

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF THE ATTORNEY GENERAL



KARL A. RACINE
ATTORNEY GENERAL

Public Advocacy Division
Social Justice Section

E-Docketed

June 17, 2022

Ms. Brinda Westbrook-Sedgwick, Secretary
Public Service Commission
of the District of Columbia
1325 G Street, NW, Suite 800
Washington, DC 20005

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

Dear Ms. Westbrook-Sedgwick:

On behalf of the District of Columbia Government, please find its Consolidated Initial Comments on the Potomac Electric Power Company's Climate Solutions Plan Filings in the above-captioned proceeding. If you have any questions regarding this filing, please contact the undersigned.

Sincerely,

KARL A. RACINE
Attorney General

By: /s/ Brian Caldwell
BRIAN CALDWELL
Assistant Attorney General
(202) 445-1952 – Mobile
Brian.caldwell@dc.gov

cc: Service List

**BEFORE THE
PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA**

IN THE MATTER OF)	
)	
The Implementation of Electric and Natural Gas Climate Change Proposals)	Formal Case No. 1167
)	

**DISTRICT OF COLUMBIA GOVERNMENT’S
CONSOLIDATED INITIAL COMMENTS ON THE POTOMAC ELECTRIC
POWER COMPANY’S CLIMATE SOLUTIONS PLAN FILINGS**

Pursuant to Order No. 20754 of the Public Service Commission for the District of Columbia (Commission), the District of Columbia Government (the District) submits the following consolidated Initial Comments on the Potomac Electric Power Company’s (Pepco) filings, which Pepco refers to as their “Climate Solutions Plan”.¹

I. INTRODUCTION

The District appreciates the opportunity to review and comment on Pepco’s suite of plans and analyses in support of meeting the District’s environmental, energy, and equity objectives. With the assistance of Synapse Energy Economics, Inc., of Cambridge, MA, we have reviewed Pepco’s filings in this docket within the broader context of planning, research, and regulation in support of District policy.

The District appreciates the plans, strategies, and program information that Pepco has filed in this proceeding. While our comments identify numerous areas for improvement and

¹ Formal Case No. 1167, *In the Matter of the Implementation of Electric and Natural Gas Climate Change Proposals* (rel. June 4, 2021). The deadline to submit Initial Comments on Pepco’s “Climate Solutions Plan” filings was subsequently extended by the Commission in Order Nos. 21043 (rel. Oct. 27, 2021) and 21155 (rel. May 17, 2022).

alignment, we do not wish to understate how valuable this docket and these filings are to successfully meeting the District’s clean energy goals. Planning to meet goals, whether they are in 2032 or 2050, will require iteration, refinement, and coordination. This set of filings provides a good starting point for this iterative process. In particular, we find it very valuable to have a concrete set of proposals in the 5-Year Action Plan. The District looks forward to working with Pepco and other stakeholders to further develop and refine coordinated plans and programs. The Commission has a unique and powerful opportunity in this docket to help the District and its residents understand energy transformation and what it means for both the electric and gas systems. Pepco’s filings provide a foundation of information on which the Commission can build to provide a framework that can, in turn, help coordinate and inform the actions and plans of the District of Columbia’s utilities, residents, and businesses.

These comments are divided into two portions. In the first section, the District addresses Pepco’s full set of Climate Solutions Plan filings to date, with a focus on comparing whether those filings adequately address the requirements set forth by the Commission in Order No. 20754. In the second section, which constitutes the bulk of the District’s comments, we review the 5-Year Action Plan in detail. These comments conclude with summary remarks.

II. COMMENTS

A. Pepco’s Climate Business Plan does not meet all of the requirements in Commission Order No. 20754.

Paragraphs 47 through 49 of the Commission’s Order No. 20754 direct Pepco to make the filings that are addressed by these comments:

- Paragraph 47 directs Pepco to file its Climate Change Commitment strategy. Pepco met this requirement by filing its Climate Solutions Plan² on July 20, 2021.
- Paragraph 48 directs Pepco to file a “list of proposed programs and initiatives” that would form part of its Climate Solutions Plan over 5-year and 30-year time horizons and identify how they relate to existing or proposed actions in other dockets. The Commission further directed Pepco to consider plans to expand renewable power supply through power purchase agreements for default service. Pepco’s 5-year Acton Plan³ filed on October 8, 2021, and the associated cost-benefit analysis filed on January 31, 2022,⁴ broadly satisfy the requirements of this paragraph. As we discuss further below, Pepco’s 30-year strategy filing of November 30, 2021,⁵ does not contain sufficient programmatic detail or proposals required by this paragraph.
- Paragraph 49 directs Pepco to file a detailed implementation plan for its Climate Solutions Plan, which should include:⁶
 - the current emission level for the District of Columbia to be used as a starting point;
 - multiple scenarios with proposed projects that are designed to support the development of robust and resilient decarbonization strategies to achieve the District’s climate change goals;
 - GHG reduction projections, to the extent applicable for each scenario;
 - modeling including detailed assumptions and projections, and key findings to support these scenarios;
 - quantitative results and actions for program implementation and market action for each scenario;
 - detailed workpapers and modeling assumptions; and
 - a robust benefit-cost analysis (BCA) for each scenario.

² Pepco. July 20, 2021. *Climate Solutions Plan: Pepco’s Blueprint to Support the District of Columbia’s Climate and Clean Energy Goals* (“Climate Solutions Plan”). Filed in DC PSC FC 1167.

³ Pepco. October 8, 2021. *Climate Solutions 5-Year Action Plan: Pepco’s 5-Year Plan to Support the District of Columbia’s Climate and Clean Energy Goals* (“5-Year Action Plan”). Filed in DC PSC FC 1167.

⁴ Hledik et al. January 2022. *Pepco’s Climate Solutions 5-year Action Plan: Benefits and Costs*. The Brattle Group. Filed in DC PSC FC 1167.

⁵ Pepco. *30-Year Transition Strategy: Pepco’s Long-Term Outlook at the Development of Climate Solutions in the District of Columbia*. Filed in DC PSC FC 1167.

⁶ The following two lists are direct quotes or paraphrases of the text of Paragraph 49 of Order No. 20754.

Paragraph 49 provides more detail regarding the required analysis:

- Two of the scenarios should be “business-as-usual” and “policy-driven” (or full-electrification) scenarios.
- Pepco should use quantitative pathway scenario analysis in developing its scenarios. The scenarios should include all three sectors—the energy supply sector, the transportation sector, and the building sector.
- Further, the filing should address how Standard Offer Service (SOS) and disadvantaged communities will be affected by the scenarios.
- The Climate Solutions Plan should also indicate the scenario that Pepco favors based on the modeling results.
- Pepco is required to provide detailed cost and investment projections, as well as specific detailed projected reliability performance standards for different scenarios.

Paragraph 49 also directs Pepco to explain how the Climate Solutions Plan would provide safe, reliable, affordable, and sustainable electric distribution service and discuss how its proposals align with the Commission’s statutory mandates, Clean Energy DC, Climate Ready DC, and the Revised Vision Statement.

Pepco has comprehensively failed to deliver the analysis and implementation plan required by Paragraph 49. While individual aspects of portions of Pepco’s filings could be stretched to support claims that individual components of the requirements have been met, when viewed as a whole, neither the spirit nor letter of this requirement has been met. The remainder of this first section of the District’s comments document Pepco’s failure in this regard and the resulting impact on the District’s climate commitments.

1. Scenario analysis is an essential approach for planning.

Paragraph 49 requires Pepco to complete a scenario analysis, with different scenarios reflecting different approaches to meeting the District’s climate objectives. Scenario analysis is a valuable and appropriate tool in this context because it allows examination of how different aspects of the energy transition interact, and how they are shaped by external events (such as the pace of technological development) or by different policy approaches.

Because the District has multiple policy objectives, it is not possible to pick an “optimal” scenario or to use optimization to design a scenario. It is common for scenarios to demonstrate tradeoffs between different approaches. For example, one approach may be less expensive but less resilient, while another is more expensive and more equitable. Different scenarios may differ in their reliance on policy versus reliance on market forces or show the impacts of taking centralized versus distributed approaches. Within the external context and assumed approach that defines each scenario, it is appropriate to develop actions and assumptions that allow each scenario to be internally consistent and the best possible version of itself. Where it is possible to find optimal combinations or scales of action within the construct of a given scenario, this kind of optimization is valuable.

Pepco builds its Climate Solutions Plan around a high-electrification approach that is consistent with the District’s policy and plans. Even within the confines of this general direction for decarbonization, however, Pepco could have developed scenarios that would have illuminated the impacts to grid infrastructure and/or planning in the District of Columbia and helped the Commission and stakeholders understand tradeoffs. This analysis would have provided a foundation and justification for the selection and design of the programs and other actions proposed in the 5-Year Action Plan. For example, Pepco could have analyzed the relative costs and benefits of a traditional, wires-investment-based approach to meeting the needs of electrification on the distribution grid, compared with a scenario that depends more on distributed energy resources.

As a reflection of the need to evaluate scenarios from multiple perspectives, Paragraph 49 requires that Pepco use the scenario process to evaluate impacts on SOS customers and on disadvantaged communities. While Pepco has identified specific actions related to SOS and

discusses impacts on disadvantaged customers for some of its action offerings, the lack of scenario analyses that take different approaches means that the Commission, the District, and other stakeholders are left with uncertainty as to whether these impacts and actions are more or less beneficial for SOS customers and disadvantaged communities than other approaches would have been.

2. Pepco’s 5-year plan supplants the work of the Clean Energy Act Implementation Working Group (CEAIWG), is not comprehensive, and is not based on a long-term analysis.

One essential purpose of conducting scenario planning would be to show how the resulting action plan is consistent with and emerges from the results of analysis that considers alternative approaches. Because of the lack of a comparative approach, the Commission, the District, and other stakeholders are left unable to evaluate whether the proposed Climate Solutions Plan and associated actions reflect the most promising alignment with District policies and with “safe, reliable, affordable, and sustainable electric distribution service,” as required by Paragraph 49.

While Pepco filed a 30-year strategy, it does not provide analysis of pathways to decarbonization over those 30 years. Nor does it provide a structure to determine whether the 5-year Action Plan is consistent with Pepco’s role in a successful long-term energy transition or whether the proposed actions are consistent with success in meeting the District’s objectives between now and 2050. Paragraph 49 requires Pepco to provide “quantitative results and actions for program implementation and market action for each scenario.” If these analytic results existed, it would be possible to match the proposed actions against the overall strategy and verify that Pepco’s favored approach is based on modeling results.

In short, Pepco’s filing does not provide a framework for evaluating whether the 5-Year Action Plan has been optimized or selected as part of consideration of a broader range of potential actions. The BCA conducted by The Brattle Group is not consistent with the recommendations put forth by the Clean Energy Act Implementation Working Group (CEAIWG) in GD-2019-04-M. While the Brattle BCA indicates that individual components of the Action Plan may be promising, this BCA is a “unilaterally proposed, unvetted, and unapproved BCA.”⁷ Additionally, the BCA was applied at the program but not at the portfolio level. Given the limited time between now and 2050 to achieve the District’s climate commitment to carbon neutrality, and between now and 2032 to reduce District of Columbia-wide emissions by 50 percent from 2006 levels, any climate plan by Pepco that does not take a holistic approach and does not follow the consensus BCA framework will necessarily fall short of what the District needs to achieve its climate commitments.

3. Pepco’s Implementation Plan lacks detail required by Commission Order No. 20754.

Paragraph 49 requires that Pepco provide a “detailed implementation plan” with “detailed cost and investment projections, as well as specific detailed projected reliability performance standards for different scenarios.” While the 5-Year Action Plan and associated benefit-cost analysis provide some detail regarding programmatic cost projections, they fail to take a wider view of all customer costs.

For example, there are no details in Pepco’s filings regarding Pepco’s planning for transmission, substation, or distribution upgrades to meet the loads identified in the

⁷ Formal Case No. 1167, Joint Reply to the Potomac Electric Power Company’s Motion for Leave to Submit Comments and Comments on the CEAIWG Report, at pg. 4 (Feb 10, 2022).

Electrification Study. While this study shows that the rate of peak load growth would remain within historic levels, it does not provide any details regarding how Pepco would change its grid investments or operations, and when those changes would be required. Because the analysis is conducted only at a District of Columbia-wide level, it does not account for local load growth, existing capacity on the distribution system, or opportunities to use distributed resources to avoid or defer investments. If Pepco had conducted detailed evaluations of different scenarios for the use of distributed energy resources, for example, or changes in transportation modes, the resulting filings would contain details regarding costs and benefits that are entirely absent from the limited programmatic analysis that Pepco has filed.

The District appreciates that Pepco does not typically conduct distribution analysis over multi-decadal timeframes, and that the future is uncertain. The detailed results we are highlighting here would be subject to caveats and limitations. But this is precisely why scenario analysis, accompanied by transparent modeling of all cost and investments under different approaches, would be an appropriate approach.

B. Comments on Pepco’s 5-Year Action Plan.

This section of the District’s comments address Pepco’s 5-Year Action Plan. Many of the components of this plan are already being implemented or are extension of promising actions already underway. Other proposals are new. The District supports many of these ongoing and proposed actions as part of a comprehensive approach to meeting the District’s policy objectives. However, some aspects of the 5-Year Action Plan should be modified to better align with the District’s plans and the appropriate role for the regulated electric utility vis a vis other actors.

In this section, the District first addresses some important framing and methodological factors, then step through each of the components of the 5-Year Action Plan. We conclude with an evaluation of Pepco’s plan from an equity perspective and identify some future steps and recommendations.

1. Pepco’s important but limited role as electric distribution service provider.

Pepco plays important roles as the distributor of electricity in the District of Columbia and as the default electric energy supplier through SOS. It is also deepening its customer engagement on energy efficiency, as is being addressed in Formal Case No. 1160. Pepco’s actions are shaped by the regulatory approvals and requirements it has received from the Commission, which act to align Pepco’s actions with District policy.

Pepco is also far from the only entity that is taking action to advance District priorities. District agencies, including the Department of Energy and Environment (DOEE), run or oversee programs. The District of Columbia Sustainable Energy Utility (SEU), operating under contract with DOEE, advances District policy objective regarding greenhouse gas (GHG) emissions and economic development. Pepco’s 5-Year Action Plan discusses the engagement that Pepco has held with DOEE, other government agencies, and non-governmental stakeholders. The District appreciate the opportunity to engage with Pepco on this and other matters, and encourage Pepco to continue to listen closely to input it receives from across the District of Columbia.

As a dynamic and forward-looking electricity system becomes more integrated into the lives and objectives of the District of Columbia’s residents, through electrification of additional end uses like transportation, and the adoption of smart systems, the electric utility provides an important platform for the success of other initiatives. In this context, it is important for Pepco to

appreciate its role as platform, rather than dominant actor. Where the competitive market can provide a service, the regulated monopoly utility should step back and provide fair and reasonable support for the market. Where a program is already led by the District, such as in the case of Resilience Hubs, the utility should continue its role as the electric service provider, but defer on programmatic decisions to the District. And where Pepco is starting to take on roles that have been the domain of others, such as the SEU's role in advancing energy efficiency and building systems, very close coordination with the incumbents is required to avoid duplication or inadvertent gaps and to maximize synergies between the program offerings.

In general, given the urgent need to act to reduce GHG emissions and advance the District's other energy policy priorities, we appreciate the 5-Year Action Plan's bias toward action. However, Pepco can and should support the actions of others where appropriate by preparing its infrastructure for the level of DER integration, automation, communication, and planning required for meeting the District's climate commitments. In our review of Pepco's proposed actions, we recommend specific reframing of roles where appropriate.

2. Pepco's benefit-cost analysis does not conform to the principles established by the CEAIWG.

Pepco presented a benefit-cost analysis of its proposed 5-Year Action Plan programs in the form of an analysis prepared by the Brattle Group.⁸ This section addresses this analysis on its own terms, independent of the requirements of Paragraph 49 (discussed above), which required an entirely different kind of benefit-cost analysis.⁹

⁸ Hledik et al. January 2022.

⁹ Paragraph 49 requires a benefit-cost analysis of different scenarios to achieve the District's policy objectives, not an analysis of program proposals.

On November 16, 2021, the Commission received the input on benefit-cost analysis developed by the CEAIWG in the form of the “Framework for Compliance with the Clean Energy Omnibus Amendment Act of 2018 (the CEDC Act) of the District of Columbia” (the CEAIWG Report). The majority recommendations contained in the CEAIWG Report include:

- “The Commission should adopt a consistent Benefit-Cost Analytical Framework, based on the guidance of the ‘National Standard Practice Manual for Benefit-Cost Analysis of DER’ [NSPM], that can ‘organically’ evolve in a systematic and economically sound manner to assimilate technology, policy, and market/customer changes, as well as to address multi-sited DERs and their interactive effects; multi-sectoral applications; dynamic utility system optimization planning; and coordinated end-to-end utility planning.”¹⁰
- “The BCA should adopt the NSPM ‘Principles’ to govern the development and application of a BCA Framework. The 8 Principles are: (1) Treat DERs as a Utility System Resource; (2) Align with Policy Goals; (3) Ensure Symmetry; (4) Account for Relevant, Material Impacts; (5) Conduct Forward-Looking, Long-term, Incremental Analyses; (6) Avoid Double-Counting Impacts; (7) Ensure Transparency; and (8) Conduct BCAs Separately from Rate Impact Analyses.”¹¹
- “The basis of the development of this BCA framework is the CleanEnergy Act, also known as the DC Omnibus Act, and all other major District policies that direct and guide energy decision-making ...; thus, the selected framework should be aligned with the goals of the Act and those other District policies including MEDSIS/PowerPath DC Vision Statement and Guiding Principles.”¹²
- “The BCA should utilize a primary societal cost test framework based on the NSPM principle to ensure alignment of relevant impacts with a jurisdiction’s applicable policy goals.

When considering a straw proposal BCA, the Working Group should consider, at a minimum: Other Fuel Impacts, Resilience, GHG Emissions, Other Environmental Impacts, Public Health, Low-Income Impacts, Moderate-Income Impacts, and Geographically Distributed Impacts. Electric Utility System Impacts to be included are: Energy Generation, Capacity, Environmental Compliance, RPS/CES Compliance, Market Price Effects, Ancillary Services, Transmission Capacity, Transmission System

¹⁰ Clean Energy Act Implementation Working Group, 2021, *Framework for Compliance with the Clean Energy Omnibus Amendment Act of 2018 (the CEDC Act) of the District of Columbia*, (CEAIWG Report), Case No. GD-2019-04-M, p. 48. Available at: <https://edocket.dcpsec.org/apis/api/Filing/download?attachId=143219&guidFileName=9a60d7a2-b795-47e2-b65f-639ce2fa4c96.pdf>.

¹¹ *Ibid.*, p. 51-52.

¹² *Ibid.*, p. 54.

Losses, Distribution Capacity, Distribution System Losses, Distribution O&M, Distribution Voltage, Financial Incentives, Program Administration Costs, Utility Performance Incentives, Credit and Collection Costs, Risk, Reliability, and Resilience. Gas Utility System Impacts to be included: Fuel and Variable O&M, Capacity, Environmental Compliance, Market Price Effects, Financial Incentives, Program Administration Costs, Utility Performance Incentives, Credit and Collection Costs, Risk, Reliability, and Resilience. Host Customer Impacts to be included are: Host Portion of DER Costs, Host Transaction Costs, Interconnection Fees, Risk, Reliability, Resilience, Tax Incentives, Host Customer Non-Energy Impacts, Low-Income Non- Energy Impacts.”¹³

- “Host-customer/participant impacts should be addressed in the BCA using the NSPM listed impacts: Host Customer portion of DER Costs, Transaction Costs, Interconnection Fees, Risk, Reliability, Resilience, Tax Incentives, Low Income Host Customer Non-Energy Impacts, and Host Customer Bill Savings.”¹⁴
- “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.”¹⁵

DOEE supported each of these majority recommendations. Pepco did not support the use of the NSPM approach in the CEAIWG process, and it has acted on that position by presenting a benefit-cost analysis here which does not reflect the principles supported by the majority of the CEAIWG.¹⁶ Specifically, while Pepco supported the use of a societal test in the CEAIWG process, Pepco’s proposed “Climate Policy Enablement (CPE) Test” fails to include many of the benefits and costs that the CEAIWG identified should be considered in the District’s BCA. Most particularly, the CPE Test does not include host (participant) costs and benefits and does not

¹³ Ibid., p. 55.

¹⁴ Ibid., p. 60.

¹⁵ Ibid., p. 62.

¹⁶ Hledik et al. do cite to the NSPM to justify the use of a novel jurisdiction-specific test, but do not draw upon the developed CEAIWG recommendations that reflect the District’s policies.

include any environmental, social, or non-energy impacts other than GHG and criteria air pollutant emissions.

Pepco, through its consultant the Brattle Group, argues that the CPE Test is appropriate because it is designed to answer the question of “whether the energy system and emissions benefits Pepco DC’s proposed programs created to advance District’s goals outweigh the costs Pepco DC will incur in the process.”¹⁷ While that question may be of interest to Pepco, it should not be the question the Commission uses to determine which programs or other proposals are the most cost-effective way to achieve the District’s policy objectives. As such, the BCA that Pepco presents does not answer the most useful question.

Instead of the CPE Test, a BCA consistent with the CEAIWG’s majority recommendations would be built to reflect the District’s policy objectives. One of the core insights of the NSPM framework is that the benefit-cost test used to evaluate options should be designed to reflect the policy priorities of each jurisdiction. While Pepco stated in the CEAIWG process that it believes that the NSPM includes “hard policy positions,” we respectfully but strenuously disagree. The NSPM includes lists of numerous types of impacts to consider; which ones to include, and how to account for them, is a matter for each jurisdiction to determine, consistent with its applicable policy goals and objectives. In the District of Columbia, this means aligning with the objective of a 50 percent reduction in GHG emissions by 2032 and achieving carbon neutrality by 2050, while also achieving the District’s equity and energy burden objectives; improving local air quality and public health, affordability, and economic opportunity; and empowering customers to participate in energy generation and shape their

¹⁷ Hledik et al. p. 3-4.

consumption, among other goals. See Appendix D of the CEAIWG Report for a catalog of the source documents that codify the District’s policies.

While Pepco may attribute “hard policy positions” to the NSPM, in fact, the only policy positions reflected in the CEAIWG’s majority recommendations are the stated and formalized policy positions of the District. The CEAIWG recommended that the Commission follow the NSPM process to develop a BCA test, which means considering numerous impacts and developing a set of impacts to include in the test that reflects the District’s policy while accounting for impacts once and only once, treating costs and benefits symmetrically, and otherwise applying the NSPM principles. That process has not yet been completed. However, the CEAIWG did identify that a societal test is closer in principle to the District’s policy objectives than other commonly used tests. By taking a utility-focused perspective, Pepco’s proposed CPE Test fails to include impacts on equity and other District policy priorities. The fact that Pepco’s proposed programs are not aligned with an overarching scenario analysis that shows the scale and scope of required actions to meet the District’s objectives also means that it is impossible to ascertain whether the proposed programs are sufficient to the task.

The purpose of the District’s cost-effectiveness test should be to identify those actions and programs which are most cost-effective at achieving the District’s policy objectives, taking into account the costs and benefits incurred by all residents of the District of Columbia (and, where District policy explicitly includes concern for impacts on others, costs and benefits for others as well). This means that participant costs and benefits should be included. It also means that the cost of carbon emissions used in the analysis must be consistent with District policy. Further, Pepco needs to provide costs and benefits for each of the proposed programs so that stakeholders can figure out the best mix of programs that maximize net benefits for the District

of Columbia. The Brattle Group’s public BCA report does not provide any information about benefits and costs for each of the proposed program. The report only provides the aggregated benefit and cost results at the portfolio level and by sector or program type (e.g., Electrifying Transportation, Decarbonizing Buildings). While there is more information in the confidential supporting documents, Pepco should strive for greater transparency of costs, rather than making public review restrictive.

Pepco correctly identifies that the development of a jurisdiction-specific test under the NSPM framework should reflect the fact that the District has “committed to leading decarbonization goals,”¹⁸ but the test developed does not take this realization to its logical conclusion. As DOEE stated in its comments in the CEAIWG process:

[T]he [cost-effectiveness analysis or] CEA or marginal abatement cost approach is consistent with a jurisdiction that has already established GHG reduction goals. DOEE believes the CEA is preferred in future cycles, because choosing a discount rate for [the social cost of carbon or] SCC implies making a judgment about the value of climate damages for future generations. DOEE further notes this judgment has already been made by the District through the adoption of a carbon neutrality goal: the value of future climate damages is equal to or greater than the cost of achieving carbon neutrality by 2050.¹⁹

In its CPE analysis, Pepco used a social cost of carbon that may not be sufficient to reflect the need to reduce emissions 50 percent by 2032 and reach carbon neutrality by 2050, and is therefore inconsistent with District policy.

¹⁸ Hledik et al., p. 3.

¹⁹ CEAIWG Report, p. 228.

3. Transportation Electrification Programs.

a. Connect Transportation Initiative.

The District continues to support Pepco in the following role regarding transportation electrification: “The Electric Company has a critical role to play in partnership with the District in achieving the climate goals related to transportation. This will include:

- Decarbonizing the electricity supply;
- Streamlining Electric Vehicle Supply Equipment (EVSE) interconnection in a way that is transparent, optimizes the use of existing assets, and prioritizes NWAs;
- Encouraging beneficial charging behavior through dynamic pricing, other market signals, and managed charging programs; and
- Using EVs as grid assets.”²⁰

As such, the District believes Pepco should focus less on make-ready offerings in favor of improved tariffs and price signals, as well as Vehicle-to-Grid capabilities.

Several of Pepco’s proposed actions in the transportation sector relate to “make-ready” investments. These are investments on Pepco’s system designed to allow the system to accommodate customer-side investments, such as electric vehicle (EV) charging infrastructure. For example, a make-ready program might cover some or all of the distribution network upgrade costs up to the point of interconnection with a new fast EV charging station. Such support would encourage the development of EV charging, because the developer would otherwise have to pay these costs.

²⁰ Formal Case Nos. 1130 & 1155, Comments of the Department of Energy and Environment on the Potomac Electric Power Company’s Transportation Electrification Implementation Plan and Transportation Electrification Working Group Report, at pg. 4 (March 20, 2020).

While the District supports the development of appropriate EV charging infrastructure, public support through electric rates, which is the net effect of a make-ready approach, requires the transparency and careful planning that is expected of the expenditure of public funds. In fact, even more scrutiny may be warranted because the utility has an inherent incentive to over-invest and earn a rate of return on that investment, rather than under-invest. For each of the make-ready proposals below, Pepco should provide cost transparency (including itemized unit costs), predictability in its evaluation of potential make-ready support, and technical justification for its selection and design of each project. Additionally, the District requests that the Commission track and monitor the costs for installing EV charging equipment over time to assess the cost impact of any Commission-approved make-ready incentive. This would allow the Commission and other stakeholders to 1) assess the realized benefits of such a program; and 2) ensure that the make-ready incentive does not have an inflationary impact on the cost of interconnecting charging equipment.

b. Key Corridors Charging Program.

This program would provide make-ready rebate incentives for publicly available smart direct current fast charge (DCFC) charging ports along heavily trafficked corridors in Pepco's DC service territory. The District would like to emphasize the importance of the Department of For Hire Vehicles (DFHV), which should play a leading role in identifying any corridors and charging locations for this and the Rideshare and Taxi Charging Hubs Program.

The District supports Pepco scaling incentives to attract charging deployment in under-resourced communities and providing additional incentives if near a multi-unit dwelling (MUD). We note that Pepco is also proposing a MUD EV charging program. Pepco should detail how these programs will interact so that chargers are not doubly supported and have an appropriate

overall geographic distribution. Furthermore, if Pepco is going to provide higher incentives for chargers near MUDs, it needs to determine how it will ensure access for MUD residents. It will need to have a plan for competition for charger use between MUD residents and the public.

c. Residential Charging Program.

The District does not support the residential charging program as designed. Make-ready programs for the single-family residential sector are unusual. Most utility support for at-home charging takes the form of rebates for chargers and/or incentive payments to help with installation costs if there are electrical upgrades. Pepco should clarify how it plans to account for these program costs and justify the make-ready vs. rebate approach.

It is unclear whether Pepco's proposed program would be an effective use of funds. As with all new vehicles, new EVs are primarily purchased by higher-income residential homeowners. Many of these customers do not need an incentive to purchase a Level 2 smart charger, so there could be substantial free ridership. At-home charging can be effective for most vehicle owners at Level 1 (a standard outlet). If Pepco intends to support Level 2 charging, it should require smart charging to limit grid impacts, and expect to quantitatively justify this investment.

Pepco proposes to scale incentives to offer greater support to residents in under-resourced communities. Currently, low-income customers face significant barriers to EV adoption due to the higher upfront costs compared to internal combustion vehicles and the lack of availability of EVs in the used vehicle market. Low-income customers are also more likely to use public transit or rideshare than own a car. District policy supports providing comprehensive transportation options beyond car ownership and minimizing vehicle miles travelled. Rather than supporting

single-family home charging outside of under-resourced communities, Pepco should focus on fleet and public transit electrification in or near low-income communities.

d. Multi-Unit Dwelling Charging Program.

This program shows promise, and the District looks forward to reviewing further details. The District supports the use of tiered incentives and the proposal to offer full coverage of the make-ready costs for MUDs in low-to-moderate income (LMI) communities. As noted above, it will be important for Pepco to align the design of this program with the extra MUD incentives in the Key Corridors Charging Program.

e. EV-Ready System Design and Engineering Program.

This program expansion is appropriate. It is important that cost share be required of customers because it is possible that a fleet customer may decide against electrification after receiving an assessment. For example, customers could pay a share of the cost of the assessment, and then get a credit back if they move forward with installation.

f. Vehicle-to-Grid Demonstration Program.

There is insufficient detail about this pilot to provide detailed feedback. The District looks forward to learning more about the exact size, design, and cost of program. The District encourages Pepco to consider what particular questions would be addressed by this pilot in the District of Columbia and what can be learned from pilots underway or completed in other jurisdictions. Vehicle-to-Grid programs are a priority for the District.

g. Food Truck Service Electrification Program.

The District considers this to be a promising program and one that can provide noticeable local air quality benefits. The District supports Pepco scaling incentives to attract charging deployment in under-resourced communities. However, given the novelty and location-specific

nature of the food truck electrification need, the District recommends a small pilot to start with. Pepco needs to demonstrate outreach and coordination with food truck owners in the District of Columbia so there is documentation of what market barriers these trucks face to electrification and how many food trucks have plans to electrify. Pepco also needs to share its plans regarding how and whether the public can access these chargers when not used by food trucks.

h. Destination Charging Program.

This program would provide rebates to commercial facilities including parking locations open to the public. Pepco is proposing to offer an incentive for new charging stations. Pepco has not sufficiently justified that this incentive is needed. Pepco indicates a reason for this program is that commercial building owners must implement the requirements in the Electric Vehicle Readiness Amendment Act of 2020, which mandates a minimum level of EV-ready parking spaces for certain commercial facilities. If commercial building owners have to comply with this law, they do not also need an incentive to move them to do so.

Electric vehicle charging can be a valuable benefit for employees or customers. For example, companies should be motivated by employee retention and recruitment to provide EV charging as part of the benefits offered to their employees. Pepco should consider targeting this support to customers that face significant barriers, like non-profits and small businesses, to help them compete with larger employers and retailers.

i. Rideshare & Taxi Charging Hubs Program.

This program will focus on the need for dedicated hubs for charging these fleets to avoid competition and utilization at public charging installations. This program will offer make-ready rebate incentives to site hosts with privately owned lots to support a “charging hub” for EVs used for taxi or rideshare operations. Make-ready incentives are an appropriate role for the utility in

this context. More details will be needed regarding the split between ride share and taxis, the terms of the agreements with the private site owners, and how the site owners and Pepco will ensure usage by the vehicles targeted by this program. Pepco should defer to DFHV on these questions, along with overall siting and planning. We note that Pepco is also proposing to provide incentives for public charging along corridors and at commercial properties open to the public. There is nothing to prohibit these vehicles from using chargers incentivized by these other programs. Program coordination and alignment will be important to cost-effectively achieve the desired outcomes from each of these programs.

j. Transit Bus Charging Program.

This program appears beneficial but could be streamlined by including this program under the umbrella of a Fleet Program and include the EV-Ready System Design and Engineering Program and perhaps the Rideshare & Taxi Charging Hubs Program as well. A coordinated fleet program could target public transport, school buses, and other industry fleets and then offer tiered incentives for fleets located in low-income or environmental justice communities. Any Pepco programs in this area should be closely coordinated with the District Department of Transportation (DDOT), the Office of the State Superintendent of Education, and other transit providers.

4. Smart Rates Transportation Initiative.

a. Residential EV TOU Rate.

Pepco's existing EV time-of-use (TOU) rate, R-PIV (Residential Plug In Vehicle), is a whole-house rate for customers with electric vehicles. Under the existing rate, only supply is priced on a time-varying basis. We support Pepco's proposal for a new EV rate tailored to EV charging only, but we recommend that both supply and delivery rate elements be made to be

TOU. Further, we recommend that customers who purchase energy from other suppliers and who own EVs still be permitted to take advantage of the TOU delivery charges through this rate.

In formulating our recommendations, the District is mindful that the rate designs included in Pepco's climate plan are geared toward helping the District to achieve its climate goals. While it is critically important that supply rates be time-differentiated to incent customers to shift load to cleaner, non-peak periods, there are still potential benefits associated with time-varying delivery rates that should not be neglected. By including TOU delivery rate elements, the updated EV TOU rate that we propose would help to ensure that new and existing load associated with customer adoption of electric vehicles does not result in unmanaged consumption that leads to costly increases in system capacity, which could ultimately hinder the ability of the District to cost-effectively achieve its climate goals through electrification.

Below, we address the need for a general TOU rate that would apply to a residential customer's whole-house load.

b. Demand Charge Solution Program.

Pepco will propose either a distribution demand charge credit for DCFC chargers as a bridge to higher utilization rates or a permanent new Hours Use of Demand rate. While the District appreciates Pepco's interest in supporting low-utilization DCFC installations to help build the market, we encourage Pepco to consider focusing on more sustainable long-term solutions than temporary credits. Specifically, the District recommends that instead of demand charge credits or discounts, Pepco develop a new rate based on marginal costs. This will help to avoid concerns of cost-shifting.

c. Transit Bus Rate Solutions Program

The District supports Pepco working to develop tailored solutions for the unique loads that will be presented by transit bus charging. Close engagement with the transit agencies is essential, and the District is encouraged by Pepco’s commitment to this engagement. We stress that any transit bus rate should reflect the actual costs to serve this load, which are likely to vary over time. Therefore, the transit rate should feature time-varying supply and delivery rate components, similar to the Residential EV TOU rate. A TOU approach will promote efficient charging behavior, so that transit operators can align bus charging with system needs (e.g., so buses minimize their load during periods when the system is already constrained or generation emissions are high) and cover the costs of their charging whether on- or off-peak.

5. Energy Efficiency Programs.

a. Buildings

Pepco’s 5-Year Action Plan includes its Three-Year Energy Efficiency and Demand Response (EEDR) Program plan that Pepco recently filed with the Commission in Formal Case No. 1160. This plan contains nine residential energy efficiency programs, four low- to medium-income efficiency programs (including one pilot), five commercial energy efficiency programs, one school and education program, and two residential and commercial demand response programs.

Pepco noted it consulted and coordinated with the SEU, DOEE and other stakeholders to develop the Three-Year EEDR plan.²¹ Pepco further noted that “[t]he programs proposed in this filing are unique and complimentary to SEU’s existing programs” and that Pepco “will work

²¹ 5-Year Action Plan, p. 39.

with the SEU, DOEE and others going forward to ensure that programs continue to be complementary of existing SEU programs.”²²

The SEU filed its comments on the Three-Year EEDR plan on November 23, 2021. In the comments, the SEU noted that “the DCSEU [SEU] and Pepco were able to come to agreement around a framework that include[s] a division of programs and market segments, along with a set of principles and general plans for ongoing coordination.”²³ The SEU provided several core principles upon which Pepco and the SEU agreed. Those core principles were included in the Commission order regarding the EEDR Working Group Report. On the other hand, the SEU explained in detail several areas where potential program overlaps still have not been resolved. The District shares many of the remaining concerns expressed by the SEU and have additional concerns regarding program overlaps between the SEU’s existing programs and Pepco’s proposed programs. Program duplications are a serious issue that should be eliminated or minimized as much as possible. Program duplication leads to significant inefficiencies of program delivery as ratepayers would need to pay twice for various components of two similar programs (e.g., administrative staff, program database, contractor networks, websites, marketing activities, measurement, and verification studies). Further, it could create significant confusions among customers and key trade allies (e.g., contractors, retailers, distributors, architects) about the energy efficiency programs, which could prevent the uptake of energy efficiency and demand response measures.

²² Ibid.

²³ Formal Case No. 1160, *In the Matter of the Development of Metrics for Electric Company and Gas Company Energy Efficiency and Demand Response Programs Pursuant to Section 201 (B) of the CleanEnergy DC Omnibus Amendment Act of 2018*. Available at: <https://edocket.dcpsec.org/apis/api/Filing/download?attachId=168835&guidFileName=5cedfee1-920d-4b80-a286-7a92dce8c253.pdf>

Because of this potential, significant program duplication issue, the District strongly recommends that Pepco provide in the 5-Year Action Plan detailed strategies about how Pepco resolved program duplications and a plan to resolve any future duplication issues. The District also recommends that Pepco include in the 5-Year Action Plan the core principles of program coordination upon which Pepco and the SEU have already agreed.

Lastly, the District found that the 5-Year Action Plan lacks information about the level of contributions from the proposed EEDR programs toward meeting the District’s clean energy goals. For example, the District has goals of reducing energy usage and GHG emissions by 50 percent by 2032. It would be helpful to know how Pepco’s plan would help the District achieve these targets and how much more needs to happen to meet the targets.

Below, the District raises several program overlap issues for selected programs.

b. Efficient Products Program.

The proposed Efficient Products Program offers instant rebates for efficient appliances including smart thermostats and heat pump water heaters (HPWHs) through Pepco’s online store. It also offers midstream rebates for efficient equipment.

The SEU already offers incentives for smart thermostats and heat pump water heaters.²⁴ In addition, the SEU noted in its comments on the 5-Year EEDR plan that DOEE has recently

²⁴ “Smart Thermostats.” Available at: <https://www.SEU.com/homes/smart-thermostats>; “Home Heating & Cooling.” Available at: <https://www.SEU.com/homes/home-heating-cooling#get-started>.

requested that the SEU accelerate its effort to increase HPWH adoption.²⁵ The SEU also emphasized the important role of HPWHs and smart thermostats as follows:

HPWHs and smart thermostats are very significant energy savings measures that are important part of the SEU's ability to meet its performance goals for the District. Effective and ongoing coordination of program efforts for these measures will be critical to success.²⁶

Based on this clear conflict and overlap with the SEU's existing program offering, the District recommends that Pepco not offer incentives for smart thermostats and HPWHs, at least through its Efficient Products program, to avoid duplication of the services and confusion among participants, unless it reaches an explicit agreement with the SEU about how to coordinate programs. The District also recommends that Pepco contribute its funding for smart thermostats and HPWHs to the SEU so that the SEU will be the sole entity to offer incentives through an Efficient Products-type program. This arrangement would still allow Pepco to claim savings associated with these measures to the extent Pepco's funding was used. This will streamline the program delivery process for these two products and avoid customer confusion.

c. Home Performance with Energy Star (HPwES) Program

The proposed HPwES Program offers home energy audits and financial incentives based on the total energy savings from energy efficiency projects that are recommended by the energy audits. The SEU noted that several types of measures (e.g., HVAC, lighting) offered in this program overlap with the measures offered by the SEU.²⁷ Thus, Pepco and the SEU should work

²⁵ Formal Case No. 1160, Comments of District of Columbia Sustainable Energy Utility on Potomac Electric Power Company's Application For Approval Of A Three-Year Energy Efficiency And Demand Response Program (April 27, 2021).

²⁶ Ibid. p. 12.

²⁷ Ibid. p. 9.

together to develop protocols to avoid double-counting savings and double-dipping of program incentives.

d. Assisted HPwES Program.

The proposed Assisted HPwES Program serves LMI single-family homes and small multifamily buildings and offers a comprehensive energy audit and incentives for various measures including AC replacement, high-efficiency room ACs, and potentially ductless mini-splits. Since this offering would overlap with the SEU’s HVAC/decarbonization offerings that target low-income households, the SEU noted that “additional detailed coordination would be needed to avoid market confusion and ‘double dipping.’”²⁸ The District agrees with the SEU’s suggestion. Pepco and the SEU need to develop protocols that ensure that customers only receive incentives from one entity.

In addition, the District recommends that Pepco consider not providing incentives to central AC replacement and dedicating the freed-up incentives to central heat pumps or mini-split heat pumps. This will accelerate the process of space heating electrification.

e. Small Business Program

The SEU currently operates its small business program which targets customers with properties greater than 50,000 square feet, through custom, midstream, and prescriptive retail incentives. Pepco’s proposed Small Business Program target smaller buildings with less than 50,000 square feet and less than 100 kW demand. Pepco’s program would offer direct install measures and prescriptive incentives. It also includes an on-bill financing option.

²⁸ Ibid. p.15.

The SEU stated that “it is particularly important that rebate levels be aligned with those offered by the SEU, in order to avoid market confusion and distortion.”²⁹ The District agrees with the SEU’s suggested approach for setting incentive levels.

Another potential issue is to figure out in which size-category customers fall. This is especially important for customers who have buildings around the threshold of 50,000 square feet. Pepco and the SEU need to make clear definitions of the thresholds which include setting a threshold for a customer who has multiple buildings whose combined area exceeds the threshold, but some individual buildings may have areas less than the threshold. One potential solution to these issues is to co-develop and co-manage a single customer database which contains key customer profiles including building areas and eligible incentives. This would help coordination between the two programs and could also result in savings in costs and time managing the two separate programs.

f. Commercial Behavior Based Program

Pepco’s proposed Commercial Behavior Based Program offers small commercial customers free, self-service tools to help them understand their energy usage and improve their energy efficiency and reduce utility bills. This offering has some overlap with the SEU’s strategic energy management program which target customers with building areas over 50,000 square feet, but the SEU’s program offers more active, and longer-term engagement with the program participants. While the 5-Year Action Plan and Pepco’s Three-Year EEDR plan do not provide information about specific customer eligibility, the SEU noted that “[w]e understand from our agreement with Pepco that this program would not target buildings over 50,000 ft².”³⁰

²⁹ Ibid. p. 13.

³⁰ Ibid. p. 11.

The District thinks this is a reasonable arrangement between the two programs. To identify the right customers for Pepco’s program, the District recommends that Pepco consider co-developing and co-managing a commercial customer database with the SEU as discussed above for the Small Business Program.

Lastly, the District has a concern about the potential energy savings from Pepco’s Commercial Behavior Based Program. Pepco noted two Navigant studies without a formal reference to the studies. To support this program, Pepco noted in the Three-Year EEDR plan that “[t]wo separate third-party studies by Navigant (now Guidehouse) have shown that ... [program participants] reduce their annual energy use by between 1.5% and 2.76% through behavioral change.” However, Pepco did not provide formal study names in the filing, and the District was unable to find these studies. Instead, the District found two different Navigant studies that evaluated ComEd’s commercial behavioral program, which did not find high energy savings, unlike what Pepco stated. In fact, one Navigant study published in 2014 found only 0.2 percent average savings, and another Navigant study published in 2016 found 0.13 percent average savings with a range from about negative 6 percent savings (increased usage) to 4.4 percent savings depending on the participant.³¹ Thus, the District recommends that Pepco provide formal study references as well as a detailed explanation to support the high customer savings levels.

³¹ Navigant. 2014. *ComEd Commercial & Industrial Behavioral Program PY5 Evaluation Report*. Table 3-1. Available at: https://ilsag.s3.amazonaws.com/ComEd_EPY5_C%26I_Behavioral_Program_Eval_Report_2014-03-11_Final.pdf; Navigant: 2016. *Small Commercial and Industrial Behavioral (EnergyCheck/Pulse) Pilot Program PY7 Evaluation Report*. Table E-2 and Table 3-3. Available at: https://ilsag.s3.amazonaws.com/ComEd_Pulse_PY7_Evaluation_Report_2016-02-22_Final.pdf.

g. Midstream Program (Commercial).

The proposed Midstream Program provides incentives to various measures including lighting, HVAC, kitchen appliances, and serves small business customers. The structure of this program is almost identical to the SEU's existing midstream program, though targeted measures may be different.

The main difference between the two programs is that Pepco's proposed program targets buildings (including tenants in such buildings) less than 50,000 square feet or otherwise not subject to the 2019 Building Energy Performance Standards (BEPS) compliance cycle requirements, and the SEU's program targets large commercial customers more than 50,000 square feet.³²

In this program, Pepco noted that "Pepco and the SEU will offer identical incentive levels for like measures and align forms and other program requirements."³³ This approach was proposed to avoid customer confusion. However, the SEU raised two remaining concerns that this program would still create challenges for some building owners and trade allies as follows:

- "Those who own or occupy multiple buildings of different sizes may need to deal with both program administrators. The requirement for customers to identify the appropriate program administrator, and especially the potential requirement to work with both for different buildings, creates additional barriers to participation."³⁴
- "The challenges for engaging with contractors, distributors and retailers that serve commercial buildings are even greater, because many of them will serve buildings across the proposed 50,000 ft² threshold."³⁵

³² Formal Case No. 1160, Potomac Electric Power Company's Application to Approve Three-Year Energy Efficiency and Demand Response Program, page 66 (Aug. 2, 2021).

³³ Ibid.

³⁴ F.C. 1160, District of Columbia Sustainable Energy Utility Comments on Pepco's Application to Approve Three Year EEDR Program, at pg. 14 (Nov. 23, 2021).

³⁵ Ibid.

The District shares the SEU's concerns. The District agrees that Pepco's proposed approach would still be an inefficient way of serving customers as it would require two different systems to serve two separate customer segments. The District has two recommendations to address this issue. First, as we already recommended for the Small Business Program and the Commercial Behavior Based Program, the District recommends that Pepco consider co-developing and co-managing a commercial customer database with the SEU. Having a single customer database would enable a smooth coordination between the two programs. However, this is not a sufficient solution as the two programs are so identical to each other that they pose more risks of creating customer and trade ally confusions and barriers to program participation than the other program duplications discussed above. Thus, the District recommends that Pepco and the SEU develop a single program brand name (e.g., SEU/Pepco Midstream incentive) for the commercial midstream program. This approach is similar to the Mass Save program in Massachusetts, where all different program administrators offer their programs under a single program name with the same application process for customers and contractors. This also means that this joint program will have the same website or same application form, not two identical forms under different administrator names. This approach will avoid unnecessary customer confusion about the programs and will make the incentive application smoother while increasing customer satisfaction with the programs.

h. Residential and Small Commercial Demand Response Programs.

Pepco proposed two demand response programs for residential and small commercial customers. These programs are bring-your-own-device programs, where customers bring in their thermostats and Pepco will control the thermostats for the purpose of its demand response programs in exchange for program enrollment credits. As noted above, the SEU already offers

incentives for smart thermostats. Thus, if program participants already received incentives for their thermostats from the SEU's program, Pepco should adjust the program incentive down to reflect the SEU's incentive.

i. Connect Homes and Buildings.

The 5-Year Action Plan proposes a new initiative called Connect Homes and Buildings to be launched after the three-year program cycle associated with the energy efficiency and demand response programs currently pending before the Commission in Formal Case No. 1160. This initiative consists of 9 new programs. Pepco notes that this new initiative focuses on providing incentives for building electrification measures including electrical upgrades and also on “equity and inclusively, with dedicated programs for LMI customers and rebates that can help lower the upfront cost of electrification.”³⁶

While the District supports the development of new building electrification programs, Pepco needs to carefully coordinate with the SEU in designing and offering new programs to avoid program duplication and customer confusion. The 5-Year Action Plan lacks key pieces of information for the programs proposed under this initiative. This lack of information does not allow stakeholders to assess whether the programs as proposed are reasonable or ambitious enough because they are not part of an overall plan with any quantitative analysis. For example, the plan lacks information about annual energy and peak impacts (including the quantity of fuels expected to be displaced) and annual program budgets by program for the Connect Homes and Buildings initiative (while the confidential version of the “Benefit Cost Analysis” workbook includes 5-Year cumulative program costs and benefit-cost ratios). More importantly, the 5-Year

³⁶ 5-Year Action Plan, p. 49

Action Plan also lacks information about the impacts of each program on the District’s emissions savings target. For example, the District has a goal of GHG emission reductions of 50 percent by 2032. It would be helpful to know how the proposed programs under the Connect Homes and Buildings initiative would help the District achieve the GHG emissions savings targets for 2032 and for future years and how much more savings need to be achieved to meet the targets.

j. Appliance Electrification.

This program would offer incentives for electrification measures including heat pumps, electric stoves, water heating, dryers, and electric lawn equipment. It appears there is no program coordination issue for Pepco to offer incentives to electric dryers and lawn equipment. However, Pepco needs to be careful about designing and offering incentives for air-source heat pumps (including central air-source heat pumps and mini-split systems) and heat pump water heaters, because the SEU is currently offering incentives to these measures for single family households.

While it appears that fuel switching has not been a focus of the SEU programs based on SEU’s FY2020 program evaluation report, fuel switching is allowed under the SEU’s programs and the SEU contract was modified for FY2020 so that fuel switching will not result in any penalty toward electricity savings goals.³⁷ Further, as mentioned in the previous section, the SEU is also ramping up its incentive offering for heat pump water heaters in response to DOEE’s request.

Due to this potential overlap of incentive offering, we recommend that Pepco discuss and reach an agreement with the SEU about how to coordinate its offering for heat pumps and heat

³⁷ Sustainable Energy Utility Advisory Board. 2020. *Fiscal Year 2020 Annual Report*.

pump water heaters. Further, Pepco and the SEU need to develop protocols that ensure that customers only receive incentives from one entity.

Finally, Pepco should coordinate with the SEU to determine appropriate levels of incentives for appliance electrification measures. This includes an assessment of the cost premium of electric appliances over the cost of conventional fossil fuel-based appliances.

k. Distribution System Power-Up Rebate Program.

This program would target commercial customers and offer rebates for front-of the meter distribution system upgrade costs. This could include the costs for main control panels, branch control panels, conduit, customer-owned transformers, and switchgear.

Commercial buildings may require a substantial amount of electrical system upgrade investments. However, they are also businesses and many are required to take action by the District's building performance standard. Thus, Pepco should develop robust criteria to determine eligible customers and incentive levels for the program participants to limit support for commercial buildings that do not need it. Pepco could also consider offering a low interest rate financing option for commercial customers, potentially using C-PACE, instead of rebates as this approach will reduce the annual ratepayer costs. Targeting this program to multi-family housing, particularly housing that serves disadvantaged communities, could improve alignment between this program and District policy goals.

l. Rebates for Behind the Meter Heavy-Up Program.

This proposed program would target residential customers and offer rebates for the cost of upgrading electrical panels and wiring to accommodate electrification.

Pepco allocated a much bigger program budget for this program than for the Distribution System Power-Up Rebate Program or the explicit LMI electrification programs (that will be mentioned below). Since serving LMI customers is one of the core objectives of the Connect Homes & Buildings Initiative, Pepco should shift some of the funding allocation from this program to the two LMI electrification programs.

Not all homes will require electrical system upgrades, and different homes will require different equipment. Pepco should develop and share the criteria or conditions to determine electrical system upgrades that would be eligible to receive rebates under this program.

m. Urban Heat Island Reduction Program.

This proposed program would support planting 2,200 trees per year over five years, while collaborating with DDOT Urban Forestry Administration. Rather than running its own program, Pepco should identify appropriate locations and tree limitations (e.g., regarding mature height near wires) on its land and allow the District's tree cover experts to lead tree planting activities.

n. Dedicated LMI Electrification Programs.

Pepco proposed the Dedicated LMI Electrification (Owner-Occupied) Program for owner-occupied LMI households and the Dedicated LMI Electrification (Renter) Program for LMI renters in multifamily buildings. These two programs are supplemental to Pepco's proposed Assisted HPwES Program and the LMI Home Weatherization Pilot Program but are comprehensive in that they would promote appliance and equipment replacements, electrical panel or infrastructure upgrades, as well as enrollment in demand response or demand-side management expansion.

These two proposed programs could play a key role in promoting building electrification in LMI renter and owner buildings, but Pepco needs to carefully coordinate with the SEU to design and implement the programs because the SEU currently has HVAC/decarbonization offerings for low-income households. This coordination should include an agreement between Pepco and the SEU about how they could target LMI customers without causing any confusion among customers and trade allies, as well as the development of protocols that ensure that customers only receive incentives from one entity for the same measure.

In addition, we recommend that Pepco shift some funding from the Rebates for Behind the Meter Heavy-Up Program to these two Dedicated LMI Electrification Programs because serving LMI customers is one of the important objectives of the Connect Homes & Businesses initiative.

o. Commercial Building EE Financing Package Program.

This proposed program assists the DC Green Bank to market Commercial Property Assessed Clean Energy (C-PACE). According to Pepco's supporting materials, this program has a small budget compared to other programs, primarily because the main focus of the program is to offer marketing support to the existing C-PACE program. The 5-Year Action Plan provides no information about why Pepco needs to assist with the C-PACE program. Pepco should engage with the DC Green Bank to identify if and how Pepco's marketing support is necessary to support the program, or if Pepco simply needs to integrate C-PACE options into the way it markets efficiency and electrification to commercial customers.

p. Demand Side Management Expansion Program.

Well-designed demand response programs are a priority for the District. This program would expand Pepco's proposed demand response programs filed in the Three-Year EEDR plan

and include three sub-programs: (1) Residential Direct Load Control (e.g., Battery Storage, Residential Direct Load Control), (2) EV Chargers, and (3) Residential Smart Thermostat Flexible Load and Management Pilot. The District generally supports these proposed sub-programs but have a few suggestions for the Residential Direct Load Control-EV Chargers (“EV Charger Load Control program”) Program and the Smart Thermostat Flexible Load and Management (FLM) Pilot.

The EV Charger Load Control Program is complementary to the Connect EV programs which provide rebates for Level 2 EV chargers. Thus, when setting incentives to control EV chargers in the Load Control Program, Pepco should account for the rebates provided in the Connect EV programs.

The description of the FLM Pilot program is not clear about what end-use or end-use equipment this program is targeting. The District recommends Pepco explore demand response for other end-uses under this pilot program in addition to air conditioners, which are the main focus of the demand response programs proposed in the Three-Year EEDR plan. In particular, Pepco should test HPWHs because they could offer a critical load flexible resource to reduce winter load in the future as well as to further promote renewable generation by providing thermal storage. Further, Pepco should test different end-use control strategies including pre-cooling and pre-heating strategies using Wi-Fi enabled smart thermostats.

q. Income Eligible Multifamily Program.

The Income Eligible Multifamily Program was approved by Commission Order No. 20663 in FC No. 11148 in 2020. The program started operating in January 2021 with a 3-year program period through the end of 2023. The program targets income eligible multifamily

properties and provides incentives, financing, and technical assistance to deep energy retrofit projects.³⁸

Low-income multifamily buildings represent one important customer segment that has traditionally not been served well by energy efficiency programs. Thus, we expect that this program is playing and will play an important role in serving this customer segment by offering a comprehensive package of energy efficiency measures. However, some of the program offerings overlap with the SEU's offerings that serve low-income multifamily buildings greater than 50,000 square feet. Thus, Pepco needs to coordinate with the SEU for implementing the Income Eligible MF Program. Further, we encourage Pepco and the SEU to discuss how they could coordinate each other to continue serving this underserved market segment after the end of the 3-year program period.

6. Smart Rates Buildings Initiative.

a. Residential TOU Pilot Program.

Pepco recently completed a TOU rate design pilot in Maryland. The Company has not provided justification for why it needs to conduct another study for the District of Columbia. As an alternative to undertaking yet another pilot, Pepco could simply propose a new TOU rate based on the insights from its Maryland analysis. Whatever the case, we stress that any rate-related proposals from Pepco, whether to implement a new rate or initiate a rate pilot, should be consistent with developments in the rate design working group associated with FC1130.

³⁸ Program information is available at: <https://www.pepco.com/WaysToSave/ForYourBusiness/Pages/Income-Eligible-Multifamily-Program.aspx>.

If a DC-specific pilot is indeed warranted, Pepco should approach this process deliberately to ensure that the pilot yields all needed learnings. Pepco should articulate in advance the specific questions that it seeks to answer through this exercise; it should aim to test multiple rate designs, and it should seek to evaluate both the cost reflectivity of potential rate designs and their potential appeal to customers. In other words, in determining the optimal price ratios for time-differentiated rates through the pilot process, Pepco should consider not just cost criteria and potential for inducing load shifting, but also public acceptability. Technically sound rates that lack mass appeal are unlikely to meaningfully contribute to achievement of climate goals or constrain system costs.

Pepco should also ensure that study methodology is sound. In particular, it should ensure that its sample is large enough and appropriately representative of all customers that might eventually enroll in future TOU rates.

While Pepco has indicated that its TOU pilot would be open to just SOS customers, it should not exclude distribution service customers from future TOU rate offerings. Rather, the Company should ultimately deploy a time-differentiated delivery rate that would be open to at least customers who do not purchase energy from the Company.

b. All-Electric Rate Study.

Pepco contemplates re-introducing its former all-electric rate (R-AE), which was designed for customers with electric space heating. Schedule R-AE featured a declining block structure, with a discounted second block in winter relative to the regular Residential rate (Schedule R), but with all other volumetric rates being higher than the corresponding Schedule R rates.

Since the primary aim of Pepco's Climate Solutions 5-Year Action Plan is to support advancement toward the District's ambitious climate goals, the District recommends that the Company instead consider proposing a redesigned electrification rate that would be offered exclusively to customers with efficient electric water and space heating to encourage both efficiency and fuel switching. While a declining block structure might be appropriate, the Company should also consider other rate designs, including either flat or time-differentiated energy rates paired with higher fixed charges. The Company should also consider opportunities for layering a critical peak pricing (CPP) mechanism over a flat or TOU energy rate to permit even lower (non-peak time) energy rates. Finally, the Company should specifically assess the load shapes and load shifting potential for different beneficial electrification technologies to determine whether end-use specific rate designs are warranted.

c. Expand R-PIV Rate to all Residential SOS Customers.

The District registered its concerns with Pepco's earlier proposed revisions to R-PIV in comments filed in FC 1130 on April 17, 2020 and July 27, 2020. In these comments, the District articulated its view of the specific technical issues with the proposed changes to the rate structure.

At this juncture, we do not believe that Pepco should continue with the R-PIV rate or expand it to all customers. Instead, as noted previously, we recommend that R-PIV be replaced with a dedicated TOU rate for just EV load, with both supply and delivery rate components priced on a time-varying basis. We recommend that this new EV rate be available to all customers, including those receiving supply from competitive third parties and SOS customers. For customers not purchasing supply from Pepco, the new EV TOU rate would apply only to delivery rate elements.

d. Dynamic Pricing.

The District encourages the Company to take a broader view of dynamic pricing options. Pepco proposes a new peak time rebate (PTR) program that would be limited to customers enrolled in a demand response program. The Company should also evaluate the viability of Critical Peak Pricing (CPP) rates, which are likely to be more versatile and accessible to customers. As discussed above, CPP in conjunction with either a flat or TOU rate structure could enable the Company to provide more favorable energy rates to customers with efficient electric heating, for example. Unlike PTR, CPP-based rates could also be open to all customers—not just those participating in demand response programs.

7. Local Energy Ecosystem.

a. DER Hosting Capacity Maps and Interconnection Design Programs

The widespread deployment of DERs is crucial in helping the District achieve its climate goals. Aligned with this objective, Pepco plans to improve its current Hosting Capacity Map to allow for greater DER transparency to facilitate more informed DER siting decisions. More specifically, in its 5-Year Action Plan, Pepco stated that it will improve the existing data granularity and quality, expand information collection from interconnected DERs, automate quality control and correction for new interconnections, and improve data processing and storage capabilities for its hosting capacity and heat maps.³⁹ These maps will continue to be published on Pepco’s public website. At a high level, these improvements to Pepco’s DER maps are welcomed. However, given the lack of specifics regarding the proposed map changes, the District provides three specific recommendations: (1) increase the frequency of updates of the

³⁹ Climate Solutions 5-Year Action Plan. Pepco’s 5-Year Plan to Support the District of Columbia’s Climate and Clean Energy Goals. October 8, 2021. p. 71.

hosting capacity map, (2) enhance the functionality of the hosting capacity map, and (3) use the hosting capacity analysis (HCA) to assist with streamlining DER interconnections by improving or automating parts of the technical screening process.

i. Frequency of HCA Map Updates,

Pepco updates a feeder’s HCA results once per month if it has been flagged for one of the following reasons: (1) if 500 kW of additional solar is approved, (2) if load on the feeder increases or drops significantly, or (3) if the feeder configuration changes.⁴⁰ However, Pepco updates its hosting capacity map monthly.⁴¹ DOEE recommends that Pepco update its entire hosting capacity map as close to real-time as possible, but at minimum weekly, and provide daily updates for any feeders that require an updated hosting capacity due to one of the three aforementioned criteria. More frequent HCA data updates will help improve the granularity and transparency of hosting capacity information.

ii. Enhancements to HCA Map Functionality

Pepco’s HCA map gives an indication of how much generation can be added to a feeder before the feeder reaches capacity or other limitations that reduce the reliability of service to electric customers on the feeder. It also provides an indication of substation transformer capacity. Future updates to the HCA map should include a separate map layer for load-based HCA with the option to toggle between generation (e.g., solar PV) and load HCA displays. This is especially important for determining the available hosting capacity for energy storage systems, which can act as both a load when charging, and as a generator when discharging. In the same

⁴⁰ Stanfield, Sky and Stephanie Safdi. 2017. *Optimizing the Grid: A Regulator’s Guide to Hosting Capacity Analyses for Distributed Energy Resources*. Interstate Renewable Energy Council (IREC). p. 42. https://irecusa.org/wpcontent/uploads/2017/12/Optimizing-the-Grid_121517_FINAL.pdf.

⁴¹ Pepco’s Capacity Map Update, filed October 5, 2020.

vein, it would be useful to DER developers to have monthly and hourly feeder load profiles. For example, a customer seeking to site new DER could use a monthly load profile to design a system that limits exports in certain months (e.g., based on seasonal variations) to avoid triggering expensive distributions system upgrades. Additionally, a customer planning to site an energy storage system could use an hourly load profile to design a system that limits its charging during hours of high load, when the grid is less likely to be able to accommodate new loads. The California investor-owned utilities (IOUs) provide both circuit and substation load profiles in their hosting capacity maps. These profiles are derived from 12 months of hourly load information by selecting the maximum and minimum loading values for each hour and each month.

Pepco should provide information on its HCA map about the types of circuit violations (e.g., thermal, voltage, reverse power flow) on feeders that have reached capacity. This would allow customers to understand whether the violation could be addressed through DER system design (e.g., use of an advanced inverter) or would require a more costly distribution system upgrade. Another useful feature would be to have downloadable feeder-level summary data (e.g., as a CSV file) so that DER developers can easily analyze the HCA information using their own tools.

Pepco has a separate Heat Map which provides an indication of how much generation from DERs is currently active, pending (e.g., queued projects), and in aggregate (e.g., the combination of active and queued projects) per feeder. In combination with the HCA map, a point of interconnection can be analysed to approximate the amount of remaining feeder capacity compared to the active and pending PV generation in the queue to help determine the feasibility of interconnection at a particular location. The District recommends merging the information

from the heat map into the HCA map so that developers can have a clearer view of the available feeder hosting capacity. This will allow the customer to better understand if the displayed hosting capacity is likely to be available to new projects.

Finally, the District recommends that the Commission form a hosting capacity technical working group to be able to get feedback from stakeholders on the usefulness of the HCA map and suggestions for its improvement. An example of this is the Joint Utilities of New York, which has a hosting capacity stakeholder working group, which provides updates on the development of the New York utilities' HCA maps and their functionality.⁴²

b. Interconnection Design and Process Streamlining Program.

i. Integrating Hosting Capacity in the Interconnection Process.

In its 5-Year Action Plan, Pepco stated that it recognizes a need to accelerate the interconnection process for smaller sized DERs. The District believes that Pepco should work to accelerate the interconnection process for DERs of all system sizes. To accomplish its objective, Pepco stated that it will establish the capability to automatically process Level 1 (20 kW or less) and potentially Level 2 (2 MW or less) interconnection requests to streamline DER interconnections.⁴³ Pepco can use its HCA to either inform or supplant some fast-track and supplemental review screens. It can also be used to improve the response time for the completion of interconnection feasibility and system impact studies. Several United States utilities are already incorporating HCA into the interconnection process to help automate portions of the technical review and to streamline the interconnection process. Hawaiian Electric Company

⁴² Joint Utilities of New York. "Hosting Capacity". *Resources and Opportunities*. Available at: <https://jointutilitiesofny.org/utility-specific-pages/hosting-capacity>.

⁴³ F.C. 1167, Pepco's Climate Solutions 5-Year Action Plan. Pepco's 5-Year Plan to Support the District of Columbia's Climate and Clean Energy Goals, at pg. 70 (October 8, 2021).

(HECO) has implemented this approach and reports that use of hosting capacity for interconnection screening has substantially increased the amount of rooftop systems that it could fast-track.⁴⁴ California investor-owned utilities (IOUs) have also used hosting capacity information to inform and improve the Rule 21 interconnection process to help expedite the interconnection of DERs.⁴⁵ DOEE continues to support automated interconnection and encourages Pepco to focus on this offering.

ii. Advanced Inverter Working Group for Implementation of IEEE-1547 into Interconnection Rules.

Advanced inverter functionality plays a key role in facilitating higher penetration levels of DERs on the electric system. Although IEEE 1547-2018 (Standard for Interconnection and Interoperability of DERs with Associated Electric Power System Interface) specifies advanced inverter technical capabilities, including but not limited to voltage regulation, voltage and frequency ride-through, ramp rate control, anti-islanding, and the ability to respond to communication signals, it is silent on which inverter functions should be enabled. It is up to the the Commission, with input from the energy companies and stakeholders, to determine the appropriate performance categories for rotating-equipment and inverter-based systems, and the inverter functions which should be activated based on grid needs. Thus, Pepco should follow the direction of the Commission's Advanced Inverter Working Group to determine which advanced inverter settings should be implemented in support of DER interconnection to the distribution system. These settings should prioritize enabling voltage and frequency regulation functionality and the ability of the inverters to communicate with energy management systems. In response to

⁴⁴ U.S. DOE. 2018. *Utility Practices in Hosting Capacity Analysis and Locational Value Assessment*. p. 18.

⁴⁵ Kim, Anne Y. 2021. *California's Grid Modernization Report to the Governor and Legislature*. CPUC. p. 40.

the working group's ultimate recommendations, Pepco should also create a clear timeframe for integrating advanced inverter functionality into its interconnection process, subject to final approval and enforcement by the Commission.

Many states are either in the process of implementing IEEE 1547-2018 or are determining how best to implement it in their interconnection rules. For example, California has a smart inverter working group which has pursued the development of advanced inverter functionality over three phases: (1) autonomous functions, (2) communication protocols, and (3) advanced functions. New Mexico is in the process of revising its interconnection rules and has an Advanced Inverter Working Group working on adoption on the latest IEEE 1547 requirements so that the process of developing the advanced inverter functionality is transparent and open to all interested parties. Pepco should continue to work through the Commission's existing channel.

c. Virtual Power Plant Demonstration Program

Pepco proposed a virtual power plant (VPP) demonstration project that would use a control platform to manage 1 MW/3 MWh of residential and commercial behind-the-meter battery energy storage systems (BESS) to provide grid services, including bidding the BESS into the PJM capacity, energy, or ancillary service markets, during defined periods.⁴⁶ Pepco has not clearly outlined the program participation guidelines, including how revenues from the VPP's provision of grid services in the PJM market will be compensated to customers or returned to ratepayers. The District believes third parties may be better suited to provide VPP services. It is time for the Commission to establish clear rules for DER aggregation, so that third-party developers can take the lead to provide VPP related grid services. This is aligned with the VPP

⁴⁶ Climate Solutions 5-Year Action Plan. Pepco's 5-Year Plan to Support the District of Columbia's Climate and Clean Energy Goals. October 8, 2021. p. 69.

pilot project which the Pilot Projects Governance Board proposed and the implementation of FERC Order No. 2222.⁴⁷

Expanding on this point, the Commission needs to provide clear guidelines for how DERs that provide grid services will be compensated. Currently, net-metering is available to residential and commercial customer-generators in the District of Columbia. With increasing levels of DER deployment in the District of Columbia, similar policies and reasonable tariff rates for compensating DERs will have to be developed based on spatiotemporal considerations. As solar PV interconnection increases and advanced inverter functionality is adopted, inverter-based solar PV systems will have to be compensated for the grid services they provide, such as reactive power compensation, which contribute to grid stability and can result in system-wide cost and performance efficiencies. Moreover, individual or aggregated BESS will have to be compensated for the grid services they provide, such as resiliency to outages, increased grid hosting capacity, and potential deferral of distribution capacity investments. The Commission can consider these compensation frameworks in concert with the ongoing Value of DER study.

d. Connect Communities.

i. Resilience Hubs Program.

The District opposes the inclusion of resilience hubs, as defined and described by Pepco, in Pepco's 5-Year Action Plan. As DOEE made clear during the MEDSIS process, Resilience Hubs are a District-led program and require more than simply uninterruptible power from a battery storage system and on-site generation. The District defines Resilience Hubs as follows:

⁴⁷ FERC Order No. 2222: Fact Sheet. *A New Day for Distributed Energy Resources*. September 17, 2020. Available at: <https://www.ferc.gov/media/ferc-order-no-2222-fact-sheet>.

Resilience Hubs are government designated community-serving facilities augmented to support residents and coordinate resource distribution and services before, during, or after a disruption. Key components of a hub include the following:

They are sited and designed with deep community-input. Ensuring community leaders and community-based organization are involved from the very beginning of the process and have an element of ownership over the site selection and design is essential.

They leverage trusted facilities that can be used year-round as neighborhood centers for community-building activities. Hubs recognize that disaster preparedness involves investing in community and preparing residents before a disruption occurs.

Site should be in good-working order, accessible, and be resourced to stay functional during extreme events. This may involve retrofits to support solar, energy storage, ADA compliance, and weatherproofing.

In addition to providing shelter and electricity during extreme events, hubs should maintain a supply of needed resources including water, food, ice, and basic medical supplies.

When designed well, Resilience Hubs can equitably enhance community resilience while reducing greenhouse gas emissions and improving local quality of life. They have the potential to reduce burden on local emergency response teams, improve access to public health initiatives, foster greater community cohesion, and increase the effectiveness of community-centered institutions and programs.⁴⁸

Pepco's proposal sets the utility in the lead role developing community resources, which require much more than electric supply, and which go well beyond the company's remit as a regulated investor-owned utility. Pepco should limit its engagement with Resilience Hubs to streamlining the interconnection of government-designated Hubs and to developing a tariff suitable for the value provided, and costs incurred, by islandable microgrids and Resilience Hubs. The District is the entity that is supporting the development of Resilience Hubs and it will continue to play that role.

⁴⁸ Formal Case No. 1130, Final Report v1.0 of the PSC MEDSIS Stakeholder Working Groups, at pgs. 162-164.

The importance of equity in grid planning and resilience, and how that is reflected (or not reflected) in Pepco’s plans, is discussed further later in these comments.

ii. Mt. Vernon Connected Community Roadmap and Demonstration Project Program.

This community consultation and design process is underway, so the District has no specific comments about it at this time. NWAs are also discussed later in these comments.

e. Accelerating Renewables Initiative.

i. Renewable Energy Consumption Rates “Green” Rider Expansion Program.

Pepco proposes expanding availability of a 100-percent renewable energy rider to all residential SOS customers, rather than only participants in the whole home TOU rate (R-PIV), and is considering extending it to commercial SOS customers. The District generally supports such expansion because it provides an alternative way for District of Columbia residents and businesses to accelerate their adoption of renewable energy while remaining within the SOS framework. The District encourages Pepco to coordinate customer education regarding this rider with its customer outreach regarding TOU or dynamic rates (while being cognizant of the appropriate relationship between the utility’s roles in energy delivery and as a supplier). As the proportion of SOS service that is procured through PPAs with renewable resources grows (as discussed below), there are also opportunities for customers to couple increasingly direct renewable energy consumption with increased dynamism in their loads to transition toward being greater participants in the clean electricity system.

ii. SOS Contracting Program.

This is an existing program, and Pepco has not proposed changing it in this 5-Year Action Plan. We share the Commission’s sentiment that “[i]f we can minimize the risks to

ratepayers, the Commission expects to expand the percentage beyond five (5) percent of the District's SOS load served by long-term renewable PPAs."⁴⁹

The District looks forward to examining the results and impacts of this program as it comes to fruition over the next few years. However, the lack of transparent progress on this effort is disappointing. As stated in our comments in FC1017:

Without additional information, it is impossible for interested stakeholders to assess what, if any, progress is being made in this important initiative intended to transition the District of Columbia off fossil fuel use. In addition, the District is very concerned that Pepco's monthly letter-filing practice will significantly delay implementation of clean energy SOS supply in the District of Columbia. Pepco has been on notice of its requirement to submit an executed clean energy PPA since October 2020 but has been kicking this requirement down the road for over a year now.⁵⁰

In those comments, the District requested the Commission issue an order directing Pepco to submit a PPA by a certain date.

8. Infrastructure.

a. Connect Data Initiative.

The District appreciates the effort Pepco put forward in creating a Connect Data Initiative to enhance data connection pathways on the grid that will enable greater adoption of DERs through data-based and analytical tools. The District addresses areas for clarification and suggestions for improvement to the proposed Connect Data Initiative programs in the following sections. These comments do not assess whether investments should be made in these advanced

⁴⁹ F.C. 1017, Order No. 20327, Paragraph 18, (*rel.* April 9, 2020)

⁵⁰ Formal Case No. 1017 – In the Matter of the Development and Designation of Standard Offer Service in the District of Columbia” Letter from Office of the Attorney General to Pepco (May 25, 2022.)Available at: <https://edocket.dcpsec.org/apis/api/Filing/download?attachId=169192&guidFileName=5aca1cb7-ca24-49cd-b5e3-30f95df27f49.pdf>

grid technologies, but rather assesses how these technologies can enhance DER integration, if approved.

i. Advanced Distribution Management System Program

Pepco states that it will establish an ADMS technology platform, which is already in flight, to support a suite of distribution control, management, and optimization capabilities. It also notes that the ADMS program will be implemented in three stages, with Stage I implementation occurring within a five-year period, and Stages II and III building on the platform to increase functionality, standardize business processes, and enable advanced grid capabilities, including a Distributed Energy Resource Management System (DERMS).⁵¹ ADMS may include various system applications such as an Outage Management System (OMS), Distribution Supervisory Control and Data Acquisition (D-SCADA), Geographic Information System (GIS), and DERMS, among other advanced applications. Advanced AMDS applications include Fault Location, Isolation, and Service Restoration (FLISR) and Integrated Volt/VAR Optimization (IVVO). FLISR uses software and automated switching devices to decrease the duration of, and number of customers affected by, any individual outage.⁵² IVVO is an application that automates and optimizes the operation of the distribution voltage regulating and Var control devices to reduce electrical losses, electric demand, and energy consumption, and provides increased distribution system injection capacity to host DER.⁵³ Pepco should clearly identify for its ADMS program: (1) concrete and measurable program goals, (2) a clear roadmap with associated timelines for implementation and ongoing development, and (3) the benefits

⁵¹ Climate Solutions 5-Year Action Plan. Pepco's 5-Year Plan to Support the District of Columbia's Climate and Clean Energy Goal, pg. 84 (October 8, 2021).

⁵² Public Service Company of Colorado, Xcel Energy, Distribution System Plan, May 2, 2022, p. 16.

⁵³ Public Service Company of Colorado, Xcel Energy, Distribution System Plan, May 2, 2022, p. 16.

above and beyond what is currently being done. Throughout the process of operationalizing the integration of this technology, Pepco should enhance customer and stakeholder engagement and efforts to market the benefits of its DER Connect Data initiative.

Concrete and measurable goals are needed to evaluate whether the program objectives are being adequately met and how well the goals are aligned with District policy mandates. Pepco must also have clear reporting metrics to demonstrate how it is achieving these objectives. Moreover, the Commission should create a transparent stakeholder process that meaningfully engages stakeholders and enables them to provide feedback on whether the program's objectives are being satisfactorily met. Pepco should also make the data obtained from the implementation of these advanced DER technologies publicly available.

A clear roadmap is essential for determining the timeline by which the three stages will be implemented and for tracking and accountability purposes. It is also helpful for determining when other applications like DERMS and Advanced Metering Infrastructure (AMI) will be integrated into the ADMS. The ADMS/DERMS implementation schedule should be accelerated and coordinated with the smart inverter interconnection efforts, the planning and forecasting system program efforts, advanced hosting capacity analysis, and the locational value analysis, since these all feed into Pepco's integrated distribution planning efforts.

The benefits above and beyond what is currently being done is important for establishing a program baseline and conducting a cost-benefit analysis of the program. Pepco should clearly explain the technical and economic benefits of implementing the ADMS technology with respect to their program goals and metrics. Pepco should conduct market research to learn from the best practices of other electric utilities that are implementing ADMS for purposes of increased DER

integration and conduct a comprehensive cost-benefit analysis to show the incremental value of the system above the business-as-usual scenario. This analysis will also be useful for assessing the incremental value of advanced ADMS applications like FLISR and IVVO.

iii. Advanced DER Analytics Program.

Pepco plans to create a computing platform with advanced analytics capable of analyzing large amounts of data to capture DER performance to be synthesized into a centrally managed database to enhance DER integration, improve operations (e.g., monitor power quality and perform predictive load management), and augment load forecasting.⁵⁴ Pepco should ensure that the Advanced DER Analytics Program is well-integrated with its planning and forecasting system program, its GIS program, and its ongoing hosting capacity map updates. GIS is a data input for granular load and DER forecasts, and advanced analytics are useful for incorporating probabilistic methods into load and DER forecasts. These granular load and DER forecasts also tie into the development of a forecasted hosting capacity analysis for high-DER-penetration scenarios and for the identification of prospective constraints to DER deployment. Thus, Pepco should ensure that the implementation plans for these Connect Data Initiative programs are well-coordinated and integrated. Additionally, to the extent possible, all the data that is generated from the advanced analytics program should be made publicly available for use by DER developers and other stakeholders who could benefit from access to this data.

iv. Planning and Forecasting System Program and GIS & Data Digitization and Optimization Program.

Pepco's Planning and Forecasting System Program, which is already in flight, incorporates historical data and forecasts to enable temporal and spatial analysis of the future

⁵⁴ 5-year Action Plan. Page 85.

impact of DER technologies on the distribution grid.⁵⁵ Pepco is also in the process of reviewing and updating its existing GIS information through its GIS and Data Digitization and Optimization program. This program will standardize the business processes, data model, and software in Pepco's GIS database.⁵⁶ As previously mentioned, it is important for the forecasting system program to be well coordinated and integrated with the Advanced DER Analytics and GIS programs since they will improve the quality of the underlying datasets used in the forecast. To further improve the accuracy of its forecasting system, Pepco should integrate its AMI data into its bottom-up load forecasts, enhancing its ability to conduct predictive load modeling and to help identify optimal locations for dispatchable DER. Pepco should incorporate this data into its hosting capacity map to give the public a better understanding of the optimal locations for DER interconnection and to identify future distribution system constraints where system upgrades may be needed.

b. Connect Infrastructure Initiative.

i. Radial Hosting Capacity Improvements.

Pepco states that this program will allow it to initiate a proactive evaluation and resolution of interconnection constraints due to forecasted DER needs in specific parts of the system, enabling Pepco to analyze, plan, engineer, and execute hosting capacity improvements prior to constraints emerging that prevent customer interconnections.⁵⁷ Pepco's Hosting Capacity Maps and Interconnection Design Programs, GIS Program, Planning and Forecasting System Program, ADMS Program, and Advanced DER Analytics Program are all interrelated and

⁵⁵ Ibid. p. 86.

⁵⁶ Ibid. p. 87.

⁵⁷ Ibid. p. 89.

directly support the Radial Hosting Capacity Improvements Program. A hosting capacity analysis can be used as a tool for integrated distribution planning and to identify potential future constraints and proactive upgrades in support of greater DER integration. The GIS and the Advanced DER Analytics Programs can serve as data inputs to augment the granular load and DER forecasts developed in the Planning and Forecasting System Program. The 8760 forecasted load and DER curves for high-DER-penetration scenarios are direct inputs to the development of a forecasted HCA, which helps to identify prospective constraints to DER deployment. These forecasted HCA results can be used to enhance the functionality of Pepco's hosting capacity maps as part of its Hosting Capacity Maps Program, assisting developers in identifying locations where distribution system upgrades are likely. Coordination and integration of the HCA with the deployment of the ADMS/DERMS will enable advanced HCA under normal and abnormal circuit configurations, reflecting upstream constraints at the substation and bulk power system levels. It will also allow for near-real-time solutions to hosting capacity and a better reflection of operational flexibility. Coordinating these various programs so that they can be effectively integrated, systematically deployed, and leveraged for the Radial Hosting Capacity Improvements Program will vastly simplify Pepco's task of identifying and evaluating areas on the radial distribution system where hosting capacity improvements are most needed, both at present and in the future. This will enable Pepco to quickly prioritize locations on the grid where it will proactively resolve radial distribution system upgrades for improved hosting capacity, thereby increasing the interconnection of DERs.

c. NWAs.

The 5-Year Action Plan references Pepco's requirements under Order 20286 in Formal Case No. 1130 to solicit non-wires solutions to address capacity constraints through the

distribution system planning (DSP)/NWA process.⁵⁸ This same section addresses distribution system planning. By example, the five-year plan highlights the Mt. Vernon BESS demonstration project that will defer the need for a fourth transformer at the Mt. Vernon substation.⁵⁹ Pepco also provides a description of the Ward 8 Investment Deferral Program that consists of two projects: the Resilient Homes Demonstration Project and the Congress Heights Battery Demonstration Project.⁶⁰ While all three projects highlight NWA solutions, both the Mt. Vernon and Congress Heights battery projects are Pepco-owned BESS solutions. While the 5-Year Action Plan highlights these solutions to specifically identified constraints, DOEE recommends that the plan should be more explicitly linked as both an input and outcome related to Formal Case 1130.

We urge Pepco to incorporate lessons learned from NWA efforts across the country, such as the Brooklyn Queen Demand Management Project in New York City, with regard to scoping and soliciting third-party contributions to NWAs. Best practices include identifying the services and times required (rather than the technologies used to provide those services); providing geographic specificity commensurate with the grid constraint being relieved (e.g., identifying specific feeders where the issue arises, or where solutions would be more valuable); soliciting solutions with sufficient lead time to allow providers to develop solutions; and using a benefit-cost framework that accounts for all benefits and costs, not only those for the electric system alone. That is, if two NWA portfolios can address a grid issue, the one that provides greater net societal benefit should be preferred.

⁵⁸ Ibid. p. 91.

⁵⁹ Ibid. p. 90.

⁶⁰ Ibid. p. 92.

The District notes that this first workshop of the second cycle of the DSP/NWA Process was recently held on May 5, 2022.⁶¹ The accompanying slide deck noted that the Load Impact Factors Request for Information (RFI) will be issued for in the Summer of 2022 and will inform the 2023 planning cycle.⁶² Pepco has identified that the 2022/23 Locational Constraint is currently the Alabama Avenue substation.⁶³ Pepco also states that it does not have a preference between utility and third-party solutions, although this stated indifference has not yet been demonstrated in Pepco's process and evaluation criteria.⁶⁴ It is important to note that some types of NWA solutions cannot be owned by Pepco under District law. The current DSP/NWA Process is focused on a need identified for 2022/23. The District recommends that the 5-year and 30-year climate plans be incorporated in the DSP/NWA Process through the identification of future needs at specific feeders and/or substations. The earlier identification of potential projects may help third-party providers to develop more cost-effective bids with longer lead times.

9. Equity and inclusion.

The District has acknowledged that people of color and people experiencing poverty disproportionately experience the impacts of pollution and climate change.⁶⁵ Low-income households in DC experience a median energy burden that is 4.5 times higher than non-low income households, and Black/Hispanic households experience an energy burden that is 45 percent greater than that of white (non-Hispanic) households. Factors such as age, building age,

⁶¹ Pepco. 2022/23 DSP/NWA Process: Stakeholder Workshop #1. May 5, 2022. Available at: <https://edocket.dcpso.org/apis/api/Filing/download?attachId=168961&guidFileName=72833047-ba90-45ee-9ac9-917fdc462759.pdf>.

⁶² Ibid. Slide 9.

⁶³ Ibid. Slide 14.

⁶⁴ Ibid. Slide 12.

⁶⁵ Department of Energy and Environment. *District of Columbia Equity Framework*. October 13, 2021. Available at: https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/DOEE%20Equity%20Framework_Oct%202021.pdf.

and education level also factored into higher energy burden for households in DC.⁶⁶ To reduce this inequity, policies must directly support these groups. Targeted programs have the potential to provide greater equity in the District of Columbia.

DOEE defines equity as “the guarantee of fair treatment, advancement, opportunity and access for all individuals while striving to identify and eliminate barriers that have prevented the full participation of some groups and ensuring that all community members have access to community conditions and opportunities to reach their full potential and to experience optimal well-being and quality of life.”⁶⁷ Correspondingly, the DOEE defines racial equity as “the elimination of racial disparities such that race no longer predicts opportunities, outcomes, or the distribution of resources for residents of the District, particularly for persons of color and Black residents.”⁶⁸ To help achieve greater equity, the District is committed to meeting its equity goals.

These goals include:

- § 34–1501.01, which finds that “it is in the public interest that the Department enables the development and deployment of community renewable energy facilities... to facilitate market entry for all potential subscribers, while prioritizing those persons most sensitive to market barriers.”⁶⁹
- The Solar for All Program, which seeks “to increase the access of seniors, small local businesses, nonprofits, and low-income households in the District to the benefits of solar power.”⁷⁰
- The Racial Equity Achieves Results (REACH) Amendment Act of 2020, which requires the Mayor to use racial equity tools to “identify clear strategic initiatives, objectives, and measurable outcomes,” to develop metrics to

⁶⁶Drehobl et al. *An Examination of District Residents’ Experiences with Utility Burdens and Affordability Programs*. March 2021. Available at: https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/Report_An%20Examination%20of%20District%20Residents'%20Experiences%20with%20Utility%20Burdens%20and%20Affordability%20Programs.pdf, p. 19

⁶⁷ Clean Energy Act Implementation Working Group. *Framework for Compliance with the Clean Energy Omnibus Amendment Act of 2018 (the CEDC Act) of the District of Columbia*. Available at: <https://edocket.dcpsc.org/apis/api/Filing/download?attachId=143219&guidFileName=9a60d7a2-b795-47e2-b65f-639ce2fa4c96.pdf>, p. 24

⁶⁸ Ibid.

⁶⁹ D.C. Law 34–1501.01. Available at: <https://code.dccouncil.us/us/dc/council/code/sections/34-1501.01>.

⁷⁰ D.C. Law 8–1774.16 (Solar For All Program). Available at: <https://code.dccouncil.us/us/dc/council/code/sections/8-1774.16.html>.

“measure progress in redressing disparate social and economic outcomes in the District based on race, sex, and ethnicity” and to “track and measure how programmatic and policy decisions benefit or burden individuals based on race, sex, or ethnicity.”⁷¹

Pepco can help alleviate inequity within the District by further incorporating equity into its portfolios and programs outlined in its 5-Year Action Plan.

Pepco’s 5-Year Action Plan is guided by its filed Climate Solutions Plan, which lays out five guiding principles that “drive and inspire Pepco’s Climate Solutions Plan’s portfolio development.”⁷² Equity & Inclusion is one of these 5 principles. In the plan, Pepco describes how it plans to incorporate equity into its four broad portfolios.

The first portfolio Pepco addresses in its 5-year Action Plan is transportation. Pepco lays out a portfolio of programs that will deploy charging stations and lower charging costs through rate design in LMI communities.⁷³ The programs that directly include provisions for LMI customers are the Multi-Unit Dwelling Charging Program and the Rideshare & Taxi Charging Hubs Program. Both fully cover the make-ready costs for charging stations located in LMI communities. Pepco could build on this effort by creating program-specific goals requiring specific amounts of spending to benefit historically marginalized communities. This could include utilizing tools such as the District Department of Transportation’s Equity Assessment Tool, which could help Pepco identify and target communities with “low proximity to frequent transit, low access to jobs and destinations and safety risks to identify where transportation

⁷¹ D.C. Law 23-181. Available at: <https://code.dccouncil.us/us/dc/council/laws/23-181>.

⁷² Climate Solutions Plan p. 14-15

⁷³ 5-Year Action Plan p. 17

improvements are needed.”⁷⁴ Similarly, as discussed in the REACH Amendment Act of 2020⁷⁵ and the DOEE Equity Framework,⁷⁶ Pepco should conduct Racial Equity Impact Assessments (REIAs). These assessments are a “systematic examination of how different racial and ethnic groups will likely be affected by a proposed action or decision.”⁷⁷ Using REIAs can reduce the unanticipated and adverse consequences of proposed policies and programs.⁷⁸ Pepco should use tools like these to develop achievable targets related to transportation pollution, access to charging, and charging affordability these neighborhoods, and should publish its progress towards each goal on its website regularly.

The Decarbonizing Buildings portfolio includes programs that will focus on helping increase equity in the District of Columbia. Pepco mentions that the initiatives included in the 5-Year Action Plan “are designed to promote equity and inclusivity through incentive programs for under-resourced communities to switch to efficient electric devices” and that a wider “availability of rate designs tailored to electric end-uses will improve in-home economics of fuel switching, greatly contributing to the principle of affordability.”⁷⁹ Pepco has already laid out several programs directly targeting LMI customers under its DC Energy Efficiency Program Initiative. These include the LMI Efficient Products Program, the LMI Home Energy Assessment Program, and the Low-Income Home Weatherization Pilot Program. These

⁷⁴ moveDC. “Mapping Transportation Needs”. Available at: <https://movedc-dcgis.hub.arcgis.com/pages/mapping-transportation-needs>.

⁷⁵ D.C. Law 23-181.

⁷⁶ Department of Energy and Environment. *District of Columbia Equity Framework*. October 13, 2021. Available at: https://doee.dc.gov/sites/default/files/dc/sites/d DOE/service_content/attachments/DOEE%20Equity%20Framework_Oct%202021.pdf.

⁷⁷ *Ibid.* p. 19.

⁷⁸ More information on REIAs is available here: https://www.raceforward.org/sites/default/files/RacialJusticeImpactAssessment_v5.pdf

⁷⁹ 5-Year Action Plan. p. 40.

programs would provide rebates, education, and weatherization. We appreciate that Pepco has taken an effort to outline how it will better reach customers in these programs, including working with “working with dollar stores and smaller retailers” to ensure LMI customers have better access to products in the efficient products program, and coordinating with SEU as part of the LMI Home Energy Assessment Program “to engage community groups and property owners with whom each has ongoing relationships.”⁸⁰ The Connect Homes and Buildings Initiative also includes programs directly targeting LMI customers. These include the Dedicated LMI Electrification (Owner-Occupied) Program, the Dedicated LMI Electrification (Rental Properties) Program, and the Income Eligible Multifamily Program. The first two programs directly assist LMI customers with electrification, while the latter helps multifamily building owners reduce energy usage.

Pepco could refine its approach to this effort by directly teaming up with District Government and other organizations to provide easier access to more encompassing home upgrades and take advantage of existing program delivery approaches. Upgrades such as mold removal, installing carbon monoxide alarms, and general repairs could go a long way towards improving quality of life, and are not directly related to Pepco’s particular expertise. For example, it may be more effective for Pepco to support the existing Weatherization Assistance Program, which addresses these issues, rather than create a potentially duplicative effort. Similarly, Pepco could contribute funds to the SEU’s LMI electrification activities instead of launching its own program. Where Pepco supports programs run by others, it should receive an appropriate share of the regulatory credit for the programs’ impacts.

⁸⁰ 5-Year Action Plan. p. 44-45.

The third portfolio in the 5-Year Action Plan is the Activating the Local Energy Ecosystem Portfolio. This portfolio supports DER adoption throughout the District of Columbia. The Connect Communities Initiative includes 2 programs (the Resilience Hubs Program and the Mt. Vernon Connected Community Roadmap and Demonstration Project Program). As we discussed earlier in these comments, Resilience Hubs are appropriately led by the District government, rather than Pepco, and Pepco should change its approach to supporting these Hubs to reflect its appropriate support role. The District believes there is more room for equity to be included in this portion of the portfolio. Our recommendations include providing additional incentives and support for microgrids for LMI communities and community education on the benefits of resilience. Pursuing these recommendations could help the District achieve further equity and progress towards the objectives of the aforementioned § 34–1501.01 and the Solar for All Programs.

The last portfolio detailed in Pepco’s 5-Year Action Plan is the Enhancing Infrastructure for Climate Solutions Portfolio. This section of the portfolio discusses several grid modernization programs and pilots Pepco plans to fund in order to support a more reliable and resilient grid. While making these investments, we suggest that Pepco prioritize investments in LMI and historically disadvantaged communities in order to ensure that they equally receive the benefits of a reliable grid. Specifically, we suggest that Pepco keeps track of metrics (such as Customer Average Interruption Duration Index (CAIDI), Customer Average Interruption Frequency Index (CAIFI), System Average Interruption Duration Index (SAIDI), Customers Experiencing Multiple Interruptions (CEMI, with a threshold of three interruptions in 12 months)) with geographic specificity and ensure that LMI and other historically disadvantaged

customers receive similar, if not better improvements from the investments in the proposed programs.

While the 5-Year Action Plan does provide programs that promote greater equity within DC, the District believes that Pepco could take additional and more measurable steps to more explicitly support a more equitable grid. In summary, these include:

1. Collaborating with community partners for a wider variety of home improvements/upgrades
2. Utilizing tools like DDOT's Transportation Equity Assessment Tool and REIAs to better target certain communities and to create goals that lead to measurable improvements in disadvantaged communities
3. Providing additional incentives and support for enabling microgrid interconnection for LMI communities and community education on the benefits of resilience
4. Developing measurable equitable goals and regularly updating progress towards these goals publicly

10. Further needs for Pepco's Action Plan.

As previously discussed, Pepco's 5-Year Action Plan is not developed as the implementation of a scenario selected for its cost-effectiveness in meeting the District's policy objectives. As a result, the 5-Year Action Plan is not grounded in the scale and scope of the overall energy transition required for the District to meet its objectives. Specifically, the 5-Year Action Plan contains no information regarding how the number of participants in each of Pepco's proposed programs compares with the number of similar customers who would need to undertake the actions promoted by a given program to be on track to reduce emissions 50 percent by 2032 or to carbon neutrality by 2050. How many homes and commercial buildings will require electrical panel or service line upgrades to accommodate an efficient electric heating and transportation future, and how does that compare with the scale and design of the Distribution

System Power-Up Rebate Program and Rebates for Behind the Meter Heavy-Up Program? The same kind of questions could be asked for each of Pepco's proposed programs. Each will also require alignment with the actions of other program administrators, such as the SEU.

By focusing on programmatic impacts, Pepco's 5-Year Action Plan also fails to place the transition in end-use demand and distributed energy resources into a broader picture for the overall transition on the grid. A better plan would show how Pepco's actions smooth and facilitate the development of the grid and electric demands consistent with District policy. The programmatic focus also constrains the BCA, which is less useful as a result. The BCA analysis assumes that each program ends within 5 years, rather than showing how the programs grow or change to meet the changing market needs in the late 2020s and into the 2030s.

11. Load forecasting and capital budgets.

Pepco currently files its Annual Consolidated Report under Formal Case 1119. The 2022 Annual Consolidated Report follows previous reports in detailing Pepco's comprehensive plan for the planning, design, and operations of Pepco's distribution system within the District of Columbia.⁸¹ A quick search of the 2022 Annual Consolidated Report indicates that term "climate change" occurs in three instances within the 320-page report and those references were made in the context of Pepco's Resupply Plan.⁸²

The District recommends that Pepco explicitly link both the 5-year and 30-year plan to Pepco's Comprehensive Plan documented in the Annual Consolidated Reports. Two specific areas that Pepco should focus on include load forecasting and capital budgets. On load forecasting, Pepco

⁸¹ Pepco. *2022 Consolidated Report*. April 2022. Available at: <https://edocket.dcpsec.org/apis/api/Filing/download?attachId=168274&guidFileName=40869771-941a-4f64-8e53-f874bd1262a2.pdf>.

⁸² *Ibid.* Attachment F- Downtown Resupply. p. 1 of 3.

describes the components of its load forecasting process and customer growth projections.⁸³ In future Annual Consolidated Reports, DOEE recommends that Pepco should describe how both the 5-year and 30-year climate plans will impact and inform Pepco's short-term load forecast (Years 1-3) and long-term load forecast (Years 4-10). The load forecast will also impact the identification of NWA solutions as part of Formal Case No. 1130 detailed above. On the issue of capital budgets, Pepco currently summarizes the current five-year capital budget in Table 10 of the 2022 Consolidated Report.⁸⁴ Currently, Pepco's five-year overhead and underground distribution projects capital budget is projected to be \$385 million between 2022 through 2026. The District recommends that Pepco describes how both the 5-year and 30-year climate plans will impact and interact with Pepco's distribution capital budgets.

III. CONCLUSIONS AND RECOMMENDATIONS

The District appreciates Pepco's filings in this docket and its evident desire to assist in meeting the District's policy objectives. Many of the programs that Pepco has suggested in its 5-Year Action Plan are promising, and the District looks forward to working with Pepco to amend and refine its proposals to develop a set of actions that, when viewed as part of the portfolio of approaches taken by many actors in the District of Columbia, put us on a path to achieving GHG and other policy goals. A necessary step to that success is evaluating the portfolio in a benefit-cost analysis that aligns with the CEAIWG approach and puts the 5-Year Action Plan within a more detailed long-term framework. The District urges Pepco to:

⁸³ Ibid. Sections 1.1 through 1.9.

⁸⁴ Ibid. p. 38.

- promptly complete the scenario and planning analysis required by Paragraph 49 of Order 20754;
- utilize a benefit-cost analysis based on the CEAIWG majority approach;
- prioritize its Action Plan activities where it provides a unique advantage in meeting policy goals, such as in the development of a fully modernized and transparent approach to distribution grid investment, operations, and planning; and
- coordinate with and support the activities of other entities best suited to taking leadership roles in areas outside of Pepco's core role and strength.

The District thanks the Commission for establishing the opportunity to review Pepco's plans and urges the Commission to act, when necessary, to ensure that it receives the information and analysis required for it to set a framework that all stakeholders can work with to shape our shared future.

CERTIFICATE OF SERVICE

I certify that on June 17, 2022, a copy of the District of Columbia Government's Consolidated Initial Comments on the Potomac Electric Power Company's Climate Solutions Plan Filings was electronically delivered to the following parties:

Christopher Lipscombe, Esq.
General Counsel
Public Service Commission of the District of Columbia
1325 G Street, NW, Suite 800
Washington, D.C. 20005
clipscombe@psc.dc.gov

Moxila A. Upadhyaya, Esq.
Venable LLP
600 Massachusetts Avenue, NW
Washington, D.C. 20001
MAUpadhyaya@venable.com

Erin Murphy, Esq.
Environmental Defense Fund
1875 Connecticut Ave. NW, Suite 600
Washington, D.C. 20009
emurphy@edf.org

Frann G. Francis, Esq.
Apartment of Office Building Assoc.
1025 Connecticut Ave. NW, Suite 1005
Washington, D.C. 20036
ffrancis@aoba-metro.org

Eric J. Wallace, Esq.
GreeneHurlocker, PLC
4908 Monument Ave., Suite 200
Richmond, VA 23230
ewallace@greenehurlocker.com

Kristi Singleton, Esq.
Dennis Goines
U.S. General Services Administration
1800 F Street, NW #2016
Washington, D.C. 20405
Kristi.singleton@gsa.gov
dgoinspmg@verizon.net

Andrea Harper, Esq.
Associate Counsel
Potomac Electric Power Company
701 Ninth Street, NW
Washington, D.C. 20068
ahharper@pepcoholdings.com

Susan Stevens Miller, Esq.
Earthjustice
1625 Massachusetts Ave., NW
Suite 702
Washington, D.C. 20036
smiller@earthjustice.org

Cathy Thurston-Seignious, Esq.
Washington Gas Light Company
1000 Maine Street, SW, Suite 700
Washington, D.C. 20024
cthurston-seignious@washgas.com

Sarah Kogel-Smucker, Esq.
Office of the People's Counsel
1133 15th Street, NW, Suite 500
Washington, D.C. 20005
ssmucker@opc-dc.gov

Nina Dodge
D.C. Climate Action
6004 34th Place, NW
Washington, D.C. 20015
ndodge432@gmail.com

Barbara Mitchell, Esq.
Assistant General Counsel
District of Columbia Water & Sewer
5000 Overlook Avenue, SW
Washington, D.C. 20032
barbara.mitchell@dcwater.com

Larry Martin
GRID 2.0
POB 14040
Washington, D.C. 20044
lmartinc@gmail.com

/s/ Brian Caldwell
Brian Caldwell