities?
- Will stakeholders be compensated for their time?
- Will Pepco conduct outreach and education about the program to local residents?

37. <u>Outreach regarding climate plans that includes education on program costs and impacts</u>

38. Equitable, wide-spread distribution of climate program participation is essential to achieving the deep emission reductions called for by the District's climate commitments. Programs that are accessible only to the middle- and upper-income groups will not be sufficient to reaching carbon neutrality by 2050. Pepco's planning documents filed in Formal Case No.1167 do not specify planned actions related to customer education or outreach and marketing related to climate program participation.

39. Pepco's cooperation will also be important in the District's effective and targeted education and outreach to make ratepayers aware of benefits of a clean energy transition in terms of the District's participation in global greenhouse gas reduction and of co-benefits such as reduced air pollution. Additional outreach and marketing is needed—on a program-specific

basis—to disseminate information regarding rebates and incentives, potential energy and bill savings, and how to access these programmatic benefits.

40. <u>Climate programs that share costs and benefits equitably</u>

41. The District's MEDSIS process calls for an energy system that is affordable and non-discriminatory—a system that "will meet the energy needs of the present without compromising the ability of future generations to meet their own energy needs by focusing on the triple bottom line: environmental protection, economic growth, and social equality."[1] Pepco's submissions in Formal Case No.1167 place very little weight on these pivotal MEDSIS goals to modernize DC's energy distribution system in a way that is: sustainable, well-planned, encourages DERs, safe/secure and reliable, interactive, and affordable and non-discriminatory.

42. Climate-related proposals submitted to the PSC for approval must address specific measures to ensure that each project or program will be carried out in a just, equitable, and affordable manner. Achieving acceptable equity outcomes will require transparent planning regarding:

- **Impacts to low- and moderate-income customers**: Low- and moderate- income ratepayers face higher energy burdens than more affluent customers. Special consideration is required in designing climate programs that will not add disproportionate costs to the bills of households that can least afford bill increases.
- **Impacts on renters**: Renters face different costs, financial benefits, options for climate program participation, and opportunities to benefit from the clean energy transition

than housing owners. Program design needs to take into account the three-quarters of District homes that are renter- occupied.

- **Public health impacts**: Public health risks related to energy use include air pollution from vehicle use and building back-up generators, indoor air pollution from appliances and heaters using fossil fuels, and a myriad of climate change-related impacts due to heat waves and flooding. Neighborhoods at the greatest risk of these public health impacts—or where these health stressors are already occurring—should be first in line to receive climate program co-benefits such as reduced local air pollution.
- **Targeting of programs and their benefits to under-served and under-resourced communities**: District policy must mitigate emissions and invest in under-served and under-resourced communities to avoid the worst impacts of climate change. The most climate-vulnerable communities should not disproportionately fund mitigation and resiliency measures. Program costs and benefits should be distributed across the District's eight wards and designed to promote equity by identifying and targeting communities in urgent need of infrastructure upgrades. For example, Massachusetts Program Administrators identify equity as one of three main priorities in their three-year energy efficiency plans. To support this priority, Massachusetts utilities have developed strategies and measurable equity metrics for each sector that aim to target underserved communities.[22]

[22] Mass Save. November 1, 2021. *Massachusetts Joint State Wide Electric and Gas Three-Year Energy Efficiency Plan 2022-2024*.

- **Strategic sequencing of project roll-out**: Utility climate proposals should address program sequencing with a goal of meeting the needs of the most vulnerable communities first. By strategically addressing urgent needs before they worsen, front-loading benefits to communities with urgent needs or disproportionate risks provides greater benefits for the same expense.
- **Program planning should include intentional investment in vulnerable communities**: With intentional design, climate initiatives can promote investment in under-resourced and under-served communities. Utility climate proposals should provide detailed information regarding the share of investments planned by Ward and by demographic characteristics including income level and race/ethnicity.

43. ***Pepco's plans should include commitments to take specific, measurable actions.***

44. Utility climate proposals need to go beyond general statements of intention or acknowledgements that actions are important. These proposals must make commitments that include quantifiable metrics that can be evaluated over time. Utility climate proposals should include commitments related to the equitable distribution of costs and benefits, the promotion of competition with and among third-party DER vendors, the provision of green jobs and fostering small businesses, and the reduction of local pollution. For example, as part of their Three-Year Energy Efficiency Plan, Massachusetts' Program Administrators have set equity targets for environmental justice municipalities, workforce development,

partnerships, renters, moderate income customers, English-isolated customers, and small businesses.[23]

45. Committing to an equitable distribution of costs and benefits.

46. The District must mitigate emissions and invest in resilient communities to avoid the worst impacts of climate change. The most climate-vulnerable communities should not disproportionately fund mitigation and resiliency measures. Pepco's climate plans do not commit to an amount of proposed investments in resilience and energy infrastructure to be made in the most climate-vulnerable communities in the District or provide a distribution of costs and benefits across Wards. For example, Pacific Gas and Electric (PG&E) has launched a number of measures to target communities most vulnerable to fire-risk. In May 2022, PG&E installed safety settings across 26,000 miles of distribution lines in high-fire risk areas.[24] In addition, the California Public Utilities Commission's Self-Generation Incentive Program offers rebates for energy storage technology and prioritizes communities in high fire-threat areas, communities that have had multiple power shut-offs, and low-income and medically vulnerable customers.[25]

47. Costs of transitioning to a clean energy economy should be equitably distributed among consumer classes and market participants (costs should not be disproportionately borne by

[23] Mass Save. November 1, 2021. *Massachusetts Joint State Wide Electric and Gas Three-Year Energy Efficiency Plan 2022-2024*.

[24] PG&E. May 25, 2022. "Installation of Powerline Safety Settings Essentially Complete in High-Fire Risk Areas Across 25,500 Distribution Line Miles in PG&E's Service Area." Available at: pge.com/en_US/about-pge/media-newsroom/news-details.page?pageID=4abd8d0c-c546-4d73-b511-9ca157468e85&ts=1654181766043

[25] California Public Utilities Commission. n.d. "Participating in Self-Generation Incentive Program (SGIP)." Available at: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/self-generation-incentive-program/participating-in-self-generation-incentive-program-sgip

low- and moderate-income customers). Likewise, all programs should be developed to ensure that benefits are equitably distributed among customer classes and District communities. Pepco's plans maintain that "equity and inclusion" are driving principles and note that "additional," "increased," or "scaled" incentives will be offered for "under-resourced communities" and "low-income households" but fail to provide specific information about what share of program benefits these communities will receive. In addition, many of the enhanced equity incentives described in Pepco's 5-Year Plan take the form of rebates, which are of limited use in overcoming important capital cost barriers of low-income customers because customers can only receive rebates after they have made a full capital expenditure.

48. <u>Committing to competition allowing third-party DER vendors</u>

49. A critical aspect of ensuring competition in DER procurement is making utility companies subject to third-party competition. A stakeholder process for facilitating the growth of DERs is particularly important as more customers begin to generate electricity on-site. Pepco has not committed to a transparent stakeholder process that would include customers in the planning process for infrastructure upgrades. Energy Efficiency and Demand Response potential studies planned as a part of Formal Case No. 1160 are expected to provide critical information regarding needs for both supply- and demand-side resources to serve the District's needs; the roles of both the DC SEU and the utilities should be influenced by this information. Potential inconsistencies among the utilities' climate plans include both overlapping efforts (building shell improvements, modernizing heating services) and deeply contradictory paths (full electrification versus doubling down on fossil

fuel variants and substitutes). The District needs a single, integrated climate plan to minimize ratepayer costs and maximize emission reductions and related co-benefits. Multiple, contradictory plans pointing the District in opposite directions and layering on duplicative measures can be neither affordable nor effective.

50. Pepco also fails to address its own role as the "connector" on the grid "platform" with respect to DER. As the connector, will Pepco initiate its own investments in DER? What problems might arise from Pepco taking the roles of both developer and connector simultaneously? What safeguards will be put in place to protect third-party DER developers competing with Pepco? What measures will the grid platform's connector take to foster DER development by customers and third parties? In light of the Commission's Order No. 20754 and comments submitted in Formal Case No. 1166, how will Pepco proceed with facilitating DER in the District without claiming utility ownership and operation of energy storage?

51. Pepco's 5-Year Plan includes an initiative to "Provide Robust Opportunity for Competitive Markets" by avoiding monopolies and promoting competition to reduce barriers to entry and lower customer costs. The 5-Year Plan does not, however, include discussion of how third-parties will participate in or provide programs to decarbonize the District's electric supply by increasing DERs or entering into long-term power purchase agreements. The Plan mentions third-parties as they relate to the development of DERs, non-wires alternatives, and a solar/battery demonstration program in Ward 8, but fails to address or commit to third-party competition in these instances or as it relates to the entire suite of programs more broadly.

52. Committing to providing green jobs and fostering small businesses

53. The transition to a clean energy economy should bring quality green jobs to District residents. Pepco's climate plans do not discuss or commit to jobs numbers, job types, or job quality related to development of DER or new building and transportation infrastructure. Pepco's 5-Year Plan states that "programs have the ability to contribute to local job creation and economic development"[26] and notes a need for trained workers:

> *[A]s Pepco builds the infrastructure to support the additional electric load and increasing amounts of local solar on the system, there will be an increased need for trained and qualified individuals to construct and maintain the electric grid, such as the more than 105 District residents that have graduated from the DC Infrastructure Academy to date and received job offers with Pepco and its local contractors that support projects such as DC PLUG and Capital Grid, among others.*[27]

54. A growth in local green jobs has the potential to address equity issues in under-resourced communities while facilitating a clean energy transition. Similarly, Pepco's 30-Year Plan mentions support of businesses in under-resourced communities, but does not make a clear commitment. Instead, the 30-Year Plan uses conditional language like "where appropriate", and "to the extent practical".[28]

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[26] Pepco 5-Year Plan at 3.

[27] Pepco 5-Year Plan at 7.

[28] Pepco 30-Year Plan at 34.

55. Committing to reducing local pollution

56. Local pollutants have the greatest impacts on communities with disproportionately high rates of asthma and other health issues. Prioritizing public health requires reducing air pollution first in communities with the worst air quality. Pepco's climate plans do not commit to specific goals for rectifying air pollution through climate programs and fail to address the need to prioritize reducing air pollution in communities with disproportionate levels of local pollution and poor air quality.

VI. BCA ASSESSMENT: THE DISTRICT'S CLIMATE PLANS REQUIRE CUSTOMER- (OR RESIDENT-) FOCUSED ASSESSMENT PROCESSES AND TOOLS.

57. The methods and assumptions used to develop Pepco's BCA assessment differ from those developed in the District's *Clean Energy Act Implementation Working Group (CEAIWG) Report* issued in Case No. GD-2019-04-M. Published in November 2021, the CEAIWG Report makes recommendations to the PSC on how to conduct a benefit-cost analysis (BCA) on utility filings related to climate objectives.[29] In response to a majority recommendation that the PSC should adopt a BCA framework based on the National Energy Screening Project's *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources* manual (NSPM),[30] which evolves over time, Pepco disagreed and instead suggested a "straw BCA" on which CEAIWG members could offer

[29] *Formal Case No. GD-2019-04-M, In the Matter of the Implementation of the 2019 Clean Energy DC Omnibus Act Compliance Requirements ("Formal Case No. GD-2019-04-M")*, A report by the Clean Energy Act Implementation Working Group, p. 5, filed November 16, 2021 ("CEAIWG Report").

[30] National Energy Screening Project. 2020. *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources.* Available at: https://www.nationalenergyscreeningproject.org/wp-content/uploads/2020/08/NSPM-DERs_08-24-2020.pdf

suggestions for improvement.[31] Pepco submitted its own BCA of its 5-Year Plan in January 2022, and Pepco's motion to the PSC dated January 31, 2022 recommends its own BCA as the "straw proposal BCA" on which to base a Phase II of GD-2019-04-M.[32]

58. The cost-effectiveness test framework outlined in the CEAIWG Report includes considerations of applicable tests for a BCA, discount rates, equity considerations, and sensitivity analyses, in addition to the types of criteria air pollutants and greenhouse gases included in the analysis. During the CEAIWG process, Pepco provided a critique of these considerations. In certain instances, such as in the discussion of a BCA framework to build upon, Pepco recommended its own BCA handbook.

59. The CEAIWG majority recommendation is to use the Societal Cost Test (SCT) for screening all relevant programs and portfolios, and to use the Utility Cost Test (UCT) and Total Resource Cost (TRC) test as secondary tests in program evaluation, while a ratepayer impact measure (RIM) can be used to inform rate and bill impacts.[33] According to the CEAIWG Report, "Pepco stated that the primary test should be the Societal Cost Test as the BCA should reflect net welfare from a societal perspective, considering benefits and costs from the perspective of the District's policy goals. Pepco also noted that, while other information about a project or program may be useful for informational purposes on a

[31] CEAIWG Report, at 48; 51.

[32] *Formal Case No. GD-2019-04-M*, Pepco's Motion for Leave to submit Comments and Comments on the CEAIWG Report, filed January 31, 2022 ("Pepco Motion for Leave").

[33] CEAIWG Report at 169.

situational basis, Pepco did not see a compelling reason to require that a secondary test be performed, and it stated that requiring such a test could increase administrative costs."[34]

60. More broadly, the CEAIWG recommended the use of the NSPM as a consistent BCA framework.[35] Pepco opposed this recommendation and claimed the CEAIWG did not reach an agreement on many issues of BCA methodology, and that this does not justify using an external report.[36] Instead, Pepco recommended a "strawman" BCA be proposed and recommended either its own *Benefit-to-Cost Analysis Handbook for Locational Constraint Solutions* (LCS BCA) handbook or the "Climate Solutions BCA" (FC1167).[37] Pepco argued that the NSPM cannot serve as the initially proposed methodology as it does not have sufficient detail and clarity.[38]

61. Pepco's BCA offers an analysis of its own October 2021 5-Year Plan. In it, Pepco develops a new cost-effectiveness test it coins the Climate Policy Enablement (CPE) test.[39] The Company explains the need for a new test (in contrast to using one or more of the established cost-effectiveness tests), stating that the District's policy context requires a cost-effectiveness framework that "specifically compares the cost of Pepco DC's proposed

[34] CEAIWG Report at 78-79.

[35] CEAIWG Report at 48-51.

[36] CEAIWG Report at 69.

[37] CEAIWG Report at 69.

[38] CEAIWG Report at 69.

[39] *Formal Case No. 1167*, Pepco's Climate Solutions 5-Year Action Plan: Benefits and Costs, p. 3 filed January 31, 2021 ("Pepco BCA").

programs to the benefits associated with advancing the District's climate policy objectives through those programs."[40]

62. The CPE test compares Pepco's program costs of its 5-Year Plan to the programs' projected benefits from reduced fuel and electricity consumption, and reduced greenhouse gas and criteria air pollution emissions. The proposed CPE test is a combination of the well-known SCT and UCT.[41] Like the SCT, it calculates a reduction in system costs of supplying electricity and fuel, and the societal benefits of reduced emissions. Like the UCT, the CPE test also includes the utility-incurred costs for implementing programs. Pepco rejects an additional common cost-effectiveness test—the RIM—and in doing so excludes participant costs from the analysis. Pepco argues that participant costs fall outside the scope of its Study because Pepco's objective should be to evaluate "the economics of how Pepco DC's proposed programs enable achievement of the District's decarbonization goals," rather than evaluating the cost-effectiveness of the goals themselves. The Company also argues that assessing participant costs would necessitate assigning a value to non-energy customer benefits, such as customer preferences for vehicle performances of electric vehicles compared to vehicles running on internal combustion engines.[42]

63. The pertinent differences between the CEAIWG's recommended cost-effectiveness tests and the Pepco BCA's new CPE test are: (1) Pepco's exclusion of certain social externalities, (2) its exclusion of costs related to customer incentives, and (3) its exclusion

[40] Pepco BCA at 3.

[41] Pepco BCA at 3.

[42] Pepco BCA at 4.

of the RIM as a secondary test. Overall, Pepco's own BCA test appears to detract focus from the impacts of utility measures and programs on ratepayers.

64. In addition, the CEAIWG Report includes a recommendation that the District's BCAs "should include metrics for social equity, racial equity, and environmental justice."[43] The Report calls for the inclusion of both energy and non-energy benefits, including access to clean energy, across income, race, and geography.[44] In its response comment within the CEAIWG Report, Pepco argues that qualitative factors could be reported, but that it did not believe an equity-focused program should be subject to a BCA because these types of programs frequently fail to pass a BCA due to the higher costs of providing services to low- and moderate-income communities.[45] As such, Pepco argues that its 5-Year Plan incorporated equity considerations into program design.[46] But it does not include any of the specific equity factors recommended in the CEAIWG Report in its BCA, including energy and non-energy benefits (access to clean energy, across income, race, and geography).[47]

65. The CEAIWG stresses the importance of good decision-making when monetizing all benefits of climate-related policies and programs:

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[43] Pepco BCA at 21.

[44] Pepco BCA at 21.

[45] Pepco BCA at 23.

[46] Pepco BCA at 3.

[47] CEAIWG Report at 7.

> *All benefits and costs should be quantified and/or monetized to the extent possible, even when difficult; a utility will use cost-effective efforts to develop/acquire and apply the best available tools, analytic methods and techno-economic practices to quantify and/or monetize benefits and costs included in the DCPSC's primary cost-effectiveness test in connection with the planning, design and implementation of its programs that relate to the achievement of the District's climate change, clean energy and energy efficiency mandates and associated policy commitments, taking into account recognized industry practices and techniques. The BCA should avoid double-counting impacts.*[48]

66. In particular, the omission of benefits that would normally be included in the SCT, UCT and RIM tests but are excluded in Pepco's CPE (avoided emission impacts and non-energy benefits including health and safety benefits, low-income benefits, and environmental impacts not related to emissions) may be important impacts on BCA results and the policy and investment decisions made based on those results.

67. <u>Good, unbiased decision-making requires a PSC-directed BCA; not a utility-driven BCA.</u>

    - BCAs should provide focused assessment of ratepayer impacts as a central metric. The ratepayer (and the almost identical set of individuals and households: District residents) is the appropriate lens from which to understand the costs and benefits of DC climate

[48] CEAIWG Report at 62.

plans and actions. Assessments that instead focus on impacts to utility miss critical information needed by the Commission for good decision-making.

- Cross-sector, cross-utility BCA assessment, planning, and decision making are absolutely essential to a successful climate plan and related investments. A stand-alone BCA (that considers only a single sector and/or ignores impacts of services and programs among the gas and electric utilities and DC SEU) is incomplete and cannot accurately depict future impacts. The importance of cross-sectoral energy planning has become increasingly imperative with the electrification of heating and transportation services.
- Benefits should be limited to those impacting District residents:
    - Air pollutants: Only local emissions should be considered. The District's climate decision making cannot expect to comprehensively observe, record, measure or value all localized emission impacts upstream of its energy services. Local pollution is a critical issue, but outside of a reasonable scope of decision making, with the exception of pollutants that impact on the District's own air quality.
    - Greenhouse gas emissions: All emissions, including Scope 2 upstream emissions at power plants, should be included. In contrast to local air pollution, greenhouse gas pollution affects the entire world, including the District. DC's own greenhouse gas emissions affect DC, and so do the greenhouse gas emissions of all other jurisdictions around the globe.

- Important uncertainties should be reflected through sensitivities and ranges. The energy and emissions modeling behind any BCA rests on assumptions of future values that can only be projected with uncertainty, among these, fuel prices, emissions allowances (e.g. carbon prices), and expectations regarding climate damages. These predictions cannot, by their nature, be certain and so must instead be represented in a way that reflects this uncertainty, by performing sensitivity analyses that explore how robust modeling results are to changes in assumption values and by presenting ranges of modeling results values (including BCA ratios) associated with ranges of assumption values. For example, in the Brattle Group's California-focused BCA, variations in capacity prices, resource adequacy and frequency regulation were examined.[49]
- BCA-based decision-making should choose among a set of plans that all meet District climate goals. Multiple potential plans or measures would be selected based on the net cost and benefit impact to the ratepayer and on measures of their distributional impacts. Decision-makers would choose among the set of plans or measures that provide positive net monetary benefits along with other qualitative benefits.

68. Pepco should follow the recommendations enumerated by the CEAIWG and NSPM, and not chart a new course that is both untested and countervails stakeholders' considered recommendations formed through a lengthy process of discussion, learning, and collaboration.

[49] Hledik R., et al. September 2017. *Stacked Benefits: Comprehensively Valuing Battery Storage in California*. The Brattle Group. Available at: https://www.brattle.com/wp-content/uploads/2017/10/7208_stacked_benefits_-_final_report.pdf

VII. PEPCO ELECTRIFICATION STUDY: THE DISTRICT'S BUILDING DECARBONIZATION PLAN MUST KEEP CONSIDERATIONS OF EQUITY FRONT AND CENTER.

69. On August 27, 2021, Pepco submitted *An Assessment of Electrification Impacts on the Pepco DC System* (the Study), prepared by The Brattle Group, in Formal Case No.1167. Brattle's analysis provides an overview of the role electrification could play in making the District carbon neutral by 2050. To model the District's climate goals, Brattle makes the following assumptions:

- **Decarbonize the power supply**: The District aims to have 100 percent renewable electricity by 2032.[50] Brattle assumes that electrification and a decarbonized power supply will eliminate 90 percent of the District's emissions by 2050.[51]
- **Electrify transportation**: The District has several transportation electrification initiatives. For the Study, Brattle assumes 100 percent of light-duty vehicles, over 75 percent of medium duty vehicles, and over 50 percent of heavy-duty vehicles are electrified by 2050.[52]
- **Reduce building energy consumption**: The District's goal is a 50 percent reduction in building energy consumption by 2032.[53] For the Study, Brattle assumes that this

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[50] Clean Energy DC. 2020. *Turning ideas into actions: Progress Report Summary.* Department of Energy & Environment, Government of the District of Columbia. Available at: https://doee.dc.gov/cleanenergydc. p. 2

[51] *Formal Case No. 1167*, Pepco's Electrification Study, p. 8, filed August, 27, 2021 ("Electrification Study").

[52] Electrification Study at 31.

[53] Clean Energy DC. 2018. *District of Columbia Climate and Energy Action Plan Summary Report*. Prepared for the Department of Energy & Environment, Government of the District of Columbia. p. 25

reduction will be achieved in part by widespread electrification of heating and that 95 percent of buildings will be fully electrified by 2050.[54]

70. The Brattle Study explores how implementation of energy efficiency and load flexibility practices can be used to achieve carbon neutrality and moderate the load impacts of electrification. However, the Pepco Electrification Study does not contain any mention of how these benefits will be equitably applied to District residents.

- **Equitable cost sharing***:* According to Brattle, electricity already provides 43 percent of the District's energy demand with commercial and industrial customers accounting for 32 percent of total District electric demand.[55] In order to transition to an electrified system, Brattle assumes that—in a carbon neutral by 2050 scenario—100 percent of light duty vehicles and 95 percent of buildings will be completely electrified by 2050 and that the majority of other vehicles will also be electrified. This creates a scenario where electrification eliminates 90 percent of emissions; Brattle assumes that the remaining 10 percent will be addressed through other means but does not specify what other means might be used.[56] The Study does not comment on how the costs of transitioning to electric vehicle and heating systems or increases to future electric bills will be funded, or the distribution of these costs across income groups.
- **Equitable benefit sharing***:* Pepco lists residential and commercial load flexibility modeling assumptions that include criteria for program participation, including home

[54] Electrification Study at 8.

[55] Electrification Study at 30.

[56] Electrification Study at 8.

electric vehicle charging, distributed (behind-the-meter) batteries, and electric heat pumps.[57] However, there is no information on how these measures would be made available to District residents or how their benefits would be equitably distributed.

- **Investing in climate-vulnerable communities***:* The Study does not discuss the funding of mitigation and adaptation measures or where such measures would be located. Brattle assumes that decarbonization of the building sector—which would lead to a decrease in emissions—will in large part be achieved through electrification of heating, increasing electric demand and contributing to load growth.[58] Pepco acknowledges that most future load growth will likely be location specific and based on localized grid conditions.[59] Brattle's Study, however, is system wide without analysis based on smaller geographic areas (such as Wards) within the District. If localized grid conditions are a factor in the initial stages of the District's decarbonization, analysis of Ward by Ward conditions will be essential to ensure that climate-vulnerable communities are eligible for building sector electrification.
- **Inclusive planning process***:* Brattle does not address how Pepco will include consumers in its planning process and facilitate consumer awareness and understanding of climate plans and incentive programs. The Study also does not comment on how Pepco would address consumer interests and needs.

[57] Electrification Study at 38.

[58] Electrification Study at 32.

[59] Electrification Study at ii.

- **Promote competition***:* The Study omits any discussion of the role of third-party competition in managing the growth of annual electric use and peak demand, contributing to electrification, or ensuring a 100 percent renewable power source.[60] It also does not address the role of third-party competition in meeting the District's carbon neutrality goals.[61]
- **Provide green jobs***:* The Study makes no mention of jobs, job numbers, types, or quality as it relates to Pepco's plan for a transition to clean energy.
- **Reduce local air pollution***:* The District plans to meet its greenhouse gas reduction goals through transitioning to 100 percent renewable powered energy, electrification of transportation, and reduction in building energy consumption, all of which have co-benefits of decreasing local air pollution.[62] Brattle's Study does not set specific goals for improving air quality or comment on which communities will be front loaded for air pollution reductions.

71. ***Evaluation: Brattle's Study includes several key technical flaws.***
72. While Brattle's performs a technically sound electrification analysis and its approach, overall, provides a big picture view of one conceptualization of the District's potential electrification pathway, Brattle's Study does not capture variations across the DC neighborhoods and households, or address how those variations may effect electrification on both the local (Ward) and city level. Brattle's Study treats the District—incorrectly—

[60] Electrification Study at 3.

[61] Electrification Study at 7.

[62] Electrification Study at 7.

as a homogenous monolith. Chartering a practical, equitable, and affordable plan for District-wide decarbonization, however, is simply impossible without detailed consideration of differences in household and neighborhood circumstances, means, and needs. Ignoring DC's diversity can only lead to poor planning and suboptimal, unintended outcomes.

73. In addition, Brattle uses a proprietary model to estimate the size and shape of peak electric load, which reduces transparency and makes it impossible to verify Brattle's modeling or independently test the sensitivity of its results to changes in assumptions or modeling techniques. Assumptions regarding the adoption of energy efficiency measures and the pace of building and vehicle electrification are pivotal to Brattle's assumed build-out of DERs and other renewables, and its near-term emission forecasts under this full electrification plan. The speed at which efficiency and electrification measure are employed—and the costs of these investments—are critical uncertainties in any decarbonization plan. Pepco addresses this uncertainty by providing results at baseline and high-load growth levels. This area of uncertainty merits additional sensitivity runs across a wider set of possible outcomes.

74. Brattle's assumption that 95 percent of current building fuel use is electrified by 2050 is entirely contradictory to plans filed by WGL. It is difficult to comprehend how separate, contradictory climate and energy plans—affecting nearly all DC residents—can hope to result in an effective, affordable and equitable decarbonization plan.

75. In addition, Brattle and Pepco's assumptions regarding post-COVID commuting patterns, the effect of EV charger investment on EV adoption, and the expected vehicle milage range in the DC-specific context all warrant additional examination.

76. ***Evaluation: District climate program design should include a plan for evaluation and iteration.***

77. Successful planning processing includes measure for learning by doing: evaluation, reassessment and retuning. District climate proposals should include detailed descriptions of evaluation procedures including:

- program metrics focusing on the equitable distribution of costs and benefits;
- geographic analysis of programs and benefits by Ward.
- data assessment and reassessment over time;
- the frequency at which program data be assessed;
- methods, metrics and criteria for evaluating program data; and
- plans for program redesign and iteration.

VIII. ASSESSMENT OF PEPCO'S STRATEGY

78. Pepco's planning documents are not detailed enough to provide a full understanding of (and allow appropriate stakeholder and third-party review of) program funding, program offerings, the distribution of costs and benefits by geography and community, stakeholder involvement, and procedures for evaluation, and the utility's expectations with regard to its own role in decision-making. In addition, Pepco's BCA and Electrification Study are deeply flawed, focusing on the needs of the utility, not the ratepayer, and failing to correctly account for costs and benefits specific to the District's ratepayers.

79. **Recommendation:** The PSC should require that Pepco provide additional information including, but not limited to: ratepayer impacts; stakeholder inclusion; DER competition; green jobs and small business impacts; low- and moderate-income household impacts; and intentionally designed climate programs aimed at achieving MEDSIS goals.

BEFORE THE
PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA

In the Matter of the	)	
	)	
the Implementation of Electric and Natural Gas Climate Change Proposals	)	**Formal Case No. 1167**
	)	
	)	
	)	

AFFIDAVIT

I declare under penalty of perjury that the foregoing testimony was prepared by me or under my direction and is true and correct to the best of my knowledge, information, and belief.

Elizabeth Stanton
____

Subscribed and sworn to before me

This 16 day of June, 2022.

State of Massachusetts

County of Middlesex

Maryann F. Pallotta
Notary Public

My Commission expires: 9/22/28

Maryann F. Pallotta
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
September 22, 2028

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POTOMAC ELECTRIC POWER COMPANY
DISTRICT OF COLUMBIA FORMAL CASE NO. 1167
RESPONSE TO OPC DATA REQUEST NO. 5

QUESTION NO. 1

Funding. In Pepco's s 5 Year Action Plan Pepco states that Pepco, "recognizes that there may be opportunities to offset program costs, including through existing federal grants, as well as potential funding that could be made available from the infrastructure and reconciliation bills now pending before Congress and will work with the District government and other stakeholders to identify and leverage these potential funds." Please list all federal funding opportunities that Pepco has identified as potential funding sources. For each federal funding opportunity please provide: (1) any application deadlines; (2) any available timeframes indicating when additional guidance or information will be released; (3) links or citations to any published guidance about applying for that funding; and (4) stakeholders Pepco plans to engage to help leverage those funds.

RESPONSE:

Pepco is currently evaluating projects that may meet the eligibility requirements within the context of Infrastructure Investment and Jobs Act (IIJA). Pepco's IIJA strategy is designed to help maximize the company's success in the receiving transformational federal and local investments that will power the next horizon of Pepco's strategic vision for its customers and communities. IIJA investments will amplify the impact of rate-based investments, reduce the cost of developing emerging and transformative areas of the business, catalyze step-change progress in the clean energy transition, and maintain customer affordability. Pepco is in the process of identifying potential projects that aligns with the District's priorities of creating a cleaner and stronger electric grid, by enabling greater DER penetration and through the decarbonization our buildings and transportation sectors. Pepco is also evaluating potential opportunities to create greater resiliency and reliability for the grid, reducing the impact of climate change for the customers and communities we serve. At this time, Pepco is unaware of any upcoming application deadlines. Based on the latest publicly available information, Pepco expects the application release window for projects falling under the priorities listed above, to be Q3/Q4 of 2022.[1] IIJA grants will require applicants including Utilities to comply with program matching requirements, which are on average 50% of the total grant cost. Pepco is currently working with stakeholders from the District including Department of Energy and Environment, Department of General Services, and the Department of Transportation on IIJA programs, specifically coordination pertaining to the National Electric Vehicle Infrastructure (NEVI) program. As we make further determination of program eligibility requirements, Pepco will engage the appropriate stakeholders for feedback and support.

SPONSOR: The Company

[1] Latest publicly available information: www.whitehouse.gov/build

CERTIFICATE OF SERVICE

Formal Case No. 1167, *In the Matter of the Implementation of Electric and Natural Gas Climate Change Proposals*

I certify that on June 17, 2022, a copy of *Office of the People's Counsel for the District of Columbia's Comments on Pepco's Combined Filings* was served on the following parties of record by hand delivery, first class mail, postage prepaid or electronic mail:

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