

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
OFFICE OF THE ATTORNEY GENERAL



**BRIAN L. SCHWALB**  
**ATTORNEY GENERAL**

**Public Advocacy Division**  
**Social Justice Section**

**ELECTRONIC FILING**

January 12, 2024

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

**Re: Formal Case No. 1176 – In the Matter of the Application of Potomac Electric Power Company for Authority to Implement a Multiyear Rate Plan for Electric Distribution Service in the District of Columbia.**

Dear Ms. Westbrook-Sedgwick:

On behalf of the District of Columbia Government, please find the enclosed Direct Testimony of Courtney Lane (Exh. DCG (A)), along with supporting exhibits, in the above-captioned proceeding. If you have any questions regarding this filing, please do not hesitate to contact the undersigned.

Respectfully submitted,

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cc: Service List

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

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**IN THE MATTER OF THE APPLICATION )  
OF THE POTOMAC ELECTRIC POWER )  
COMPANY FOR AUTHORITY TO )  
IMPLEMENT A MULTIYEAR RATE PLAN )  
FOR ELECTRIC DISTRIBUTION SERVICE )  
IN THE DISTRICT OF COLUMBIA )**

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**Formal Case No. 1176**

**Direct Testimony of  
Courtney Lane**

**On Behalf of  
The District of Columbia Government**

**January 12, 2024**

**Exhibit DCG (A)**

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1     **I. INTRODUCTION AND QUALIFICATIONS**

2     **Q     Please state your name, title, and employer.**

3     A     My name is Courtney Lane. I am a Principal Associate at Synapse Energy Economics  
4           (Synapse), located at 485 Massachusetts Avenue #3, Cambridge, MA 02139.

5     **Q     Please describe Synapse Energy Economics.**

6     A     Synapse is a research and consulting firm specializing in electricity and gas industry  
7           regulation, planning, and analysis. Our work covers a range of issues, including economic  
8           and technical assessments of demand-side and supply-side energy resources; energy  
9           efficiency policies and programs; integrated resource planning; electricity market  
10          modeling and assessment; renewable resource technologies and policies; and climate  
11          change strategies. Synapse works for a wide range of clients, including attorneys general,  
12          offices of consumer advocates, public utility commissions, environmental advocates, the  
13          U.S. Environmental Protection Agency, the U.S. Department of Energy, the U.S.  
14          Department of Justice, the Federal Trade Commission, and the National Association of  
15          Regulatory Utility Commissioners. Synapse has over 40 professional staff with extensive  
16          experience in the energy industry.

17    **Q     Please summarize your professional and educational experience.**

18    A     I have 19 years of experience in energy policy and regulation. At Synapse, I work on  
19          issues related to utility regulatory models, grid modernization, benefit-cost assessment  
20          frameworks, and performance incentive mechanisms. Prior to working at Synapse, I was  
21          employed by National Grid as the growth management lead for New England where I  
22          oversaw the development of customer products, services, and business models for

1 Massachusetts and Rhode Island. Part of this role included the development of  
2 performance incentive mechanisms (PIM). In previous roles at National Grid, I worked  
3 on the deployment of non-wires alternatives (NWA) and grid modernization efforts and  
4 led the development of annual and three-year energy efficiency plans. Prior to joining  
5 National Grid, I worked on regulatory and state policy issues pertaining to energy  
6 conservation, retail competition, net metering, and the Alternative Energy Portfolio  
7 Standard for Citizens for Pennsylvania's Future. Before that, I worked for Northeast  
8 Energy Efficiency Partnerships, Inc. where I promoted energy efficiency throughout the  
9 Northeast.

10 I hold a Master of Arts in Environmental Policy and Planning from Tufts University and  
11 a Bachelor of Arts in Environmental Geography from Colgate University. My resume is  
12 attached as Exhibit DCG (A)-1.

13 **Q Have you previously testified before the Public Service Commission of the District of**  
14 **Columbia?**

15 A Yes. I sponsored written testimony before the Public Service Commission of the District  
16 of Columbia (the Commission) in Formal Case (FC) No. 1156 on behalf of the District of  
17 Columbia Government (DCG or the District).

18 **Q Have you previously submitted testimony in proceedings before other state**  
19 **commissions or agencies?**

20 A Yes. I have testified and participated in regulatory proceedings before the Rhode Island  
21 Public Utilities Commission, the Pennsylvania Public Utility Commission, the New  
22 Hampshire Public Utilities Commission, and the New Mexico Public Regulation  
23 Commission. A list of my previous testimony is contained in Exhibit DCG (A)-1.

1 **Q On whose behalf are you testifying in this case?**

2 A I am presenting testimony on behalf of DCG.

3 **Q What is the purpose of your direct testimony?**

4 A The purpose of my direct testimony is to review and assess the design of the Potomac  
5 Electric Power Company's (Pepco or Company) second multi-year plan (MYP) and  
6 whether it will result in benefits to customers and sufficiently support the District's  
7 energy policy and climate goals. I also address Pepco's supplemental testimony filed in  
8 response to Commission Order in Order No. 21886 related to the purported benefits of  
9 Pepco's Modified Enhanced Multiyear Rate Plan (Modified EMRP) as approved in FC  
10 No. 1156 and whether the results of the Modified EMRP are sufficient to justify a second  
11 MYP. I do not address all aspects of the Company's application; silence on any issue  
12 should not necessarily be taken as acceptance of the Company's proposals.

13 **Q What materials did you rely on to develop your testimony?**

14 A The sources for my testimony are Pepco's application, responses to data requests, public  
15 documents, and my personal knowledge and experience.

16 **Q Are there any exhibits accompanying your testimony?**

17 A Yes. I am sponsoring Exhibits DCG (A)-1 through DCG (A)-33 Exhibit DCG (A)-1 is  
18 my resume and Exhibits DCG (A)-2 through DCG (A)-33 are some of the data responses  
19 I relied upon for my testimony.

1 **Q** **Were these exhibits and your direct testimony prepared by you or under your**  
2 **direction?**

3 A Yes. My direct testimony and the accompanying exhibits were prepared by me or under  
4 my direct supervision and control.

5 **II. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS**

6 **Q** **Please summarize your primary conclusions regarding Pepco's MYP proposal.**

7 A My main conclusion is that the Commission should reject the Company's MYP proposal  
8 because it contains the following critical flaws:

- 9 1. The Company's proposed MYP does not provide appropriate incentives to the  
10 Company to contain its costs or protect its customers from unreasonable rates due  
11 to (a) the misguided adoption of the reconciliation process used in Maryland, and  
12 (b) the use of a Company-specific cost forecast to build its revenue requirements.
- 13 2. Pepco's MYP is not a "Climate Ready Pathway" and instead uses the guise of  
14 supporting the District's climate goals as a means to increase business-as-usual  
15 investments that do not adequately advance the District's energy and climate  
16 goals such as (1) grid modernization, (2) increasing adoption of distributed  
17 energy resources (DER), and (3) development of NWAs.
- 18 3. The proposed MYP fails to include PIMs to incentivize the Company to act in  
19 furtherance of the District's climate goals, or commit to the continued tracking of  
20 the performance of its investments contained in the MYP to ensure that MYP  
21 investments are in fact advancing the District's energy and climate policy goals.

1 I also find that the Company's evaluation of its first MYP pilot program as approved in  
2 FC 1156 fails to provide sufficient data to support the approval of a second MYP in the  
3 instant proceeding.

4 **Q Please summarize your recommendations.**

5 **A** I offer the following recommendations:

- 6 • The Commission should continue historical test year ratemaking until an  
7 evaluation framework is developed for how to track and assess the benefits of an  
8 MYP on a pilot basis.
- 9 • The Commission should not approve an MYP until Pepco develops a  
10 comprehensive long-term grid modernization plan and integrated distribution plan  
11 (IDP).
- 12 • Should the Commission approve an MYP in the future, it should require that any  
13 proposal (1) not be permitted to include reconciliations of utility under-earnings,  
14 (2) include an index-based cost escalator to escalate the historical test year  
15 revenue requirement for each year of the MYP, (3) provide for more transparency  
16 pertaining to grid modernization efforts, and (4) include PIMs that advance the  
17 District's energy and climate goals.
- 18 • Regardless of whether the Commission directs Pepco to operate under an MYP or  
19 cost of service regulation, I recommend that the Commission:

- 1 a) Require Pepco to develop and file an IDP and comprehensive grid  
2 modernization plan that includes a system needs assessment; technology  
3 investment roadmap, timeline, and benefit-cost analysis (BCA) that  
4 adheres to the framework to be developed in accordance with Commission  
5 Order No. 21938 issued on December 8, 2023, in General Docket No.  
6 2019-04-M; and,
- 7 b) Establish explicit metrics and targets to guide Pepco’s activities for grid  
8 modernization.

9 **III. SUMMARY OF PEPCO’S MYP PROPOSAL**

10 **Q Please summarize Pepco’s MYP proposal.**

11 A Pepco proposes a second MYP that sets revenues for a three-year MYP term of 2024–  
12 2026. Pepco uses the calendar year 2022 as the historical test year and proposes three rate  
13 adjustments for each year of the MYP. The rate adjustments are based on the Company’s  
14 Long Range Plan (LRP) for distribution operations and maintenance (O&M) and capital  
15 investments. The proposed rate adjustments result in an incremental revenue requirement  
16 increase of \$116.4 million, \$37.9 million, and \$37.3 million for MYP Year 1, Year 2, and  
17 Year 3, respectively.<sup>1</sup>

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<sup>1</sup> Direct Testimony of Elizabeth Morgan Downs O’Donnell, Pepco (A), at 32, Table 1.

1 **Q What is the residential bill impact of Pepco’s proposed MYP?**

2 A Pepco’s proposed MYP revenue requirements would result in substantial annual increases  
3 in customer bills. In the first year bills would increase by 6.37 percent, followed by an  
4 additional increase of 5.96 percent in the second year, with another increase of 5.61  
5 percent in the third year.<sup>2</sup>

6 **Q What is Pepco’s justification for the increase in revenue requirements over the**  
7 **MYP?**

8 A The Company states that the increase in revenue requirements is driven by the need for  
9 additional capital investments and ongoing costs to “maintain and modernize the  
10 distribution grid so that the Company can continue providing safe and reliable service to  
11 its customers.”<sup>3</sup> Pepco states that the work included in the MYP is required to deliver a  
12 “climate-ready grid” to support and enable the District’s greenhouse gas emission (GHG)  
13 reduction goals.<sup>4</sup>

14 **Q Does Pepco propose changes to the structure of the Modified EMRP approved in FC**  
15 **1156?**

16 A Yes. The Company proposes three changes to the structure of the MYP as follows:<sup>5</sup>

- 17 1. changes to how revenues and expenses are forecast over the MYP (i.e., the  
18 attrition relief mechanism or “ARM”),  
19 2. the reconciliation process, and  
20 3. the stay-out provision.<sup>6</sup>

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<sup>2</sup> Direct Testimony of Robert T. Leming, PEPCO (B), at 4, lines 10-12.

<sup>3</sup> *Id.*, at 5, lines 15-17.

<sup>4</sup> *Id.*, at 5, lines 17-19.

<sup>5</sup> *Id.*, at 2, lines 16-19.

<sup>6</sup> *Id.*, at 7-8.

1 Further, the Company is not proposing any PIMs or tracking metrics. I provide a  
 2 summary comparison of the MYP components as included in the Modified EMRP and as  
 3 proposed in the instant proceeding in

4 Table 1 below.

<u>A</u> <u>MYP</u> <u>Component</u>	<u>Modified EMRP (FC 1156)</u>	<u>Proposed MYP (FC 1176)</u>
MYP Component	Modified EMRP (FC 1156)	Proposed MYP (FC 1176)
<u>ARM</u>	<u>2.17% escalation of historical test year revenue and O&amp;M</u>	<u>Company's LRB</u>
<u>Reconciliation</u>	<u>1) Annual Informational Filing 2) Final reconciliation and prudence review after the conclusion of the MYP</u>	<u>1) Annual Informational Filing 2) Consolidated reconciliation and prudence review in a subsequent rate case 3) Final reconciliation and prudence review after the conclusion of the MYP</u>
<u>Stay-out Provision</u>	<u>Stay-out that does not allow for a rate update during the MYP rate effective period, and one year after the conclusion of the MYP</u>	<u>Stay-out that does not allow for a rate update during the MYP rate effective period</u>
<u>Deferred Accounting Mechanism</u>	<u>Included</u>	<u>Included</u>
<u>Re-opener Provision</u>	<u>Included</u>	<u>Included</u>
<u>PIMs</u>	<u>Climate and Clean Energy tracking PIMs</u>	<u>None</u>

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7 **Comparison of Structure of Modified EMRP and Proposed MYP<sup>7</sup>**

<sup>7</sup> *Id.*, at 8, Table 3.

1     **IV. PEPCO’S PROPOSED CHANGES TO THE MYP REDUCE INCENTIVES FOR**  
2     **COST CONTAINMENT**

3     **Use Of Cost Forecasts Should Be Limited**

4     **Q     Please describe how the Company projected revenues and expenses for the Modified**  
5     **EMRP.**

6     A     In the Modified EMRP approved in FC 1156, the Company began with plant-related  
7     items and O&M expense for a historical test period and applied an escalation factor of  
8     2.17 percent annually over the Modified EMRP term to project annual additions to plant  
9     in service and O&M expenses.<sup>8</sup>

10    **Q     How does Pepco propose to project revenues and expenses over its proposed MYP?**

11    A     Instead of using a fixed escalation factor, Pepco developed a Company-specific forecast  
12    for revenues and expenses based on its LRP.

13    **Q     Why does Pepco propose to use a forecast based on its LRP?**

14    A     The Company claims that using the LRP as the basis for its revenue requirement forecast  
15    is a “reasonable and more appropriate approach” because it provides parties in this  
16    proceeding and customers with transparency into Pepco’s plans. Pepco contends that  
17    using the LRP will ensure that the basis for the revenue requirements are “rooted in plans  
18    that support the District’s goals and policies.”<sup>9</sup> The Company argues that the prior  
19    escalation approach employed in the Modified EMRP is not able to reflect year-to-year  
20    changes in inflation and supply chain issues over the three-year term of the MYP and is

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<sup>8</sup> *Id.*, at 8, lines 5-9.  
<sup>9</sup> *Id.*, at 9, lines 8-11.

1           therefore a suboptimal approach to aligning Pepco's rates and revenues with the costs it  
2           will incur to provide electric service to its customers.

3   **Q     Do you agree with the Company's proposal to base revenue requirements off its**  
4   **forecast?**

5   A     No, for several reasons. First, revenues should not be based on cost forecasts because  
6           doing so shifts risk to customers. Second, Pepco's LRP does not provide sufficient  
7           information for stakeholders to adequately vet the proposed investments. Finally, the use  
8           of cost forecasts is not necessarily more accurate than an external index, as the Company  
9           does not have perfect foresight regarding issues related to supply chain complications or  
10          inflation.

11 **Q     Please explain why the use of a Company-specific cost forecast shifts risks to**  
12 **customers.**

13 A     The use of a utility-specific cost forecast exacerbates information asymmetries since the  
14          utility will always have the most technical knowledge and information regarding its  
15          systems, which creates significant challenges for the intervening parties and regulators to  
16          ensure that cost forecasts are reasonable. As explained by the National Regulatory  
17          Research Institute:

18                 "Information asymmetry reflects the relatively less knowledge that a  
19                 regulator has (relative to the utility's) on the correlation between forecasted  
20                 costs and utility-management competence. When a utility files a cost  
21                 forecast, how does the regulator know whether it reflects competent  
22                 management? The analyst or auditor can evaluate the forecast applying  
23                 state-of-the-art techniques; still, however, a level of uncertainty remains

1           that leaves unknown the utility’s level of managerial competence embedded  
2           in the forecast.”<sup>10</sup>

3           Due to the fact that intervening parties and regulators can never completely vet the  
4           accuracy of cost forecasts, utilities have an inherent bias to overstate their costs and  
5           understate revenues. When a utility’s rate of return is greater than the cost of borrowing,  
6           utilities have a financial incentive to maximize their capital expenditures in order to  
7           increase rate base and thereby increase profits. This is often referred to as the Averch-  
8           Johnson effect.<sup>11</sup>

9           In addition, regulated utilities have an inherent incentive to favor capital expenditures  
10          over operating expenses in order to increase return to investors. Indeed, this can be seen  
11          in Pepco’s parent company Exelon’s Winter 2023 Investor Meeting slide deck, which  
12          touts to utility investors approximately \$18 billion in expected rate base growth over  
13          2023–2026 to be recovered through alternative recovery mechanisms such as MYPs. It  
14          also shows a capital plan that would result in expected rate base growth of 7.9 percent  
15          over that same period, including about \$3.7 billion in new capital investments for  
16          Pepco.<sup>12</sup>

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<sup>10</sup> Costello, K, 2016, *Multiyear Rate Plans and the Public Interest*, National Regulatory Research Institute, at 35–36.

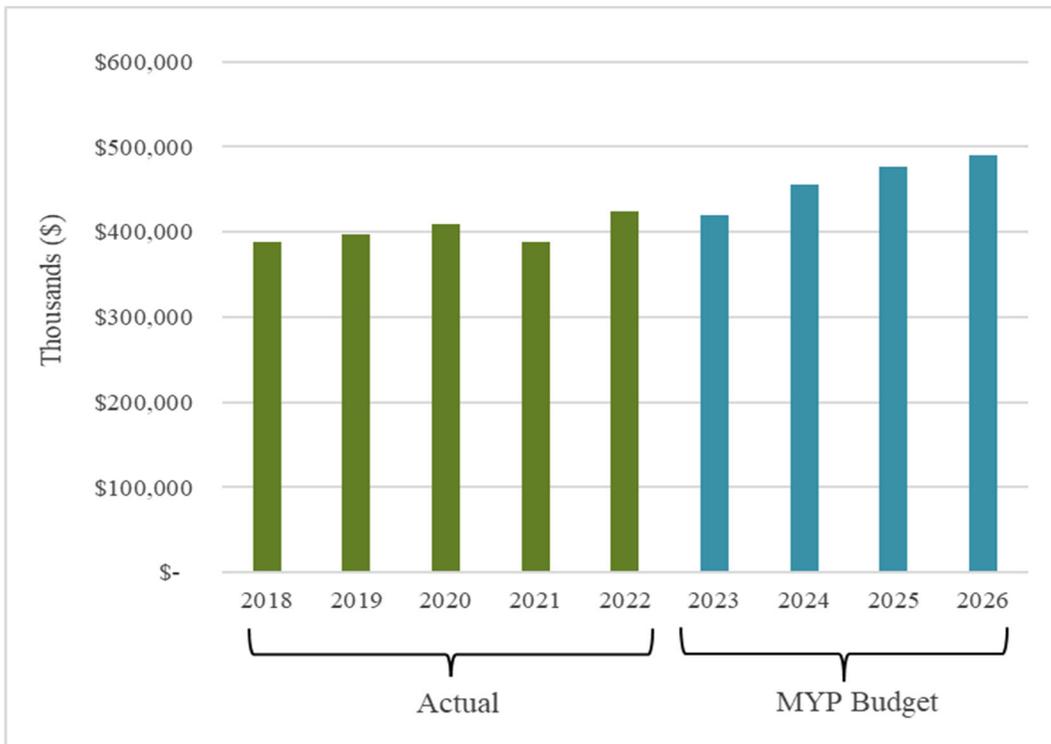
<sup>11</sup> The Averch-Johnson effect is identified by economists as the tendency of regulated companies to engage in excess capital investments to increase their profits and was originally published in the *American Economic Review*, vol. 52, no. 5, 1962, at 1052–1069 “Behavior of the Firm Under Regulatory Constraint” by Harvey Averch and Leland L. Johnson.

<sup>12</sup> Exelon Winter 2023 Investor Meetings at slides 11, 15, and 36. Available at:  
<https://investors.exeloncorp.com/static-files/1ce013d3-79a4-4379-ad12-d81c28aa33c1>

1 The combination of these factors incentivizes utilities to over-estimate future costs to  
2 maximize their allowed revenues under an MYP and minimize the chance of overruns.  
3 For these reasons, cost forecasts are likely to be higher than necessary.

4 This risk to ratepayers is particularly concerning when one examines the increase in  
5 Pepco's requested capital budget in the MYP compared to actual capital spend in  
6 previous years as shown in the figure below.

7 **Figure 1. Historical Capital Spend Compared to MYP Capital Budget<sup>13</sup>**



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<sup>13</sup> Pepco Response to DCG 7-2 Attachment A and DCG 5-19(C) Attachment, attached hereto as Exhibits DCG (A)-2 and DCG (A)-3, respectively.

1 **Q Does the requirement of a prudency review protect ratepayers?**

2 A Not sufficiently. The practical burden of proving imprudence of costs incurred is high, as  
3 it requires extensive time and resources by the challenger to request and comb through a  
4 vast amount of data to decipher exactly what the utility knew and when (if that is even  
5 possible from the information provided). As a result, it is often extremely challenging for  
6 other parties or the Commission to establish or even identify imprudence of costs in all  
7 but the most egregious cases. The fact that no parties conducted any discovery or filed  
8 any comments regarding Pepco's Final Reconciliation for the Modified EMRP implies  
9 the impracticality of this after-the-fact approach.<sup>14</sup>

10 **Q Do you agree that by providing the LRP, Pepco is improving the transparency of its**  
11 **planned investments?**

12 A No, I do not. As I will explain in more detail later in my testimony, simply including a  
13 list of planned investments without a long-term IDP provides little value to the parties in  
14 this case. Without the information provided in an IDP, there is not enough context for  
15 how Pepco's planned investments over the MYP term relate to existing or future planned  
16 grid modernization investments, how investments pertain to forecasts for DERs and  
17 electrification, and whether more cost-efficient solutions exist through NAWs.

18 **Q The Company cites concerns related to supply chain issues and inflation variability.**  
19 **Does the use of a forecast resolve these issues?**

20 A No. Issues related to uncertainty around inflation variability and supply chain issues are  
21 present under a Company-specific forecast and an escalation-based approach because the

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<sup>14</sup> O'Donnell Supplemental Direct Testimony, PEPCO (2A), at 7, lines 16-18.

1 Company cannot accurately project inflation nor can it foresee with certainty supply  
2 chain issues. For example, during the Modified EMRP, Pepco spent far less than it  
3 projected.<sup>15</sup> According to the annual reconciliation filings, Pepco spent 29 percent less  
4 (\$53.0 million) than its budget in 2021<sup>16</sup> and 13 percent less (\$41.3 million) in 2022.<sup>17</sup>  
5 Pepco explains that these substantial deviations from its projected budget were primarily  
6 due to supply chain issues, which demonstrates that forecasts are not necessarily able to  
7 better align revenues with actual costs.

8 Furthermore, changes in inflation could be accounted for using the escalation factor  
9 approach. For example, a provision could be implemented whereby rates could be  
10 adjusted should annual inflation exceed a certain threshold (e.g., 5 percent) to add in a  
11 layer of protection to Pepco. In order to protect ratepayers, this provision would only be  
12 enacted should the Company's ROE also fall below its allowed ROE. A similar  
13 mechanism was implemented in New Hampshire, where Public Service Company of New  
14 Hampshire was allowed to adjust rates if inflation exceeded 4 percent.<sup>18</sup>

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<sup>15</sup> Formal Case No. 1156, Order No. 20755 required that the Company reconcile actual O&M and plant closings to updated budgets that the Company was required to submit within 120 days from the date of the Order to facilitate reconciliation and prudence reviews.

<sup>16</sup> Formal Case No. 1156, Pepco Final Reconciliation for Modified Enhanced Multiyear Rate Plan (EMRP), March 31, 2022, Appendix 1, Schedule 3X - District of Columbia - Annual Reconciliation Filing - Capital Additions.

<sup>17</sup> Formal Case No. 1156, Pepco Final Reconciliation for Modified EMRP, March 31, 2023, Appendix 1, Schedule 2 - District of Columbia - Annual Reconciliation Filing - Capital Additions.

<sup>18</sup> The Brattle Group, "Exploring the Use of Alternative Regulatory Mechanisms to Establish New Base Rates," Joint Utilities' of Maryland Initial Comments, Maryland PC51, March 2019, Appendix, pg. 8.

1        **Pepco’s Proposed Reconciliation Process Should Be Rejected**

2        **Q     Please summarize the Company’s proposed reconciliation process.**

3        A     The Company proposes to implement the reconciliation process adopted by the Maryland  
4        Public Service Commission (MD PSC) in Order No. 89482. This process is nearly  
5        identical to that approved for the Modified EMRP. Pepco will still file an annual  
6        information filing that compares projected budgets to actuals within 90 days following  
7        the first and second rate-effective periods and will file a final reconciliation, subject to a  
8        prudence review, after the conclusion of the MYP term.

9        The key change is the additional filing of a consolidated reconciliation and prudence  
10       review. Unlike the Modified EMRP, Pepco proposes to file its next rate case prior to the  
11       end of the MYP term (as opposed to one year after the conclusion of the MYP). As part  
12       of this next rate case, Pepco would include a “consolidated reconciliation” of all actual  
13       costs incurred during the MYP term (2024–2026) available through the end of the new  
14       historical test year, which would be subject to a prudence review. All adjustments and  
15       reconciliations will be moved into rate base on a case-by-case basis as part of the new  
16       rate order.<sup>19</sup>

17       The final reconciliation and prudence review would address any investments and costs in  
18       the MYP that were not previously included in the consolidated reconciliation and  
19       prudence review. As part of this reconciliation process, Pepco would propose a rider  
20       mechanism to adjust customer rates for any over- or under-collections ultimately

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<sup>19</sup> Leming Direct Testimony, PEPCO (B), at 10-15.

1 approved by the Commission.<sup>20</sup> As is required with the Maryland reconciliation process,  
2 in the case of over-collection (i.e., the Company spent less than its allowed revenues), the  
3 carrying costs would continue to apply during the period of any repayment to customers.  
4 In the case of under-collection (i.e., the Company spent more than its allowed revenues),  
5 the Company would not be allowed to recover carrying costs associated with the  
6 overspend.<sup>21</sup>

7 **Q Pepco states that its reconciliation process incentivizes the Company to develop**  
8 **forecasts that are as close as possible to actual results.<sup>22</sup> Do you agree?**

9 A No, I do not. I find that the proposed reconciliation process incentivizes Pepco to inflate  
10 its projected costs in the LRP and also reduces the Company's incentive to find cost  
11 efficiencies during the MYP term.

12 **Q Please explain how the proposed reconciliation process incentivizes Pepco to inflate**  
13 **its cost forecasts.**

14 A If the Company overspends its budget projections, it can recover the overspend itself, but  
15 it is not allowed to earn a return on that overspend. To minimize the risk of overspending  
16 and foregoing that return, the Company has an incentive to inflate its cost estimates so  
17 that its allowed revenue requirement is as high as possible.

18 **Q How does the reconciliation process reduce Pepco's incentive to control costs?**

19 A There are two ways in which the reconciliation process erodes Pepco's incentive to  
20 control costs. First, although Pepco is not allowed to earn a return on expenditures above

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<sup>20</sup> *Id.*, at 10-15.

<sup>21</sup> MD PSC Order No. 89482 at ¶ 84.

<sup>22</sup> Leming Direct Testimony, PEPCO (B), at 10, lines 1-2.

1 its allowed revenue requirement, it *is* allowed to recover any spending above its allowed  
2 revenue requirement through the reconciliation process. If found prudent, these costs are  
3 then recovered from customers through a reconciliation mechanism. This is counter to  
4 traditional cost of service regulation in which a utility is not allowed to recover spending  
5 that exceeds its revenues between rate cases. Instead, under traditional cost-of-service  
6 regulation, base rates remain fixed between rate cases and a utility must live within the  
7 revenues provided by those rates or absorb any excess costs. Thus, the potential revenue  
8 loss for Pepco under the MYP with reconciliation is much less than under traditional  
9 cost-of-service regulation.

10 Second, while the penalties for overspending are relatively modest, the benefits to the  
11 Company of underspending (through pursuing cost efficiencies) are virtually non-  
12 existent. Through the reconciliation process, any underspending due to achieving cost  
13 efficiencies flows to customers, not to the Company. Thus, the full reconciliation of any  
14 cost savings to customers during both the Consolidated and Final Reconciliations at the  
15 end of the MYP term erodes any incentive to the Company to achieve cost savings. The  
16 Company confirms this fact in response to a District data request, in which it states that  
17 “accounting protocols require that when an overearning is demonstrated, and money  
18 would be owed to customers, that a liability be recorded to reflect that financial  
19 obligation. Recording that liability reduces earnings and offsets any improvement in  
20 Pepco’s return on equity resulting from lower spend. While the reconciliation process

1 occurs towards the end of the MYP, annual informational filings which compare actual  
2 costs to those approved by the Commission occur annually.”<sup>23</sup>

3 To summarize:

- 4 • Pepco has little incentive to find cost efficiencies because it receives no benefit  
5 from reducing its costs, and
- 6 • Pepco is better off overestimating its capital costs to ensure that it will not  
7 overspend its allowed revenues and forfeit the carrying costs associated with that  
8 overspend.

9 **Q Outside of Maryland and the District, is it common for an MYP to reconcile costs?**

10 **A** No. I am not aware of other jurisdictions that implement a similar reconciliation process  
11 for over- and underspending in the context of an MYP. Some states have implemented  
12 reconciliations for underspending, but otherwise reconciliations are limited outside of  
13 cost trackers for specific types of costs.

14 However, the forecasting and reconciliation process does bear similarities to formula rate  
15 plans. A formula rate plan formulaically ensures that revenues track costs (often  
16 measured as deviations in ROE from the utility’s target ROE). Under a formula rate plan,  
17 if a utility spends less than it collects through revenues, the utility’s return will exceed its  
18 ROE target, and it will be required to reduce its rates. Likewise, if a utility overspends, its  
19 earned return will fall below its target return and it will be allowed to increase its rates.

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<sup>23</sup> Pepco Response to DCG 9-24, attached hereto as Exhibit DCG (A)-4.

1        These rate increases or decreases are accomplished through periodic prudency reviews  
2        and reconciliations that ensure that revenues track prudently incurred costs. In this way,  
3        the MYPs in Maryland and the District bear close similarities to formula rate plans, since  
4        revenues are adjusted to match the utility's costs.<sup>24</sup>

5        In contrast, most MYPs limit revenue adjustments (reconciliations) during the plan, as  
6        adjusting revenues to match costs erodes cost-containment incentives. Instead, MYPs  
7        establish a pre-set revenue adjustment mechanism and require utilities to live within those  
8        pre-set revenues. If utilities overspend their allowed revenues during the plan, they do not  
9        recover those costs. Conversely, if utilities find cost efficiencies during the plan, they  
10       retain all or a portion of those costs savings until the following rate case.

11       [Table 2](#) below shows results from a 2018 survey by the Brattle Group regarding  
12       reconciliations occurring in formula rate plans and MYPs. As shown in this table,  
13       reconciliations for overspending the revenue requirement (and under earning) are  
14       virtually unheard of in an MYP, but such reconciliations are common in a formula rate  
15       plan.

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<sup>24</sup> Excluding carrying costs for overspend.

1 **Table 2. Reconciliations in Formula Rate Plans and MYPs<sup>25</sup>**

State	Utility	Alternative Regulation Type	ROE Reconciliation	
			Over Earning	Under Earning
AR	Entergy	Formula Rate Plan	X	X
IL	ComEd	Formula Rate Plan	X	X
LA	SWEPco	Formula Rate Plan	X	X
FL	FPL	MYP	X	
HI	HECO	MYP	X	
NH	PSNH	MYP	X	
NY	ConEd	MYP	X	
ND	NSP	MYP	X	
WA	PSE	MYP	X	

2 **Q Is it ever appropriate for a reconciliation mechanism to be included in an MYP?**

3 A Yes, there are two cases when it can be appropriate for MYPs to include a reconciliation  
 4 mechanism. First, if the revenue requirement is based on cost forecasts, then a one-way  
 5 downward reconciliation mechanism should be implemented to reduce the risk to  
 6 customers that the utility has inflated its cost forecasts. Second, a limited bi-directional  
 7 reconciliation mechanism can be appropriate for certain large, unusual investments, such  
 8 as part of a grid modernization plan, recurring pass-through or mandated costs, or  
 9 extraordinary costs that are largely outside of the utility's control.

10 **Q Why is it important that a reconciliation mechanism be downward-only when**  
 11 **revenue requirements are based on utility cost forecasts?**

12 A It is important that any reconciliation mechanism for cost forecasts be downward-only so  
 13 that a utility is not rewarded for overspending. Although a downward reconciliation does  
 14 not reward the Company for reducing its costs below its allowed revenue requirement, it  
 15 does protect customers from excessive overspending by the utility, or the utility failing to

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<sup>25</sup> The Brattle Group, "Exploring the Use of Alternative Regulatory Mechanisms to Establish New Base Rates," Joint Utilities' of Maryland Initial Comments, Maryland PC51, March 2019, pg. 18, Table 6.

1 implement its forecasted investments. This is because a downward-only reconciliation  
2 mechanism does not allow the utility to profit from under-investment and ensures that  
3 overspend is not considered until a subsequent rate case when rates are reset.

4 **Q If an MYP includes a revenue requirement forecast based on an external index**  
5 **similar to the Modified EMRP, what type of annual reconciliation process do you**  
6 **recommend?**

7 A If revenue forecasts are based on an external index, I do not recommend any  
8 reconciliation of revenues and costs during the course of the MYP or at the end of the  
9 MYP (with the exception of an earnings sharing mechanism if earnings exceed a certain  
10 threshold). As indicated above, reconciliation mechanisms reduce incentives for cost  
11 efficiencies over the MYP term. For an MYP to provide the desired benefits of cost-  
12 containment, rates should instead be reset with a new test year at the close of the MYP.

13 **Q Does the Company's proposal provide greater cost-containment incentives than**  
14 **cost-of-service regulation?**

15 A No. Under cost-of-service regulation, base rates are set based on a test year and then held  
16 fixed until the utility files a subsequent rate case. In this way rates are not trued up to  
17 actual costs between rate cases. Because rates (and revenues) are not adjusted to match  
18 costs, the utility has an inherent incentive to control costs between rate cases. This is  
19 referred to as "regulatory lag," which is defined as "the time period between the moment  
20 when a utility's cost changes and the moment when there is a commensurate change in its  
21 rates."<sup>26</sup>

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<sup>26</sup> MN Lowry, J Deason, M Makos, L Schwartz, *State Performance-Based Regulation Using Multiyear Rate Plans for U.S. Electric Utilities* (U.S. Department of Energy), July 2017, at 3.2.

1 Assuming that sales remain the same each year, the utility can increase profits by  
2 reducing costs between rate cases since the utility generally keeps any difference between  
3 revenues and costs. On the other hand, if costs increase, the utility's profits will decline  
4 until the higher costs are reflected in rates in a subsequent rate case. This provides an  
5 incentive for the utility to control costs. However, the ability for the utility to file a rate  
6 case at any time dampens the cost-containment incentive to some extent. The stay-out  
7 period in an MYP can strengthen this cost-containment incentive, but only if revenues are  
8 not adjusted to match costs through a reconciliation process.

9 **Q Does the reconciliation process, combined with the Company's proposal to base its**  
10 **allowed revenues on a cost forecast, shift risks to customers?**

11 **A** Yes. The combination of the reconciliation process and the use of cost forecasts creates  
12 an outcome where there is little risk to the utility and significant risk to customers. The  
13 proposed MYP reduces risk to Pepco by providing guaranteed revenue increases over the  
14 three-year period that are designed to meet its Company-specific cost forecast. However,  
15 as discussed above, the Company has an incentive to inflate its cost forecast to ensure it  
16 has adequate revenues (as it would not earn a return on any overspend). If regulators and  
17 stakeholders had perfect information, any inflated forecasts could be identified during the  
18 rate case. However, regulators and stakeholders do not have perfect information (in terms  
19 of data availability, models, or knowledge of the level of effort expended by utility  
20 management), nor do regulators or stakeholders have the same level of resources (e.g.,  
21 engineers) as the utility. Thus, it is extremely difficult to ensure that Pepco's cost  
22 forecasts are accurate, which places customers at risk that the allowed MYP revenues will  
23 be set too high. There is little benefit to customers in return for this increased risk. While

1 rate increases will be known over the MYP term, there is little incentive for the Company  
2 to control costs; and should Pepco overspend, it will only lose out on carrying costs while  
3 continuing to add to its rate base because of the reconciliation mechanism.

4 **The MYP Should Not Be Approved Without PIMs**

5 **Q Did the Commission approve any PIMs as part of Pepco’s Modified EMRP?**

6 **A** No. The Commission determined it was premature to adopt PIMs in the Modified EMRP.  
7 The Commission instead adopted a set of Tracking PIMs to help inform and identify how  
8 to measure PIMs and how to structure their financial rewards or penalties.

9 The Tracking PIMs approved by the Commission included a GHG reduction metric  
10 measuring GHG emissions related to Pepco-owned buildings in the District of Columbia  
11 as well as the Company’s vehicle fleet. The GHG tracking PIM also provides GHG  
12 emissions estimates related to Standard Offer Service (SOS) and non-SOS energy  
13 consumption, as well as sulfur hexafluoride (SF6) emissions from Pepco’s operational  
14 equipment and estimates of GHG emissions related to the Company’s contractor  
15 vehicles.<sup>27</sup>

16 The Commission directed that the Tracking PIMs continue for the duration of the  
17 Modified EMRP, with the opportunity during the start of the final year to solicit input and  
18 proposals from the Company and the stakeholders. The Commission also noted that it  
19 expected that the Tracking PIMs “could be readily converted to fully functioning PIMs

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<sup>27</sup> Pepco Response to DCG 1-8, attached hereto as Exhibit DCG (A)-5.

1 with incentive and penalty mechanisms — subject to Commission approval during 2022  
2 and beyond.”<sup>28</sup>

3 **Q Does Pepco propose to convert any of the Tracking PIMs into PIMs with an**  
4 **associated financial reward or penalty as part of the MYP?**

5 A No. The Company states that its PIM proposals are being addressed in the PIMs working  
6 group process and not in this MYP.<sup>29</sup>

7 **Q What has the Commission stated regarding PIMs and MYPs?**

8 A The Commission has clearly and repeatedly expressed its desire to see PIMs implemented  
9 in the District of Columbia. In the Commission’s Order on Alternative Forms of  
10 Ratemaking (AFOR), the Commission stated that any adopted MYP should be  
11 accompanied by PIMs.<sup>30</sup> In its Order approving the Modified EMRP, the Commission  
12 also stated that “properly designed PIMs represent an important tool to align utility  
13 incentives with public policy goals, such as the District’s aggressive clean energy and  
14 environmental goals.”<sup>31</sup> A key rationale for adopting AFOR is its ability to strengthen  
15 utility incentives to control costs while providing for increased operational flexibility to  
16 allow for innovative utility investments that better align with a jurisdiction’s policy goals.  
17 However, as I will explain in more detail in the next section of my testimony, Pepco’s  
18 MYP is not sufficiently aligned with the climate goals of the District and is more akin to  
19 a business-as-usual capital investment plan. Without PIMs this misalignment will persist

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<sup>28</sup> Order No. 20755, ¶ 172.

<sup>29</sup> Pepco Response to DCG 3-6(b), attached hereto as Exhibit DCG (A)-6.

<sup>30</sup> Order No. 20273, ¶ 104.

<sup>31</sup> Order No. 20755, ¶ 165.

1 because PIMs can provide a measure of assurance that Pepco's investments are in the  
2 public interest and are aligning with the climate goals of the District.

3 **Q Can PIMs be adopted after the conclusion of the instant proceeding?**

4 A Yes, but it is preferable to adopt PIMs in conjunction with the rest of the regulatory  
5 framework (such as an MYP), so that the incentives offered by each can be designed to  
6 be complementary and to avoid redundancy.

7 **Q Please explain how PIMs should be designed to complement the rest of the**  
8 **regulatory framework.**

9 A By providing a financial reward or penalty, a PIM creates new incentives for a utility. It  
10 is important that these incentives be set with consideration of the incentives provided by  
11 the rest of the regulatory framework (such as the MYP) to set the financial incentives  
12 appropriately and avoid duplication of incentives. For example, under Pepco's proposed  
13 MYP, the Company would quickly recover costs associated with reliability investments  
14 (including a return) as part of its capital plan, thereby providing a strong incentive for the  
15 utility to spend ratepayer funds to enhance reliability. It would therefore be a mistake to  
16 then create a PIM that rewards Pepco for achieving higher levels of reliability because it  
17 would duplicate the Company's existing incentives. This creates a risk of  
18 overcompensating the Company for investments it would have made regardless of the  
19 existence of the PIM. In addition, PIMs are necessary to track whether the investments  
20 contained within the MYP are aligned with and advancing the District's climate and  
21 energy goals.

1 **Q What is your recommendation for a PIM that should be adopted in the instant**  
2 **proceeding?**

3 A I propose an NWA PIM to support the desired outcome of increased investment in cost-  
4 effective NWAs. The PIM would reward Pepco for each cost-effective NWA  
5 implemented in its District of Columbia service territory based on the present value of the  
6 net benefits from implementing NWAs procured through an open-sourced request for  
7 proposals (RFP) in which the solution type has not been pre-selected.

8 The PIM will encourage Pepco to proactively identify all NWA opportunities, seek the  
9 least-cost NWA solution regardless of whether it is a capital investment, and be rewarded  
10 for maximizing ratepayer savings.

11 **Q Does Pepco have a financial disincentive to invest in NWAs?**

12 Yes. Under the current regulatory model, the Company is incentivized to prefer capital  
13 investments over operational expenditures as a means to grow its rate base and thereby  
14 profits. In fact, the incentive to undertake more capital investments is strengthened in the  
15 MYP by the reduction of regulatory lag, which allows the Company to recover its costs  
16 more quickly. This means that Pepco has a strong financial incentive to meet a  
17 distribution system need with the installation of new substations, transformers, feeders, or  
18 utility-owned battery systems, on which it would earn a return, rather than a third-party  
19 NWA solution that would be classified as an operational expense with no return.

20 **Q Why is an NWA PIM needed?**

21 The financial incentives in the existing regulatory framework are insufficient to  
22 encourage Pepco to identify and seek out third-party NWA solutions. Within the MYP,

1           Pepco only identifies two battery storage projects as non-wires solutions, both of which  
2           are based on utility-owned capital assets. A utility-owned battery system was selected to  
3           defer the need for a new substation serving projects ITN 62900 and 62935 - Pepco  
4           Alabama Ave,<sup>32</sup> and a battery system was selected for project ITN 67364 – Pepco Mt.  
5           Vernon, to address projected firm capacity load.<sup>33</sup> Only one RFP for a third-party NWA  
6           solution was issued as part of its Distribution System Planning (DSP)/NWA process  
7           (ITN: 74085 - Waterfront Sub) and no NWA solution was selected.<sup>34</sup>

8   **Q    If Pepco already issues RFPs for NWAs, why is an NWA PIM needed?**

9   A    As discussed above, Pepco does not have a financial incentive to implement NWAs and  
10       appears to be undervaluing third-party NWAs. For example, while the Company did not  
11       provide details regarding why the third-party NWA solution wasn't selected, it is clear its  
12       screening process does not consider the full benefits of NWA solutions. Pepco does not  
13       account for the monetized value of avoided carbon emissions or consider the locational  
14       value of DERs on the distribution system when reviewing NWAs.<sup>35</sup> If Pepco is not  
15       monetizing the full benefits of an NWA solution, it is not surprising that NWA solutions  
16       were not selected.

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<sup>32</sup> Pepco (H)-2, at 2-3.

<sup>33</sup> *Id.*, at. 9.

<sup>34</sup> Pepco Response to DCG 5-24(b), attached hereto as Exhibit DCG (A)-7.

<sup>35</sup> Pepco Response to DCG 5-24(f)(g), attached hereto as Exhibit DCG (A)-7.

1 **Q Why is it appropriate for the Commission to approve this PIM in light of the**  
2 **ongoing PIMs working group?**

3 A An NWA PIM does not need to rely on historical baseline data to determine appropriate  
4 targets and incentive levels; instead, the NWA PIM would be based on a shared savings  
5 approach.

6 **Q Please explain how your proposed NWA PIM would function.**

7 A I recommend a shared-savings mechanism to support NWA solutions. The shared-  
8 savings-based incentive would allow Pepco to retain a portion of the difference between  
9 the present value of the traditional wires solution and the NWA. For example, Pepco  
10 could be allowed to retain 30 percent of the savings, i.e., the net benefits, relative to the  
11 traditional solution. This provides an incentive to the Company while allowing ratepayers  
12 to retain the majority of the savings from the NWA. One important advantage of  
13 providing the utility with a portion of the net benefits—the difference between costs and  
14 benefits—is that it incentivizes the Company to both reduce costs and increase benefits.

15 To qualify for this incentive, Pepco must demonstrate that the NWA is cost-effective,  
16 using a BCA that accounts for all societal costs and benefits in alignment with  
17 Commission Order No. 21938, including but not limited to, GHG emissions and air  
18 quality impacts, to appropriately value the role of DERs as NWA solutions. The least cost  
19 solution to identified system needs should give equal consideration to NWAs procured  
20 through open-sourced solicitations to third-parties and through Company specific actions,  
21 including the targeted deployment of demand response, energy efficiency, and time  
22 varying rates.

1 **Q Should the Commission approve Pepco’s proposed MYP, how would an NWA PIM**  
2 **improve outcomes?**

3 A An NWA PIM would provide an incentive to the Company to seek cost-effective NWA  
4 solutions that are not owned and operated by the Company. The PIM would help  
5 overcome the existing financial disincentive for Pepco to use third-party or customer-  
6 facing DER solutions to meet a utility system need. Cost-effective third-party PIMs have  
7 the potential to reduce the need for new distribution expenditures thereby significantly  
8 reducing costs to customers.

9 **V. PEPCO’S MYP IS A BUSINESS-AS-USUAL CAPITAL PLAN MASQUERADING**  
10 **AS A “CLIMATE READY PATHWAY”**

11 **Q Should an MYP support innovation and achievement of the District’s policy goals?**

12 A Yes. In return for receiving more timely, predictable revenue increases over the MYP  
13 period, Pepco should demonstrate that it is making investments to support the District’s  
14 policy goals that it would not have otherwise completed under cost of service regulation.

15 A rationale for the adoption of an MYP is that cost-of-service regulation is backward  
16 looking and can impede a utility’s efforts to innovate. There are also concerns that  
17 revenues would be insufficient to support these new investments. An MYP addresses  
18 these issues by providing known increases in revenues over the MYP period.

19 As I will explain in more detail below, I do not find that Pepco’s proposed MYP  
20 adequately supports investments to facilitate the District’s climate and clean energy goals  
21 and instead represents a business-as-usual capital plan.

1           **Pepco’s “Climate Ready Grid” Represents Traditional Reliability Investments**

2   **Q     Does Pepco justify its MYP based on its contribution to the District’s and the**  
3   **Commission’s climate and clean energy goals?**

4   **A     Yes. In fact, the Company refers to its MYP as a “Climate Ready Pathway” that includes**  
5           a series of “Climate Ready Grid” investments to provide “safe, affordable, reliable, and  
6           equitable advancement of climate and clean energy goals through investments in the  
7           tools, processes, and infrastructure to control the distribution system.”<sup>36</sup> The Company  
8           states that its capital investment strategy during the MYP period focuses on supporting a  
9           pathway to a climate ready grid through, amongst other things, improving grid  
10          resiliency.<sup>37</sup>

11 **Q     How does Pepco define the Climate Ready Grid?**

12 **A     The Company defines the Climate Ready Grid as a “series of investments in**  
13          infrastructure and processes that advance system-readiness and will support customers  
14          through the current energy transformation.”<sup>38</sup> Specifically, the Company states that the  
15          District’s climate policy requires a significant shift to electrification, and Climate Ready  
16          Grid investments are needed to support reliability and resiliency, which is increasingly  
17          important as customers rely on electrification for transportation, heating, and cooling.<sup>39</sup>

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<sup>36</sup> O’Donnell Direct Testimony, PEPCO (A), pg. 5, lines 5-16.

<sup>37</sup> Pepco Response to AOBA 1-9(b), attached hereto as Exhibit DCG (A)-8.

<sup>38</sup> Pepco Response to DCG 1-9(d), attached hereto as Exhibit DCG (A)-9.

<sup>39</sup> Direct Testimony of Jaelyn Cantler, Pepco (H), at 6, lines 16-22.

1 **Q Does Pepco provide a list of the Climate Ready Grid investments included in the**  
2 **MYP?**

3 A No. The Company does not identify specific investments as being part of the Climate  
4 Ready Grid. When asked to identify the projects in Pepco’s Distribution Construction  
5 Program Report, included as Exhibit Pepco (H)-1, the Company did not provide a list.  
6 Instead, Pepco states that its capital investment strategy during this MYP period “focuses  
7 on supporting a pathway to a climate ready grid through, amongst other things,  
8 improving grid resiliency.”<sup>40</sup>

9 **Q How does Pepco propose to improve grid resiliency?**

10 A It is not clear. Pepco states that “Witness Cantler’s testimony and attachments primarily  
11 cover reliability investments to maintain Pepco’s distribution grid or the platform for the  
12 Climate Ready Grid.”<sup>41</sup> The Company’s plan to improve resiliency to address the impacts  
13 of “climate realities” includes the replacement of aging and/or obsolete infrastructure and  
14 routinely and timely performing corrective maintenance work where necessary.<sup>42</sup> But  
15 these are activities that are core to the traditional duties of the electric distribution  
16 company. Pepco has not adequately explained why undertaking these traditional goals  
17 would justify an MYP.

18 **Q Does Pepco propose that costs associated with the Climate Ready Grid be recovered**  
19 **through the MYP framework?**

20 A It is unclear what portion of this undefined Climate Ready Grid is supported through  
21 MYP investments versus other proceedings. As the Company notes, there are other

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<sup>40</sup> Pepco Response to OPC 4-6(b), attached hereto as Exhibits DCG (A)-10.

<sup>41</sup> Pepco Response to DCG 7-22(a), attached hereto as Exhibit DCG (A)-11.

<sup>42</sup> See Exhibit DCG (A)-8, originally Pepco’s Response to AOBA 1-9(b).

1 proceedings that support the Climate Ready Grid, including FC Nos. 1167, 1130, and  
2 1160.<sup>43</sup>

3 **Q What are the expected benefits from the Climate Ready Grid investments?**

4 A The expected benefits from investments associated with the Climate Ready Grid appear  
5 to be the same as those that would result from traditional utility investments that have  
6 historically been sufficiently supported through cost-of-service regulation. Specifically,  
7 Pepco states that the anticipated benefits include “providing customers with a safe,  
8 affordable, and reliable energy system.”<sup>44</sup> While these are important goals, they do not  
9 differ from Pepco’s historical mandate.

10 **Q How will the Company measure the benefits associated with its Climate Ready Grid**  
11 **investments?**

12 A Pepco states that it has not developed any metrics to track the benefits of the deployment  
13 of the Climate Ready Grid,<sup>45</sup> but that reliability is an integral component and can be  
14 measured by well-established metrics within the utility industry.<sup>46</sup>

15 **Q In your view, has Pepco provided sufficient information to evaluate the costs and**  
16 **benefits of the Climate Ready Grid?**

17 A No. Pepco has not identified which investments are part of its Climate Ready Grid or  
18 what associated costs it would recover through the MYP, nor has it identified quantifiable  
19 metrics to measure the benefits associated with these investments. This lack of  
20 transparency is counter to one of the purported goals of the Commission’s AFOR

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<sup>43</sup> Exhibit DCG (A)-9, at 1-9(d).

<sup>44</sup> *Id.*, at 1-9(e).

<sup>45</sup> *Id.*, at 1-9(f).

<sup>46</sup> *Id.*, at 1-9(b).

1 framework, which is to “provide[s] an appropriate level of transparency and reporting  
2 into the utility's operational and capital plans.”<sup>47</sup>

3 **Q How much of the MYP capital plan pertains to investments that will directly**  
4 **support the District’s (and Commission’s) clean energy and climate goals?**

5 A Despite the Company’s claim that the MYP “is a critical pathway to support and advance  
6 the District’s goals and policies on clean energy and climate,”<sup>48</sup> only 3.6 percent of the  
7 \$1.4 billion in total planned capital investments over the MYP term (2024-2026) directly  
8 supports the Company’s Climate Solutions Plan (CSP), based on data provided in  
9 discovery.<sup>49</sup> This is a clear indication that the Company’s MYP is much more akin to a  
10 business-as-usual capital plan than a “Climate Ready Pathway”.

11 **Q What investments directly support the Company’s Climate Solutions Plan?**

12 A Though not included in its MYP filing, in response to discovery, Pepco provided a list of  
13 13 projects included in the MYP that directly support its Climate Solutions Plan (CSP) 5-  
14 Year Action Plan and two additional investments that support the integration of DERs.  
15 The cost of these capital investments represents only \$51.7 million of the \$1.4 billion that  
16 Pepco has planned. I summarize these projects based on the type of investment (i.e.,  
17 capital versus expense) in [Table 3](#) below.

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<sup>47</sup> Formal Case 1156, Order No. 20273 at ¶6 (December 20, 2019).

<sup>48</sup> O’Donnell Direct Testimony, PEPCO (A), at 6.

<sup>49</sup> It was not possible to combine capital investments with ratemaking adjustments (RMA) for a total MYP budget comparison given the manner in which the RMAs were presented.

1 **Table 3. Proposed CSP 5-Year Action Plan Investments Included in MYP<sup>50</sup>**

<b>MYP Project Name</b>	<b>CSP Program</b>
<b>Capital Investments</b>	
Congress Heights Battery Demonstration (confirm known as Alabama Ave in H-2)	Congress Heights Battery Demonstration Project
Mt Vernon BESS IT	Mt. Vernon Substation Battery NWS Demonstration Program
EU ADMS Convergence - Stage 2 Pepco	ADMS
EU Outage Reporting and Analytics Implementation (Pepco)	ADMS
EU Outage Reporting and Analytics ADMS Integration (Pepco)	ADMS
Advanced Distribution Management System Implementation (Pepco)	ADMS
Pepco – Network RMS – Line	Supports DER Integration
Pepco – Network RMS – Telecom	Supports DER Integration
<b>Ratemaking Adjustment 16</b>	
Community Bill Presentment (changes) and Reporting (Interconnection Related)	Community Solar Automation Program
Community Solar Automation - Integration with SAP - ALL PHI (Interconnection related)	Community Solar Automation Program
HB818 Utility Consolidated Billing Community Solar	Community Solar Automation Program
<b>Ratemaking Adjustment 19</b>	
Interconnection Design and Process Streamlining Program	Interconnection Design and Process Streamlining
<b>Other Expense</b>	
Residential TOU implementation	Residential Electric Vehicle Charging Time-of-Use Rate Program
Advanced DER Analytics	Advanced DER Analytics Program
Planning and Forecasting System	Planning and Forecasting System Program

2 **Q Are there additional investments that the MYP should include to support the**  
 3 **District’s and the Commission’s climate and clean energy goals?**

4 **A** Yes. The Company should include additional investments to address ongoing issues with  
 5 the DER interconnection process and support data transparency and advanced metering  
 6 infrastructure.

1 **Q Please describe the need for improvement to the DER interconnection process.**

2 A While Pepco's MYP includes proposals to improve interconnection through integrating  
3 the online interconnection portal with the billing system and by expanding the Grid  
4 Power Connection (GPC) team, that supports the customer application process,<sup>51</sup> more  
5 should be done. For example, the Chesapeake Solar and Storage Association (CHESSA)  
6 has repeatedly filed comments in FC 1050 highlighting pervasive interconnection delays  
7 for large solar projects and changes to the residential interconnection requirements that  
8 increase costs.<sup>52</sup>

9 In addition, DOEE has identified issues with the solar interconnection process for both  
10 residential rooftop solar installations and Community Renewable Energy Facilities  
11 (CREFs) including: (1) delays in Pepco issuing Authorizations to Operate and to  
12 Interconnect; (2) unexpected fees; (3) lack of cost transparency for purportedly necessary  
13 distribution system upgrades; and (4) lack of a predictable, consistent interconnection  
14 process.<sup>53</sup> However, Pepco's MYP does not address these interconnection concerns.<sup>54</sup>

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<sup>50</sup> See Exhibit DCG (A)-11 (Pepco Response to DCG 7-22(a)). *See also*, Pepco's Updated Response to DCG 7-22(a) (filed on Oct. 6, 2023), attached hereto as Exhibit DCG (A)-12 and Pepco Response to DCG 9-2, attached hereto as Exhibits DCG (A)-13.

<sup>51</sup> Direct Testimony of Morlon D. Bell-Izzard, PEPCO (J), at 21-22.

<sup>52</sup> Comments of the Chesapeake Solar and Storage Association (CHESSA), FC 1050, February 2, 2023.

<sup>53</sup> District of Columbia Department of Energy and Environment Energy Administration (DOEE), *Comments in Response to Petition of Potomac Electric Power Company to Approve a Tariff Change for 20 kW and Below Residential NEM Solar Interconnections*, FC 1050, May 1, 2023, at 2.

<sup>54</sup> Response to DCG 3-14, attached hereto as Exhibit DCG (A)-14.

1 **Q What investments should Pepco consider to address these interconnection issues?**

2 A An area ripe for improvement is Pepco's hosting capacity map. This is a critical resource  
3 for facilitating DER development, but Pepco does not appear to be adequately funding it  
4 or pursuing improvements to it.

5 **Q What benefits do hosting capacity maps provide?**

6 A Hosting capacity maps can facilitate market-driven DER deployment by providing  
7 developers with an early indication of where DERs can provide the greatest value within  
8 Pepco's service territory and can help avoid the possibility of developers having to pay  
9 high system upgrade costs to interconnect DERs.

10 There are three primary use cases for hosting capacity maps and analysis:

- 11 1) to support market-driven DER deployment by enabling developers to identify  
12 technically suitable and potentially lower-cost interconnection locations;
- 13 2) to assist with streamlining DER interconnections by improving or automating  
14 parts of the technical screening process; and
- 15 3) to enable more robust, long-term distribution system planning, providing visibility  
16 into how much DER the grid can host in future years, by identifying potential  
17 system constraints and proactive upgrades.<sup>55</sup>

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<sup>55</sup> Liburd, S., et al. (2021), *Hosting Capacity Analysis and Distribution Grid Data Security*, prepared for Minnesota Department of Commerce by Synapse Energy Economics, Inc, at ii.

1 **Q Does Pepco’s proposed MYP support the hosting capacity maps?**

2 A No. While Pepco includes a DER Hosting Capacity Maps Program within its CSP 5-Year  
3 Action Plan, it does not include any costs associated with this program in the MYP, and  
4 only indicates it will continue to evaluate funding this program in future years.<sup>56</sup>

5 Similarly, Pepco states it is planning to incorporate new capabilities, such as advanced  
6 inverter functionalities (e.g. Volt-VAR control) to support dynamic hosting capacity, but  
7 does not provide an anticipated timeline.<sup>57</sup> Pepco also states that hosting capacity was not  
8 used in its load forecasts because it has not established a proactive investment program  
9 for Hosting Capacity Improvement at this time.<sup>58</sup>

10 Pepco should accelerate these investments and include a clear timeline for deployment as  
11 part of an overall grid modernization plan and allow for data sharing with DER providers  
12 to enable the deployment of DERs based on the needs of the distribution system. DOEE  
13 is currently conducting a hosting capacity analysis, following the direction of the  
14 Council’s Committee on Transportation & the Environment.<sup>59</sup> The results of the study  
15 will be public this calendar year, however it will not address the long-term need for  
16 Pepco to improve hosting capacity maps.

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<sup>56</sup> Pepco Response to DCG 7-32(b), attached hereto as Exhibit DCG (A)-15.

<sup>57</sup> Pepco Response to OPC 6-4, attached hereto as Exhibit DCG (A)-16.

<sup>58</sup> Pepco Response to DCG 7-33(a)(b), attached hereto as Exhibit DCG (A)-17.

<sup>59</sup> Council of the District of Columbia, Committee on Transportation & the Environment, [Fiscal Year 2023 Committee Budget Report](#), pg 87

1 **Q Should Pepco's MYP support increased data transparency and utilization of**  
2 **advanced metering infrastructure?**

3 A Yes. Pepco has invested millions in advanced metering infrastructure (AMI) but has  
4 failed to unlock the full benefits that these meters can provide to its customers. It is far  
5 too common for utilities to underutilize AMI. For example, a recent study by the  
6 American Council for an Energy-Efficient Economy (ACEEE) found that only one of the  
7 52 utilities surveyed was optimizing its AMI to create energy savings opportunities for  
8 customers.<sup>60</sup>

9 It is important to recognize that AMI on its own does not provide sufficient energy  
10 savings benefits to customers. The actual benefits of AMI realized by customers are  
11 directly related to the types of programs provided by utilities and the design of those  
12 programs. Customers need sufficient education, price signals, tools, and ease-of-use  
13 applications to take advantage of AMI. These offerings can include time-varying rates,  
14 load disaggregation, behavioral-based programs with real-time feedback, grid-interactive  
15 efficient buildings, Home Area Network (HAN) applications, and Green Button Connect  
16 My Data (CMD).

17 While Pepco has made progress in utilizing AMI in its Energy Wise Rewards program  
18 and has proposed a time-of-use rate, more is needed. I recommend that Pepco implement  
19 full functionality of Green Button CMD including the ability for customers to authorize  
20 automatic data transfers with third parties and implement HAN. Customers are paying for

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<sup>60</sup> Gold, R., Waters, C., York, D. 2020. Leveraging Advanced Metering Infrastructure to Save Energy. American Council for an Energy-Efficiency Economy (ACEEE).

1 AMI and should have ownership and control over their energy data, including the ability  
2 to share interval energy usage data and other AMI-related data fields with chosen  
3 authorized entities. Pepco should therefore enable the full range of energy data fields  
4 within Green Button to ensure that third parties have sufficient information to provide  
5 energy management services to customers and to help support greater grid reliability,  
6 resiliency, and decarbonization.

7 **The Climate Ready Grid Exaggerates The Impacts Of Electrification**

8 **Q Is the Company’s MYP capital plan based on a load forecast that includes**  
9 **electrification?**

10 A No. When asked to provide the Company’s forecast of the anticipated growth in  
11 electrification, Pepco indicates that it does not directly include electrification in its 10-  
12 year capacity/load forecasts. In addition, Pepco does not include forecasts for conversions  
13 of gas heating to electric heating.<sup>61</sup>

14 **Q Why is this problematic?**

15 A The Company is asking the Commission to approve a revenue requirement for the MYP  
16 term that is based on the need to create a Climate Ready Grid to prepare for the  
17 “significant shift to electrification” without considering actual electrification forecasts or  
18 conducting an analysis to determine whether additional distribution investments are  
19 actually needed to support forecasted increases in electrification.

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<sup>61</sup> Pepco Response to AOBA 1-11(a)(c), attached hereto as Exhibit DCG (A)-18.

1 **Q Is there an analysis that Pepco could use to determine whether distribution**  
2 **investments are needed to support growth in electrification?**

3 A Yes. In FC 1167, DOEE filed “The Strategic Electrification Roadmap for Buildings and  
4 Transportation in the District of Columbia” (Electrification Roadmap).<sup>62</sup> The  
5 Electrification Roadmap analyzed the expected load increases and timing resulting from  
6 the additional energy efficiency and electrification measures needed to meet the Clean  
7 Energy DC Plan target for a 50 percent reduction in GHG emissions by 2032. The  
8 roadmap quantifies substation impacts for summer and winter peaks resulting from  
9 adding building electrification and electric vehicle (EV) charging.<sup>63</sup>

10 **Q Does Pepco use the Electrification Road map to inform its electrification forecast?**

11 A No, it does not.<sup>64</sup>

12 **Q What are the main conclusions from the Electrification Roadmap?**

13 A The Electrification Roadmap found that Pepco’s system is well-equipped to handle the  
14 projected electrification loads from buildings and transportation up through the year  
15 2032, stating that the combined electrification loads are not expected to exceed substation  
16 capacity in any zone within the District of Columbia.<sup>65</sup> The Electrification Roadmap also  
17 concludes that beyond 2032, electrification loads will continue to increase, highlighting  
18 the important role that energy efficiency and DERs can play in mitigating load impacts

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<sup>62</sup> DOEE, *The Strategic Electrification Roadmap for Buildings and Transportation in the District of Columbia* (Electrification Roadmap), April 2023.

<sup>63</sup> *Id.*, at 6.

<sup>64</sup> Pepco Response to DCG 5-26(b), attached hereto as Exhibit DCG (A)-19.

<sup>65</sup> DOEE Electrification Roadmap, at 85.

1 and recommends that such resources be integrated into the grid planning process to serve  
2 as solutions to grid constraints.<sup>66</sup>

3 **Q Are there additional analyses that demonstrate that increased deployment of energy**  
4 **efficiency and load flexibility can mitigate the impacts of electrification?**

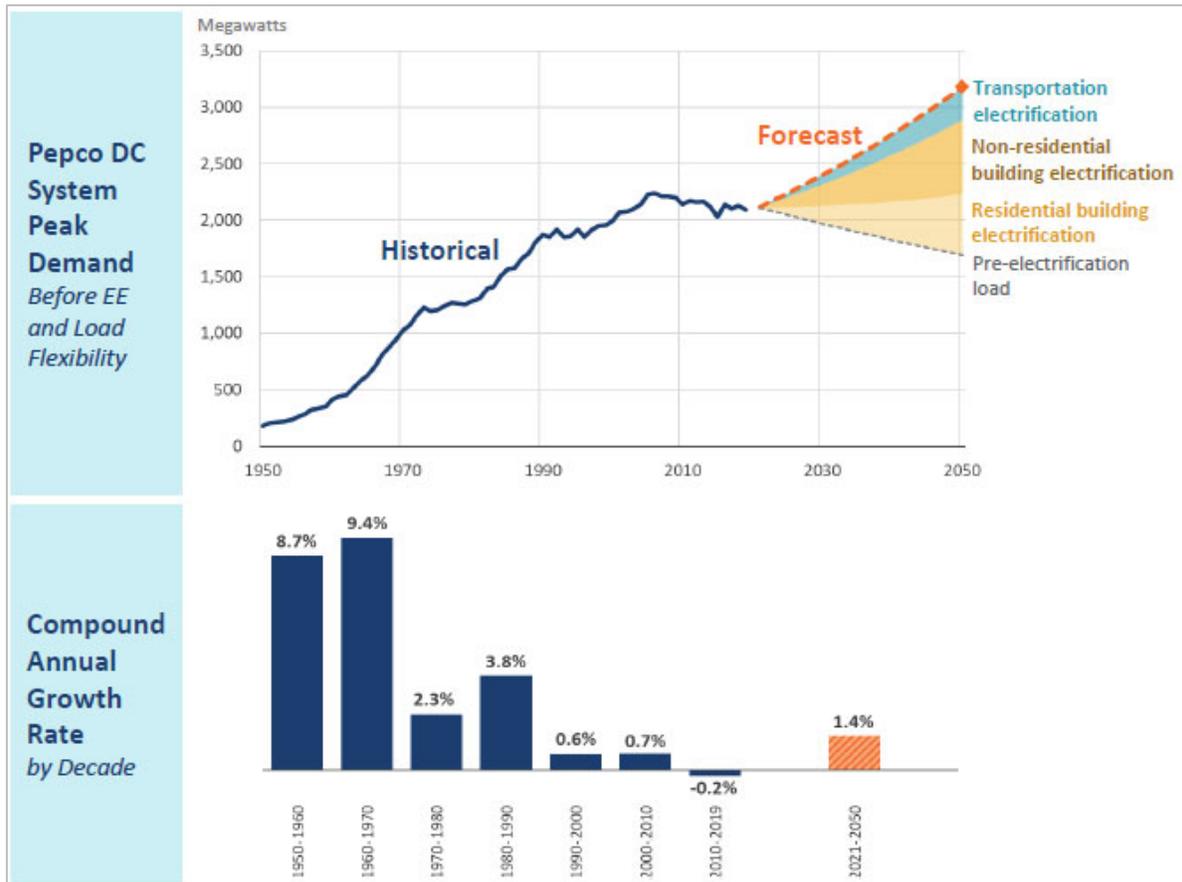
5 A Yes. Pepco itself submitted an electrification study to the Commission in FC 1167 that  
6 provided an assessment of the impact of electrification on the Pepco DC system.<sup>67</sup> The  
7 study, prepared by The Brattle Group, found that future load growth due to electrification  
8 will remain within recent historical ranges and Pepco has been able to reliably manage  
9 such growth. The graphic below summarizes these findings.

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<sup>66</sup> *Ibid.*

<sup>67</sup> Hledik, R., et al., (August 2021), *An Assessment of Electrification Impacts on the Pepco DC System*, prepared for Pepco by Brattle and filed in FC 1167 on August 27, 2021.

1 **Figure 2. Forecast of Electrification on Pepco DC System Peak<sup>68</sup>**



2

3 The study also noted that heating electrification is expected to shift the Pepco DC system

4 peak to the winter season, which is currently lower than its summer peak demand,

5 meaning that that the system can accommodate additional heating load before new

6 capacity is needed.<sup>69</sup> In addition, similar to the Electrification Roadmap, Brattle

7 determined that an achievable portfolio of energy efficiency and load flexibility measures

<sup>68</sup> *Id.*, at 3.

<sup>69</sup> *Id.*, at 22.

1 could mitigate load growth from electrification, noting such resources could reduce  
2 Pepco's future load growth rate to less than 1 percent per year.<sup>70</sup>

3 **Q Is Pepco's MYP aligned with the conclusions and recommendations from these**  
4 **electrification studies?**

5 A No. Pepco's vision of a Climate Ready Grid appears to be rooted in traditional  
6 distribution asset investments, rather than focusing on the strategies outlined in the  
7 electrification reports, such as increasing deployment of energy efficiency to manage  
8 overall load growth as well as demand-side management strategies and NWAs to target  
9 areas of the system that become constrained. Pepco's planning process does not  
10 adequately address these alternatives to traditional utility investments.

11 **Q How should Pepco's planning process be modified to address alternatives to**  
12 **traditional investments?**

13 A Pepco should evaluate the cost-effectiveness of alternatives to traditional distribution  
14 assets, and it should present those results as part of its plan. As noted by Brattle, a  
15 detailed distribution plan that includes location specific analyses of load growth and  
16 capacity needs on the distribution system as well as the costs and benefits of various  
17 approaches to addressing that growth is needed.<sup>71</sup> This is a critical missing piece from  
18 Pepco's Climate Ready Grid. The Company does not base its proposed investments on a  
19 comprehensive IDP that integrates DERs and adequately considers NWAs as means to

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<sup>70</sup> *Id.*, at 4.

<sup>71</sup> *Ibid.*

1 provide the least cost solutions to ratepayers, while supporting a reliable and resilient  
2 electric system.

3 **VI. THE MYP DOES NOT SUPPORT INCREASED DISTRIBUTION PLANNING**  
4 **TRANSPARENCY**

5 **Pepco's Grid Modernization Proposals Are Not Sufficiently Organized Or**  
6 **Transparent**

7 **Q Does Pepco include grid modernization projects in its MYP?**

8 A Yes. Pepco's MYP contains several grid modernization projects, which include  
9 Enterprise Asset Management (EAM 2.0), Geographic Information System (GIS), and an  
10 Advanced Distribution Management System (ADMS).<sup>72</sup> Investments in automation for  
11 grid modernization are discussed elsewhere, in Pepco Exhibit (H)-1.<sup>73</sup>

12 **Q Are there any additional investments in the MYP that can be categorized as grid**  
13 **modernization?**

14 A Yes. However, it is difficult to discern the complete set of grid modernization  
15 investments proposed by Pepco because modernization is discussed by Pepco in a diffuse  
16 fashion, in numerous places throughout the Company's filing. For example, Witness  
17 O'Donnell refers to Pepco's Storm Hardening the District of Columbia Infrastructure for  
18 Resiliency (SHDCIR) program as supporting "the Commission's goal of modernizing the  
19 grid and enhancing infrastructure to withstand the impact of increasing climate-related  
20 storms."<sup>74</sup> In a discovery response, Witness Cantler indicated that the Company

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<sup>72</sup> Cantler Direct Testimony, Pepco (H), at 44.

<sup>73</sup> Exhibit (H)-1, p. 37.

<sup>74</sup> O'Donnell Direct Testimony, PEPCO (A), at. 51.

1 “incorporates grid modernization efforts into our planned investments as normal course  
2 of business” and then refers to battery energy storage, 4kV conversions, and distribution  
3 automation as examples of investments to modernize the grid “to support electrification  
4 efforts and DER enablement.”<sup>75</sup>

5 **Q Do you support these investments?**

6 A In general, I am supportive of Pepco’s grid modernization investments. However, I have  
7 several concerns about Pepco’s approach to presenting these investments in its MYP  
8 filing. Pepco’s presentation of these investments lack transparency and clarity. Also,  
9 Pepco has omitted key information that is critical to evaluating its grid modernization  
10 plans.

11 **Q In what ways does Pepco’s proposal lack transparency and key information?**

12 A Pepco does not explain how individual grid modernization components fit together, nor  
13 does Pepco comprehensively evaluate alternatives to its proposed plans. Further, Pepco  
14 does not clearly map its grid modernization investments to the District’s climate goals  
15 and desired outcomes. In my view, the best fix for these informational deficiencies is  
16 requiring Pepco to provide a grid modernization plan including a BCA of its proposed  
17 grid modernization investments in conjunction with an IDP.

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<sup>75</sup> Pepco Response to DCG 5-23, attached hereto as Exhibit DCG (A)-20.



1           statutory requirements for solar growth. The Local Solar Expansion Amendment  
2           Act of 2022 increased the already ambitious targets for distributed solar in the  
3           District of Columbia, and so it is imperative that Pepco makes the necessary  
4           investments to enable the required interconnection of distributed solar.

5           Although the Company reports that its modernization efforts will enable deployment and  
6           interconnection of DER,<sup>79</sup> there is no clear assessment of how much DER  
7           interconnection will be facilitated through the Company’s grid modernization  
8           investments. Pepco is not able to indicate how much additional hosting capacity for solar  
9           and other DER will be achieved as a result of its distribution construction plan.<sup>80</sup> More  
10          specifically, Pepco cannot indicate how much additional DER capacity will be supported  
11          as a result of its investment in the Remote Monitoring System (RMS),<sup>81</sup> nor has the  
12          Company quantified the DER benefits of DERMS.<sup>82</sup> Pepco has stated for the record in  
13          the PIMs working group that “solar is a good way to reduce peak demand.” If Pepco is  
14          able to identify a peak demand reduction benefit from the deployment of DERs like solar,  
15          it should be able to more fully quantify the infrastructure and cost savings potential for  
16          DERs in its MYP.<sup>83</sup> While I support these investments in principle, Pepco should provide  
17          estimates of the benefits that can be expected from RMS and DERMS, and it should use  
18          load forecasts that are consistent with meeting the District’s energy policy goals to

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<sup>79</sup> Cantler Direct Testimony, Pepco (H), at 7.

<sup>80</sup> Pepco Response to DCG 5-12, attached hereto as Exhibit DCG (A)-22.

<sup>81</sup> Pepco Response to DCG 3-8(c), attached hereto as Exhibit DCG (A)-23.

<sup>82</sup> Pepco Response to DCG 5-21(b), attached hereto as Exhibit DCG (A)-24.

<sup>83</sup> Formal Case No. 1156 (PIMS Working Group), July 13, 2023 meeting minutes, at pg. 2.

1 demonstrate these benefits and it should use load forecasts that are consistent with  
2 meeting the District's energy policy goals to demonstrate these benefits.

3 **Pepco Should Provide A Grid Modernization Plan As Part Of An IDP**

4 **Q How should Pepco present its grid modernization plans?**

5 A Pepco should provide a comprehensive grid modernization plan. This plan should include  
6 an account of Pepco's grid modernization actions to date, active proposals, and future  
7 plans in a detailed and transparent format. All planned investments should be included in  
8 this plan, including those investments already proposed in other proceedings. Further,  
9 Pepco should detail in this plan why its investments are the optimal ones to achieve  
10 relevant District policy objectives, detailing the specific benefits that are expected to arise  
11 for each of the planned investments.

12 **Q Why is it important for Pepco's grid modernization plans to be presented clearly?**

13 A This is not just a matter of semantics. Grid modernization is distinct from business-as-  
14 usual investment: investments in grid modernization are often elective, and the value  
15 proposition for grid modernization investment usually rests on meeting policy objectives  
16 that go beyond the provision of reliable and affordable service. Moreover, grid  
17 modernization technologies are complex and interdependent. Taking all of this into  
18 consideration, it is clear that regulators and stakeholders need a comprehensive picture of  
19 Pepco's grid modernization program to ensure that it is in the public interest and will  
20 advance the District's climate goals.

1 **Q Will a grid modernization plan provide the Commission and intervening parties**  
2 **with greater transparency into grid modernization investments occurring across**  
3 **multiple proceedings?**

4 A Yes. The complexity and cost of grid modernization investments often necessitate the  
5 staggering of these investment overtime and across proceedings. A comprehensive grid  
6 modernization plan can help to provide transparency on the interdependencies across  
7 investments and provide a more holistic view into the overall costs and benefits to the  
8 electric system and ratepayers.

9 **Q Is it appropriate for the Company to incorporate grid modernization investments**  
10 **into distribution planning?**

11 A Yes. Grid modernization planning and investment should not be siloed. In this spirit, I  
12 encourage the Commission to require Pepco to submit an IDP as part of this proceeding  
13 to ensure that Pepco's grid modernization planning is fully integrated with its wider  
14 distribution system planning.

15 **Q How would the IDP relate to the grid modernization plan?**

16 A I recommend that the grid modernization plan be provided as part of the IDP. This format  
17 would help to elucidate the relationship between modernization investments and the  
18 wider grid and would also help to ensure that the Company considers the full range of  
19 options to meet given needs.

1 **Q Would providing an IDP and grid modernization plan facilitate stakeholder**  
2 **engagement?**

3 A I believe that it would. Pepco argues that it requires an MYP to facilitate modernization  
4 of the grid and is necessary to achieve key District policy priorities.<sup>84</sup> However, the  
5 certainty in cost recovery that Pepco is seeking through the MYP must be accompanied  
6 by greater prospective scrutiny of the investments that would effectively be preapproved.  
7 The grid modernization plan and IDP that I recommend would help to clarify the extent  
8 of Pepco's modernization investments and, ideally, would help to better elucidate the  
9 justification for them.

10 **Q Have any other jurisdictions implemented the informational requirements that you**  
11 **recommend?**

12 A Yes. In Minnesota, the state's investor-owned utilities (IOUs) are required to prepare  
13 biennial IDPs that include 5-year "grid modernization action plans."<sup>85</sup>

14 **Q Please describe the requirements for the IDP in Minnesota.**

15 A The specific filing requirements for the four investor-owned utilities cover five topic  
16 areas: (a) baseline distribution system and financial data; (b) hosting capacity and  
17 interconnection requirements; (c) distributed energy resource scenario analysis; (d) long-  
18 term distribution system modernization and infrastructure investment plan; and (e) NWA  
19 (non-traditional) analysis.<sup>86</sup>

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<sup>84</sup> O'Donnell Direct at 5-6.

<sup>85</sup> MN PUC. Docket No. E002/CI-18-251. Order on August 30, 2018. Docket No. E-017/CI-18-253. Docket No. E-017/CI-18-254. Docket No. E-017/CI-18-255. Order Adopting Integrated-Distribution-Plan Filing Requirements. February 20, 2019.

<sup>86</sup> Docket No. E-017/CI-18-253. Docket No. E-017/CI-18-254. Docket No. E-017/CI-18-255. Order Adopting Integrated-Distribution-Plan Filing Requirements. February 20, 2019.

1 **Q Please describe the requirements for the grid modernization action plan in**  
2 **Minnesota.**

3 A The IOUs are required to provide comprehensive information on grid modernization  
4 plans, including detail on plan objectives, timing, and costs and benefits, through a  
5 formal BCA. The action plans must document alternatives to proposed investments,  
6 detailing the technical and functional characteristics, along with the cost implications, of  
7 both proposed and alternative options. The plans must also describe interactions among  
8 grid modernization components and between these components and the wider grid.  
9 Finally, the plans must address communications, data, and interoperability  
10 considerations.<sup>87</sup>

11 **Q What role should the Commission play in the integrated planning process?**

12 A I recommend that the Commission establish filing requirements for the IDP and grid  
13 modernization plan, similar to what exists in Minnesota. When Pepco files its IDP in the  
14 future, the Commission should open a proceeding with scope for stakeholder  
15 participation. I defer to the Commission to set rules and procedures for any future IDP  
16 proceeding, and I expect that the Commission would also make explicit what the  
17 implications would be of any decision rendered in such a proceeding.

18 **Q Should the Commission provide any other related guidance?**

19 A Yes. I recommend that the Commission establish a BCA framework to ensure that  
20 Pepco's evaluation of investment benefits and costs is satisfactory. The impacts (i.e., cost  
21 and benefits) should be aligned with those included in the BCA framework to be

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<sup>87</sup> Docket No. E-017/CI-18-253. Docket No. E-017/CI-18-254. Docket No. E-017/CI-18-255. Order Adopting Integrated-Distribution-Plan Filing Requirements. February 20, 2019.

1 developed in accordance with Commission Order No. 21938. This framework should also  
2 provide direction and even establish requirements related to the timeline, the treatment of  
3 alternatives, and other facets.

4 **Q Have any other jurisdictions established BCA frameworks for grid modernization?**

5 **A** While Minnesota does not have a framework per se, the Commission has set forth  
6 requirements for Xcel Energy to conduct a BCA of grid modernization investments.  
7 Through two Orders, issued in 2019 and 2020, the Commission has formalized its  
8 expectation for detailed information on both the technical and economic dimensions of  
9 grid modernization investments. Per the 2019 Order, for each grid modernization  
10 investment proposed, Xcel must describe, among other things, the “principles, objectives,  
11 capability, functionalities, and technologies enabled by [the] investment,”<sup>88</sup> and must  
12 detail “[i]nterrelation and interdependencies with other existing or future investments,  
13 including overlapping costs: scope, amount, timing” (sic).<sup>89</sup> Xcel is further required to  
14 provide a BCA for “each investment component with overlapping costs or benefits in  
15 isolation” and “each bundled components, as appropriate” (sic).<sup>90</sup> The Commission also  
16 established principles to guide the practice of a BCA.

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<sup>88</sup> Docket No. E002/17-797. Order. September 27, 2019.

<sup>89</sup> *Ibid.*

<sup>90</sup> *Ibid.*

1 **Q Please describe the BCA principles established by the Minnesota commission.**

2 A The principles are enumerated below and indicate the standards to which investment  
3 analysis of grid modernization proposals should adhere. Per the Minnesota Commission,  
4 a properly formulated BCA for grid modernization should have:

- 5 • compared [the proposed investment] with traditional resources or technologies;
- 6 • clearly accounted for state regulatory and policy goals;
- 7 • accounted for all relevant costs and benefits, including those difficult to quantify;
- 8 • provided symmetry across relevant costs and benefits;
- 9 • applied a full life-cycle analysis;
- 10 • provided a sufficient incremental and forward-looking view;
- 11 • [be] transparent;
- 12 • avoided combining or conflating different costs and benefits;
- 13 • discuss[ed] customer equity issues, as needed;
- 14 • assessed bundles and portfolio where reasonable; and
- 15 • addressed locational and temporal values.<sup>91</sup>

16 **Q Has the Commission in Minnesota established other provisions to promote customer**  
17 **interest in grid modernization?**

18 A Yes. In its 2020 Order, the Commission set forth a series of requirements to enhance  
19 customer protection and benefits. It indicated that cost recovery for AMI and field area  
20 network (FAN) would be contingent on the utility “accomplishing Commission-approved

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<sup>91</sup> *Ibid.*

1 metrics and performance evaluations”<sup>92</sup> and further compelled Xcel to provide with any  
2 future cost recovery requests for AMI or FAN, “a proposal for specific metrics and  
3 evaluation methods, and a detailed plan describing how the company will maximize the  
4 benefits of [grid modernization] investments for ratepayers.”<sup>93</sup> In a subsequent  
5 proceeding, the Minnesota Commission initiated a process to develop PIMs to effectuate  
6 contingent cost recovery for AMI and FAN.<sup>94</sup> As far as I am aware, these PIMs are still  
7 in development.

8 **Q Should the Commission introduce customer protections for grid modernization**  
9 **investments in the District of Columbia?**

10 A Yes, the Commission should establish mechanisms to ensure that Pepco utilizes its grid  
11 modernization investments for maximum customer benefit. Unfortunately, it does not  
12 appear that Pepco is leveraging its past grid modernization investments to the fullest  
13 extent. For example, though the Company has installed AMI, it has not provided its  
14 customers with "easy and secure access to their energy usage information in a consumer-  
15 friendly and computer-friendly format."<sup>95</sup> The Commission should establish metrics and  
16 performance targets for grid modernization investments, and the Commission should also  
17 consider making cost recovery conditional on the Company taking all reasonable actions  
18 within its control to ensure that the benefits of grid modernization investments are

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<sup>92</sup> Docket No. E002/19-66. Order. July 23, 2020.

<sup>93</sup> *Ibid.*

<sup>94</sup> Docket No. E002/21-814. Order. June 28, 2023.

<sup>95</sup> Pepco (H)-2 at 209.

1 realized. I note that projections of benefits and proposed performance tracking and  
2 reporting can be addressed through the recommended grid modernization plan.

3 **VII. IT IS PREMATURE TO APPROVE A SECOND MYP**

4 **Evaluation Of The Modified EMRP Is Insufficient.**

5 **Q Please summarize the Commission’s intended goals of AFOR.**

6 **A** In Order No. 20273, the Commission established an AFOR framework as a means to  
7 protect consumers, ensure quality, availability and reliability of regulated services and  
8 ensuring that AFOR is in the public interest, including the interests of ratepayers and  
9 shareholders.<sup>96</sup> The Commission found that AFOR will provide the opportunity to  
10 explore new tools to further the District’s ambitious clean energy goals and the  
11 Commission’s PowerPath DC objectives, while also preserving a high standard of energy  
12 delivery system reliability and fostering grid modernization.<sup>97</sup>

13 **Q Did the Commission adopt an evaluation plan or establish AFOR regulations?**

14 **A** No. The Commission did not adopt a formal evaluation plan within its Order approving  
15 the Modified EMRP. In addition, AFOR regulations have yet to be developed.

16 It was not until after Pepco filed its second MYP in the instant proceeding that the  
17 Commission directed Pepco to file “supplemental testimony with accompanying exhibits  
18 that explain in quantitative and qualitative terms the benefits of, problems identified, and

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<sup>96</sup> Formal Case 1156, Order No. 20273 at ¶1 (December 20, 2019).

<sup>97</sup> *Id.*, at ¶¶ 5-6.

1 lessons learned from the Modified EMRP Pilot.”<sup>98</sup> In this Order, the Commission  
2 specifically stated that it approved the Modified EMRP as a pilot, which is “an activity  
3 undertaken as an experiment to determine if something should be pursued more  
4 broadly.”<sup>99</sup> The Commission stated the information contained in the supplemental  
5 testimony will support an assessment of lessons learned from the Modified EMRP and  
6 develop an evaluation framework in assessing Pepco’s second MYP as proposed in FC  
7 1176.<sup>100</sup>

8 **Q Why is this problematic?**

9 A As I will demonstrate below, relying on Pepco to provide a self-evaluation of its  
10 Modified EMRP without the directives from a formal evaluation framework does not  
11 provide sufficient information to assess whether the Modified EMRP successfully  
12 achieved the goals of AFOR, or is merely a litany of self-serving claims that cannot be  
13 verified.

14 **Q Did Pepco identify the benefits that would result from its Modified EMRP?**

15 A Yes. In FC 1156, the Company identified ten incremental benefits that the Modified  
16 EMRP would provide. The Company stated that its proposal would:

17 1) facilitate investments that support the District’s energy policy goals;

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<sup>98</sup> Formal Case 1176, Order No. 21886 at ¶1 (July 28, 2023).

<sup>99</sup> *Id.*, at ¶23.

<sup>100</sup> *Id.*, at ¶1.

- 1           2) provide customers, the Commission, and interested parties a longer-term view of  
2           future capital investments and O&M plans before the utility makes those  
3           investments;
- 4           3) provide customers with rate predictability over the MYP's term;
- 5           4) provide a decrease in the administrative burden and cost for the Commission and  
6           stakeholders by reducing the frequency of annual rate case filings;
- 7           5) protect customers and provide incentives to the Company to reduce costs and  
8           improve operational efficiency through the proposed Annual Reconciliation  
9           Filing;
- 10          6) align customer rates and reflect the current cost of providing service to customers;
- 11          7) increase the level of transparency and reporting to customers, the Commission,  
12          and stakeholders;
- 13          8) enhance Commission oversight through advance review of the Company's total  
14          capital investment plan and proposed performance levels, with annual reporting  
15          and reviews of certain variances to those approved plans over the term of the  
16          MYP and again at its conclusion;
- 17          9) provide for significant automatic financial penalties if the Company did not meet  
18          Commission-approved performance criteria; and

1           10) enhance certainty of spending for the MYP’s term, leading to improved  
2           investment planning that would create jobs and promote economic  
3           development.<sup>101</sup>

4   **Q    Does Pepco claim its Modified EMRP achieved these goals?**

5   A    Yes. The Company states that the Modified EMRP “generally achieved the qualitative  
6       and quantified benefits.”<sup>102</sup>

7   **Q    Do you agree with Pepco’s assessment?**

8   A    There is not sufficient data to assess the merits of Pepco’s self-evaluation. When asked to  
9       provide the “workpapers, data, analyses, assumptions, and studies” that Pepco relied  
10       upon to quantify each of the benefits achieved by the Modified EMRP, Pepco indicates it  
11       did not quantify the dollar value of each of the incremental benefits.<sup>103</sup> Furthermore,  
12       when asked if Pepco could provide any quantitative data to demonstrate that the Modified  
13       EMRP provided benefits to customers or achieved public policy goals, the Company  
14       indicated it did not perform that analysis.<sup>104</sup>

15       Without reporting metrics and quantitative data, it is difficult to assess whether the  
16       Modified EMRP resulted in sufficient benefits to ratepayers to outweigh the risks  
17       associated with information asymmetry and the reconciliation process and whether it  
18       incentivized cost-efficiencies compared to cost-of-service regulation. Given the limited  
19       data available, I summarize my assessment of the outcomes of the Modified EMRP as

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<sup>101</sup> Supplemental Direct Testimony of Elizabeth Morgan Downs O’Donnell, PEPCO (2A), at 3-4.

<sup>102</sup> O’Donnell Supplemental Direct Testimony, PEPCO (2A), at 4, lines 5-9.

<sup>103</sup> Pepco Response to AOBA 10-2, attached hereto as Exhibit DCG (A)-25.

<sup>104</sup> Pepco Response to DCG 8-10, attached hereto as Exhibit DCG (A)-26.

1 compared to its goals in [Table 4](#) below. I will further elaborate on the key outcomes in  
 2 the section below.

3 **Table 4. Summary of Modified EMRP Goals and Outcomes**

Modified EMRP Goal	Outcome
1. Support the District’s energy policy goals	Pepco does not track these investments in the EMRP and does not demonstrate that the investments that were made would not have occurred under cost-of-service regulation.
2. Provide longer-term capital and O&M investment plans before investment	Information asymmetry limits the usefulness of these plans. Further, the list of investments is not tied to an IDP and grid modernization plan, which would provide a full analysis of alternatives and important context for the investments.
3. Provide customers with rate predictability	Rate predictability is achieved through guaranteed increases to Pepco’s revenue requirement, which primarily benefits Pepco by shortening the cost-recovery period of its investments and reducing the likelihood of cost disallowances.
4. Reduce administrative burden	Pepco does not provide a specific measurement of this benefit. <sup>105</sup>
5. Reduce costs and improve operational efficiency through Annual Reconciliation	Reconciliation of overspending shifts risk to ratepayers compared to cost-of-service regulation. Reconciliation of under-spending (i.e., returning cost savings to ratepayers) eviscerates the incentive to Pepco to reduce costs.
6. Align customer rates and reflect the current cost of providing service to customers	The reconciliation process does not guarantee that the costs embedded in rates are optimal. Further, it reduces the incentive to Pepco to control costs and find alternative solutions.
7. Increase the level of transparency and reporting	Data provided is of relatively little value without IDP and grid modernization plan.
8. Enhance Commission oversight through advance review of the	Without a long-term IDP and grid modernization plan, Pepco’s investment

<sup>105</sup> Pepco Response to AOBA 7-10, attached hereto as Exhibit DCG (A)-27.

Company's total capital investment plan, with annual reporting and reviews of certain variances	plans provide little additional meaningful improvement to transparency.
9. Provide for significant automatic financial penalties if the Company did not meet Commission-approved performance criteria	PIMs with financial penalties were not adopted.
10. Enhance certainty of spending for the MYP's term, leading to improved investment planning that would create jobs and promote economic development.	This could be achieved through providing investment plans under cost of service regulation; it does not require an MYP. Pepco provides no evidence that the EMRP improved this outcome compared to cost of service regulation. This "benefit" could also be achieved through limited cost riders or trackers for specific types of investments (such as grid modernization).

1 **Q Does Pepco claim that its Modified EMRP facilitated investments that support the**  
2 **District's energy policy goals?**

3 A Yes. The Company states that the structure of the Modified EMRP allowed for the  
4 Company to invest at the pace required to meet the District's and the Commission's  
5 decarbonization and clean energy goals and support investments that are foundational to a  
6 climate ready grid, such as those that maintain reliability and resiliency.<sup>106</sup>

7 **Q What investments did Pepco make since the approval of the Modified EMRP term**  
8 **that met the District's and the Commission's decarbonization and clean energy**  
9 **goals?**

10 A The Company did not identify any investments that specifically support the District's  
11 energy policy goals. The Company states that it does not track capital investments by  
12 whether they meet a specific decarbonization and clean energy goal.<sup>107</sup> The Company

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<sup>106</sup> O'Donnell Supplemental Direct Testimony, PEPCO (2A), at 4, lines 11-18.

<sup>107</sup> Pepco Response to AOBA 10-4(a), attached hereto as Exhibit DCG (A)-28.

1 also indicates that it cannot list the reliability and resiliency investments made during the  
2 Modified EMRP that directly support the District’s energy policy goals.<sup>108</sup>

3 **Q Is it problematic that the Company cannot identify capital investments that support**  
4 **decarbonization and clean energy goals?**

5 A Yes. One of the primary justifications for implementing AFOR is to facilitate investments  
6 that support the District’s energy policy goals. The Company even refers to its current  
7 MYP application as the “Climate Ready Pathway” that will continue to advance the  
8 District’s decarbonization and clean energy goals. If the primary driver of the MYP is to  
9 support these policy goals the Company should be required to provide transparency on  
10 the investments made to support those goals.

11 **Q Does Pepco provide any evidence that the Modified EMRP supported the District’s**  
12 **clean energy goals?**

13 A The Company claims that as a result of the Modified EMRP it was able to focus more on  
14 matters related to climate change initiatives. Specifically, Pepco filed three applications  
15 with the Commission during the Modified EMRP term (1) Pepco’s Climate Solutions  
16 Plan Phase I (FC 1167), (2) Pepco’s Energy Efficiency and Demand Response (FC  
17 1160), and (3) a petition to modify Net Energy Metering.<sup>109</sup>

18 **Q Would Pepco have been able to make these filings under cost-of-service regulation?**

19 A The Company did not answer this question with a “yes” or “no” response.<sup>110</sup> However, it  
20 is common for utilities operating under traditional cost of service regulation to file similar

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<sup>108</sup> Pepco Response to DCG 8-3(a-b), attached hereto as Exhibit DCG (A)-29.

<sup>109</sup> O’Donnell Supplemental Direct Testimony, PEPCO (2A), at 16-17.

<sup>110</sup> Pepco Response to DCG 9-22(a), attached hereto as Exhibit DCG (A)-30.

1 customer-facing applications. For instance, utilities, including Pepco, have been filing  
2 applications for energy efficiency programs since the 1980s, well before the introduction  
3 of MYPs. In addition, there are numerous examples of utilities filing applications for  
4 electric vehicle programs that do not operate under an AFOR framework.<sup>111</sup> I therefore  
5 do not consider an MYP to be a requirement for a utility to develop and file customer-  
6 facing programs.

7 **Q Did Pepco claim that its Modified EMRP increased transparency?**

8 A Yes. Pepco claims that the material it filed in support of its Modified EMRP in FC 1156  
9 provided a longer-term, forward-looking view of the Company's proposed business plan  
10 and capital investments than would have been included with a traditional historic test  
11 year rate proceeding.<sup>112</sup> The Company also states that the Modified EMRP allowed for  
12 the Commission and parties to understand how Pepco's investments align with the  
13 District's and the Commission's goals.<sup>113</sup> Finally, Pepco states that the annual  
14 reconciliation filings provided the Commission and intervening parties with detailed  
15 variance reports between the actual cost of capital and O&M compared to what was  
16 budgeted.<sup>114</sup>

17 **Q Do you agree that the Modified EMRP increased transparency?**

18 A No. As indicated earlier in my testimony, information asymmetry makes it difficult for  
19 intervening parties and regulators to vet proposed utility investments and the accuracy of

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<sup>111</sup> For example, utilities in New Jersey, Pennsylvania, Texas, and New Mexico have filed electric vehicle plans absent an MYP.

<sup>112</sup> O'Donnell Supplemental Direct Testimony, PEPCO (2A), at 5, lines 4-15.

<sup>113</sup> *Id.* at 6, lines 1-4.

<sup>114</sup> *Id.*, at 6, lines 4-7.

1 cost forecasts. In addition, intervening parties have less staff resources to devote to this  
2 review and it is cost prohibitive to acquire outside expertise to conduct the necessary  
3 review of the annual reconciliation filings and variance reports to adequately vet the  
4 prudence of an investment. The fact that no parties conducted any discovery or filed any  
5 comments regarding Pepco's Final Reconciliation for the Modified EMRP implies the  
6 impracticality of this approach.<sup>115</sup>

7 **Q Is an MYP required to provide increased transparency to the Commission and**  
8 **customers?**

9 A No, it is not. Regardless of whether Pepco operates under an MYP or cost of service  
10 regulation it could file a comprehensive IDP and grid modernization plan.

11 **Q Does Pepco claim rate predictability as a benefit of its Modified EMRP?**

12 A Yes. The Company states that the Modified EMRP provided customers with rate  
13 predictability for years 2021, 2022, and 2023.<sup>116</sup>

14 **Q Do predictable rates outweigh the flaws of the MYP?**

15 A I do not find rate predictability to be a compelling enough benefit to outweigh the risks of  
16 approving a second MYP as designed. It is true that upon approval of the EMRP, the rate  
17 increases in each rate year were known to customers. However, this is no different than  
18 what occurs under traditional cost of service regulation. Once rates are finalized, they are  
19 set until the next rate case and therefore known by customers. In addition, under both an

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<sup>115</sup> *Id.*, at 7, lines 16-18.

<sup>116</sup> *Id.*, at 6.

1 MYP and cost of service regulation, the rates for the next rate case are always unknown  
2 and may increase dramatically.

3 **Q Did the Modified EMRP create cost efficiencies compared to cost-of-service**  
4 **regulation?**

5 A While Pepco concludes that it was able to come within 1.9 percent of its overall O&M  
6 expenditure level projections, there is no counterfactual to compare these savings to what  
7 would have occurred under cost-of-service regulation.<sup>117</sup> In addition, Pepco does not  
8 provide any quantitative evidence that demonstrates cost efficiencies relative to its capital  
9 plan. The only information provided is that the Company was able to secure a lower cost  
10 of debt during the Modified EMRP that allowed for lower capital financing costs;  
11 however, it is not clear this result was attributable to the EMRP itself.<sup>118</sup> In short, it is  
12 impossible to know whether Pepco's self-evaluation of the Modified EMRP contained in  
13 its supplemental direct testimony is accurate because the information cannot be verified.  
14 However, one should be highly skeptical given Pepco's self-serving financial interest to  
15 conclude that the Modified EMRP was a success.

16 **An MYP Evaluation Framework And Metrics Should Be Established**

17 **Q How should the Commission proceed with AFOR in light of the lack of quantifiable**  
18 **data on the performance of the Modified EMRP?**

19 A I recommend that the Commission enact historical test year ratemaking until an  
20 evaluation framework is developed for how to track and assess the benefits of an MYP.

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<sup>117</sup> Pepco Response to AOBA 10-15 and DCG 9-3(a), attached hereto as Exhibits DCG (A)-31 and DCG (A)-32, respectively.

<sup>118</sup> Pepco Response to DCG 3-12, attached hereto as Exhibit DCG (A)-33.

1 **Q What should be included in an MYP evaluation framework?**

2 A At a minimum the Commission should require Pepco to track quantifiable metrics related  
3 to the purported benefits of AFOR. These metrics could measure trends in costs over  
4 time, such as rate base (or net plant in service) per customer, administrative and general  
5 expenses per customer, distribution line maintenance costs per mile, and regulatory costs.  
6 Metrics could also track energy policy outcomes such as lowering interconnection costs,  
7 improvements to hosting capacity, and the number of NWAs approved and implemented.  
8 In addition, Pepco should be required to track its capital investments by whether the  
9 investment primarily pertains to grid modernization, reliability, resiliency, or support of  
10 climate goals.

11 **VIII. PROPOSED MODIFICATIONS TO PEPCO'S PROPOSED MYP**

12 **Q Should the Commission determine a second MYP is justified, how should Pepco's**  
13 **proposal be amended?**

14 A At a minimum, if the Commission does determine to go forward with Pepco's second  
15 MYP, I recommend that Pepco's proposal be amended in the following ways:

16 1. Apply an external index for business-as-usual costs: The revenue requirement from  
17 the historical test year should be escalated for each year of the MYP according to an  
18 inflation index, rather than being based on cost forecasts as occurred during the  
19 Modified EMRP term.

20 2. Cost forecasts should be limited to large and unusual investments that support the  
21 District's energy policy goals, if used at all: Allowed revenues for large, unusual  
22 costs (such as specific grid modernization investments with specified and measured

1 performance outcomes) would be set based on the utility’s three-year cost forecast, as  
2 approved by the Commission. The cost forecasts should be thoroughly supported and  
3 justified and should clearly and transparently demonstrate how the investments are  
4 consistent with the utility’s least-cost distribution system plan and a comprehensive  
5 grid modernization plan.

6 3. Require one-way (downward) reconciliations for costs based on a cost forecast, but  
7 no reconciliations for indexed costs.

8 4. Implement PIMs that clearly advance the District’s clean energy goals such as  
9 NWAs.

10 5. Contain quantitative tracking metrics that can be used to evaluate the MYP at the end  
11 of the rate period.

12 **IX. DISCUSSION OF PEPCO’S AFFORDABILITY PROGRAM CHANGES**

13 **Q Please summarize Pepco’s proposal to increase enrollment in the Residential Aid**  
14 **Discount (RAD) and Arrearage Management (AMP) programs.**

15 **A** Pepco proposes to increase outreach and marketing for the RAD program and allow any  
16 recipient of District assistance program to be counted as “categorically eligible” for the  
17 RAD program, meaning recipients would not have to separately income-qualify to be  
18 enrolled.<sup>119</sup> Pepco expects that these combined efforts will increase the number of  
19 residents enrolled in the RAD program. Pepco expects that AMP enrollment would

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<sup>119</sup> Bell-Izzard Direct Testimony, PEPCO (J), at 30-31.

1 increase along with RAD enrollment because of the requirement to be enrolled in RAD to  
2 participate in AMP.<sup>120</sup>

3 **Q Are there any issues with Pepco’s proposal to increase RAD and AMP enrollment?**

4 A Yes. Pepco fails to provide the necessary detail to assess the effectiveness of its proposed  
5 efforts to increase enrollment in these programs. While Pepco identifies some of the  
6 proposed costs related to increases in marketing and application processing, it does not  
7 provide the amount of expected enrollment changes, making it impossible to determine  
8 whether the costs represent a worthwhile investment. Furthermore, Pepco does not  
9 identify the specific methods it would employ to increase enrollment along with the  
10 expected take-up rate.<sup>121</sup>

11 The Company also fails to discuss the effectiveness of the proposed methods for  
12 enrolling customers or any of the challenges involved in enrolling residents in an income-  
13 targeted program. For instance, Donald Moynihan and Pamela Herd have found that  
14 prospective beneficiaries of income-limited programs face “costs” that must be overcome  
15 in order to ensure program enrollment.<sup>122</sup> Pepco also proposes to continue to rely on  
16 DOEE for income-qualification for the RAD program but has yet to coordinate with  
17 DOEE on how to handle increased enrollment and the increased workflow on DOEE that  
18 would be involved in processing more RAD applications for income qualification.

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<sup>120</sup> *Id.*, at 32.

<sup>121</sup> <https://www.oxfordreference.com/display/10.1093/oi/authority.20110803101930484>

<sup>122</sup> See discussion of “learning costs” “psychological costs” and “compliance costs” in Donald Moynihan, Pamela Herd, and Hope Harvey, “Administrative Burden: Learning, Psychological, and Compliance Costs in Citizen-State Interactions,” *Journal of Public Administration Research and Theory* 25 (1) (2015): 43–69, available at <https://doi.org/10.1093/jopart/muu009>.

1 Finally, DOEE has already implemented “categorical eligibility” for its Solar for All  
2 program<sup>123</sup> and should be consulted on the appropriate way to implement such a change  
3 before the Commission acts on this proposal.

4 **Q Do you have an alternative proposal for the Commission to consider?**

5 A Yes. This rate case is not the proper forum to examine RAD enrollment issues since  
6 increasing enrollment is an issue across in utility assistance programs. If Pepco would  
7 like to make a categorical eligibility proposal, it should do so in the Formal Case No.  
8 1125 docket that already exists and is dedicated to examining these issues. If the RAD  
9 tariff needs to be amended to accommodate any changes in the enrollment process, that  
10 can be accomplished outside of a rate case.

11 **Q Does this conclude your direct testimony?**

12 A Yes, it does.

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<sup>123</sup> See: [https://doee.dc.gov/sites/default/files/dc/sites/doee/service\\_content/attachments/Solar%20for%20All%20-%20Income%20Verification%20Guidance\\_5.10.23\\_update%281%29\\_0.docx](https://doee.dc.gov/sites/default/files/dc/sites/doee/service_content/attachments/Solar%20for%20All%20-%20Income%20Verification%20Guidance_5.10.23_update%281%29_0.docx)

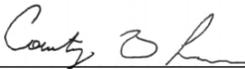
**BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF THE DISTRICT OF COLUMBIA**

\_\_\_\_\_  
IN THE MATTER OF THE APPLICATION )  
OF THE POTOMAC ELECTRIC POWER )  
COMPANY FOR AUTHORITY TO )  
IMPLEMENT A MULTIYEAR RATE PLAN )  
FOR ELECTRIC DISTRIBUTION SERVICE )  
IN THE DISTRICT OF COLUMBIA )  
\_\_\_\_\_

**Formal Case No. 1176**

**AFFIDAVIT**

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

  
\_\_\_\_\_  
Courtney Lane

Executed this 12<sup>th</sup> day of January, 2024.



## **Courtney Lane, Principal Associate**

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Synapse Energy Economics | 485 Massachusetts Avenue, Suite 3 | Cambridge, MA 02139 | 617-453-7028  
clane@synapse-energy.com

### **PROFESSIONAL EXPERIENCE**

**Synapse Energy Economics, Inc.**, Cambridge, MA. *Principal Associate*, September 2022 – Present, *Senior Associate*, November 2019 – September 2022.

Provides consulting and researching services on a wide range of issues related to the electric industry including performance-based regulation, benefit-cost assessment, rate and bill impacts, and assessment of distributed energy resource policies and programs. Develops expert witness testimony in public utility commission proceedings.

**National Grid**, Waltham, MA. *Growth Management Lead, New England*, May 2019 – November 2019, *Lead Analyst for Rhode Island Policy and Evaluation*, June 2013 – April 2019.

- Portfolio management of product verticals including energy efficiency, demand response, solar, storage, distributed gas resources, and electric transportation, to optimize growth and customer offerings.
- Strategy lead for the Performance Incentive Mechanisms (PIMs) working group.
- Worked with internal and external stakeholders and led the development of National Grid's Annual and Three-Year Energy Efficiency Plans and System Reliability Procurement Plans for the state of Rhode Island.
- Represented energy efficiency and demand response within the company at various Rhode Island grid modernization proceedings.
- Led the Rhode Island Energy Efficiency Collaborative; a group focused on reaching consensus regarding energy efficiency plans and policy issues for demand-side resources in Rhode Island.
- Managed evaluations of National Grid's residential energy efficiency programs in Rhode Island, and benefit-cost models to screen energy efficiency measures.

**Citizens for Pennsylvania's Future**, Philadelphia, PA. *Senior Energy Policy Analyst*, 2005–2013.

- Played a vital role in several legislative victories in Pennsylvania, including passage of energy conservation legislation that requires utilities to reduce overall and peak demand for electricity (2009); passage of the \$650 million Alternative Energy Investment Act (2008); and important amendments to the Alternative Energy Portfolio Standards law vital to the development of solar energy in Pennsylvania (2007).
- Performed market research and industry investigation on emerging energy resources including wind, solar, energy efficiency and demand response.
- Planned, facilitated and participated in wind energy advocates training meetings, annual partners retreat with members of wind and solar companies, and the PennFuture annual clean energy conference.

**Northeast Energy Efficiency Partnerships, Inc.**, Lexington, MA. *Research and Policy Analyst*, 2004–2005.

- Drafted comments and testimony on various state regulatory and legislative actions pertaining to energy efficiency.
- Tracked energy efficiency initiatives set forth in various state climate change action plans, and federal and state energy regulatory developments and requirements.
- Participated in Regional Greenhouse Gas Initiative (RGGI) stakeholder meetings.
- Analyzed cost-effectiveness of various initiatives within the organization.

**EnviroBusiness, Inc.**, Cambridge, MA. *Environmental Scientist*, 2000 – 2001

- Conducted pre-acquisition assessments/due diligence assignments for properties throughout New England. Environmental assessments included an analysis of historic properties, wetlands, endangered species habitat, floodplains, and other areas of environmental concern and the possible impacts of cellular installations on these sensitive areas.

## **EDUCATION**

**Tufts University**, Medford, MA

Master of Arts; Environmental Policy and Planning, 2004.

**Colgate University**, Hamilton, NY

Bachelor of Arts; Environmental Geography, 2000, *cum laude*.

## **PUBLICATIONS**

Fortman, N., J. Michals, T. Woolf, C. Lane. 2022. *Benefit-Cost Analysis: What it Can and Cannot Tell us About Distributional Equity of DERs*. E4TheFuture, Synapse Energy Economics. Presented at the 2022 ACEEE Summer Study of Energy Efficiency in Buildings.

National Energy Screening Project. 2022. *Methods, Tools and Resources: A Handbook for Quantifying Distributed Energy Resource Impacts for Benefit-Cost Analysis*. E4TheFuture, Synapse Energy Economics, Parmenter Consulting, Apex Analytics, Energy Futures Group.

Woolf, T., D Bhandari, C. Lane, J. Frost, B. Havumaki, S. Letendre, C. Odom. 2021. *Benefit-Cost Analysis of the Rhode Island Community Remote Net Metering Program*. Synapse Energy Economics for the Rhode Island Division of Public Utilities and Carriers.

Lane, C., S. Kwok, J. Hall, I. Addleton. 2021. *Macroeconomic Analysis of Clean Vehicle Policy Scenarios for Illinois*. Synapse Energy for the Natural Resources Defense Council.

National Energy Screening Project. 2020. *National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources*. E4TheFuture, Synapse Energy Economics, Energy Futures Group, ICF, Pace Energy and Climate Center, Schiller Consulting, Smart Electric Power Alliance.

Lane, C., K. Takahashi. 2020. *Rate and Bill Impact Analysis of Rhode Island Natural Gas Energy Efficiency Programs*. Synapse Energy Economics for National Grid.

Chang, M., J. Frost, C. Lane, S. Letendre, PhD. 2020. *The Fixed Resource Requirement Alternative to PJM's Capacity Market: A Guide for State Decision-Making*. Synapse Energy Economics for the State Energy & Environmental Impact Center at the NYU School of Law.

## **TESTIMONY**

**Maryland Public Service Commission (Case No. 9702):** Direct Testimony of Courtney Lane regarding electric vehicle programs and cost recovery issues in the application of Potomac Electric Power Company for an Electric Multi-Year Plan. On behalf of the Maryland Office of People's Counsel. December 15, 2023.

**Public Utilities Commission of New Hampshire (Docket No. DE 23-039):** Direct Testimony of Courtney Lane regarding Liberty Utilities Request for Change in Distribution Rates. On behalf of the Office of Consumer Advocate. December 13, 2023.

**Maryland Public Service Commission (Case No. 9692):** Direct and Surrebuttal Testimony of Courtney Lane regarding electric vehicle program benefit-cost analysis issues in the application of Baltimore Gas and Electric Company for an Electric and Gas Multi-Year Plan. On behalf of the Maryland Office of People's Counsel. June 20, 2023 and August 25, 2023.

**Maryland Public Service Commission (Case No. 9696):** Direct Testimony of Courtney Lane regarding the application of Baltimore Gas and Electric Company for an Electric School Bus Pilot Program. On behalf of the Maryland Office of People's Counsel. July 25, 2023.

**Maryland Public Service Commission (Case No. 9695):** Direct and Surrebuttal Testimony of Courtney Lane regarding electric vehicle program benefit-cost analysis issues in the application of the Potomac Edison Company for Adjustments to its Electric Retail Rates. On behalf of the Maryland Office of People's Counsel. June 9, 2023 and July 14, 2023.

**California Public Utilities Commission (Application Nos. 22-05-015/22-05-01):** Prepared Testimony of Eric Borden and Courtney Lane regarding Quantitative Risk Analysis Issues in Sempra's 2024 Test Year General Rate Case. On behalf of The Utility Reform Network. March 27, 2023.

**New Mexico Public Regulation Commission (Case No. 22-00058-UT):** Direct Testimony of Courtney Lane regarding the application of Public Service Company of New Mexico's for authorization to implement grid modernization. On behalf of the New Mexico Office of Attorney General. January 27, 2023.

**Illinois Commerce Commission (Dockets 22-0432/22-0442 (Consol.):** Direct and Rebuttal Testimony of Courtney Lane and Eric Borden regarding the petition of Commonwealth Edison Company for Approval of Beneficial Electrification Plan Under the Electric Vehicle Act. On behalf of the People of the State of Illinois. September 22, 2022 and November 16, 2022.

**Illinois Commerce Commission (Docket No. 22-0431/22-0443):** Direct and Rebuttal Testimony of Courtney Lane and Eric Borden regarding the petition of Ameren Illinois Company for Approval of Beneficial Electrification Pursuant to Section 45 of the Electric Vehicle Act. On behalf of the People of the State of Illinois. September 15, 2022 and November 7, 2022.

**New Mexico Public Regulation Commission (Case No. 21-00178-UT):** Direct Testimony of Courtney Lane regarding the application of Southwestern Public Service Company's for authorization to implement grid modernization. On behalf of the New Mexico Office of Attorney General. October 11, 2022.

**Public Service Commission of Wisconsin (Docket 5-UR-110):** Direct and Surrebuttal Testimony of Courtney Lane regarding the Joint Application of Wisconsin Electric Power Company and Wisconsin Gas, LLC for Authority to Adjust Electric, Natural Gas, and Steam Rates. On behalf of Clean Wisconsin. September 9, 2022 and October 3, 2022.

**Maryland Public Service Commission (Case No. 9681):** Direct Testimony of Courtney Lane regarding the application of Delmarva Power & Light Company for an Electric Multi-Year Plan. On behalf of the Maryland Office of People's Counsel. August 19, 2022.

**New Mexico Public Regulation Commission (Case No. 21-00269-UT):** Testimony of Courtney Lane in Support of Unopposed Comprehensive Stipulation regarding the Application of El Paso Electric Company for Approval of a Grid Modernization Project to Implement an Advanced Metering System. On behalf of the New Mexico Office of Attorney General. May 11, 2022.

**Public Utilities Commission of New Hampshire (Docket No. DG 21-104):** Direct Testimony of Courtney Lane and Ben Havumaki regarding Northern Utilities, Inc.'s request for change in rates. On behalf of the Office of Consumer Advocate. April 1, 2022.

**Public Utilities Commission of New Hampshire (Docket No. DE 20-092):** Direct Testimony of Courtney Lane and Danielle Goldberg regarding the 2021-2023 Triennial Energy Efficiency Plan. On behalf of the Office of Consumer Advocate. April 19, 2022.

**Maryland Public Service Commission (Case No. 9655):** Direct and Surrebuttal Testimony of Courtney Lane regarding the application of Potomac Electric Company for a Multi-Year Plan and Performance Incentive Mechanisms. On behalf of the Maryland Office of People's Counsel. March 3, 2021 and April 20, 2021.

**Pennsylvania Public Utility Commission (Docket No. M-2020-3020830):** Direct testimony of Alice Napoleon and Courtney Lane regarding PECO Energy Company's proposed Act 129 Phase IV Energy Efficiency and Conservation Plan. On behalf of the Natural Resources Defense Council. January 14, 2021.

**Maryland Public Service Commission (Case No. 9645):** Direct and Surrebuttal Testimony of Courtney Lane regarding the Application of Baltimore Gas and Electric Company for an Electric and Gas Multi-Year Plan. On behalf of the Maryland Office of People's Counsel. August 14, 2020 and October 7, 2020.

**Maryland Public Service Commission (Case No. 9619):** Comments of Maryland Office of People's Counsel Regarding Energy Storage Pilot Program Applications, attached Synapse Energy Economics Report. June 23, 2020.

**Public Service Commission of the District of Columbia (Formal Case No. 1156):** Direct, Rebuttal, Surrebuttal, and Supplemental Testimony of Courtney Lane regarding the Application of Potomac Electric Power Company for Authority to Implement a Multiyear Rate Plan for Electric Distribution Service in the District of Columbia. On behalf of the District of Columbia Government. March 6, 2020, April 8, 2020, June 1, 2020, and July 27, 2020.

**Rhode Island Public Utilities Commission (Docket No. 4888):** Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2019 Energy Efficiency Program (EEP). On behalf of National Grid. December 11, 2018.

**Rhode Island Public Utilities Commission (Docket No. 4889):** Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2019 System Reliability Procurement Report (SRP). On behalf of National Grid. December 10, 2018.

**Rhode Island Public Utilities Commission (Docket No. 4755):** Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2018 Energy Efficiency Program (EEP). On behalf of National Grid. December 13, 2017.

**Rhode Island Public Utilities Commission (Docket No. 4684):** Oral testimony of Courtney Lane regarding the RI Energy Efficiency and Resource Management Council (EERMC) Proposed Energy Efficiency Savings Targets for National Grid's Energy Efficiency and System Reliability Procurement for the Period 2018-2020 Pursuant to §39-1-27.7. On behalf of National Grid. March 7, 2017.

**Rhode Island Public Utilities Commission (Docket No. 4684):** Oral testimony of Courtney Lane regarding National Grid's 2018-2020 Energy Efficiency and System Reliability Procurement Plan. On behalf of National Grid. October 25, 2017.

**Rhode Island Public Utilities Commission (Docket No. 4654):** Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2017 Energy Efficiency Program Plan (EEPP) for Electric & Gas. On behalf of National Grid. December 8, 2016.

**Rhode Island Public Utilities Commission (Docket No. 4580):** Oral testimony of Courtney Lane regarding the Narragansett Electric Co. d/b/a National Grid - 2016 Energy Efficiency Program Plan (EEPP) for Electric & Gas. On behalf of National Grid. December 2, 2015.

**Pennsylvania Public Utility Commission (Docket No. P-2012-2320369):** Direct testimony of Courtney Lane regarding the Petition of PPL Electric Utilities Corporation for an Evidentiary Hearing on the Energy Efficiency Benchmarks Established for the Period June 1, 2013 through May 31, 2016. On behalf of PennFuture. October 19, 2012.

**Pennsylvania Public Utility Commission (Docket No. P-2012-2320334):** Direct testimony of Courtney Lane regarding the Petition of PECO Energy for an Evidentiary Hearing on the Energy Efficiency Benchmarks Established for the Period June 1, 2013 through May 31, 2016. On behalf of PennFuture. September 20, 2012.

**Pennsylvania Public Utility Commission (Docket No. I-2011-2237952):** Oral testimony of Courtney Lane regarding the Commission’s Investigation of Pennsylvania’s Retail Electricity Markets. On behalf of PennFuture. March 21, 2012.

**Committee on the Environment Council of the City of Philadelphia (Bill No. 110829):** Oral testimony of Courtney Lane regarding building permitting fees for solar energy projects. On behalf of PennFuture. December 5, 2011.

**Pennsylvania Public Utility Commission (Docket No. M-00061984):** Oral testimony of Courtney Lane regarding the En Banc Hearing on Alternative Energy, Energy Conservation, and Demand Side Response. On behalf of PennFuture. November 19, 2008.

## **PRESENTATIONS**

Lane, C. 2021. “Accounting for Interactive Effects: Assessing the Cost-Effectiveness of Integrated Distributed Energy Resources.” Presentation at the 2021 American Council for an Energy-Efficient Economy (ACEEE) National Conference on Energy Efficiency as a Resource, October 27, 2021.

Lane, C. 2019. “The RI Test.” Presentation for AESP Webinar: Emerging Valuation Approaches in Cost-Effectiveness and IRPs, October 31, 2019.

Lane, C., A. Flanders. 2017. “National Grid Rhode Island: Piloting Wireless Alternatives: Forging a Successful Program in Difficult Circumstances.” Presentation at the 35th Annual Peak Load Management Association (PLMA) Conference, Nashville, TN, April 4, 2017.

Lane, C. 2013. “Regional Renewable Energy Policy Update.” Presentation at the Globalcon Conference, Philadelphia, PA, March 6, 2013.

Lane, C. 2012. “Act 129 and Beyond.” Presentation at the ACI Mid-Atlantic Home Performance Conference, October 1, 2012.

Lane, C. 2012. “Act 129: Taking Energy Efficiency to the Next Level.” Presentation at the Energypath Conference, June 28, 2012.

Lane, C. 2011. “Pennsylvania’s Model Wind Ordinance.” Presentation at Harvesting Wind Energy on the Delmarva Peninsula, September 14, 2011.

Lane, C. 2011. “Electric Retail Competition and the AEPS.” Presentation at the Villanova Law Forum, November 4, 2011.

Lane, C. 2009. “Act 129: Growing the Energy Conservation Market.” Presentation at the Western Chester County Chamber of Commerce, March 25, 2009.

*Resume updated January 2024.*

## Exhibit DCG (A)-2

Executive Category	2018A	2019A	2020A	2021A	2022A
All Other Project Types	\$ 132	\$ 1,289	\$ 2,655	\$ (709)	\$ 1,165
Capacity Expansion - Distribution	\$ 74,939	\$ 98,085	\$ 57,559	\$ 34,564	\$ 61,078
Corrective Maintenance - Distribution	\$ 30,830	\$ 30,072	\$ 26,655	\$ 38,520	\$ 46,110
Corrective Maintenance - Substation	\$ 130	\$ 7,153	\$ 5,911	\$ 1,872	\$ 1,561
Customer Operations	\$ 4,826	\$ 6,131	\$ 4,347	\$ 3,708	\$ 4,740
Equipment Refresh	\$ 816	\$ 1,139	\$ 3,747	\$ 2,674	\$ 3,318
Facilities Relocation - PEPCO	\$ 6,042	\$ 3,241	\$ 4,004	\$ 5,969	\$ 3,698
IT Projects	\$ 63,230	\$ 38,985	\$ 56,778	\$ 50,247	\$ 59,526
New Business Connections - PEPCO	\$ 87,087	\$ 65,627	\$ 80,563	\$ 69,970	\$ 68,001
Preventative Maintenance - Distribution	\$ -	\$ 104	\$ 100	\$ 148	\$ 147
Real Estate and Facilities	\$ 2,840	\$ 10,628	\$ 20,434	\$ 15,516	\$ 5,951
Smart Grid Smart Meter	\$ 100	\$ 2	\$ -	\$ 18	\$ (19)
System Performance - Automation	\$ 10,490	\$ 7,025	\$ 5,577	\$ 6,717	\$ 10,704
System Performance - Distribution	\$ 78,181	\$ 86,503	\$ 62,758	\$ 83,957	\$ 79,456
System Performance - Substation	\$ 26,846	\$ 39,863	\$ 74,892	\$ 70,051	\$ 70,970
Tools	\$ 1,851	\$ 1,605	\$ 3,614	\$ 5,003	\$ 7,944
<b>Grand Total</b>	<b>\$ 388,339</b>	<b>\$ 397,450</b>	<b>\$ 409,596</b>	<b>\$ 388,225</b>	<b>\$ 424,353</b>

Note: Due to system changes and category realignment, category subtotals may not tie exactly to totals presented in testimony.

# Exhibit DCG (A)-3

Witness	Executive Category	2020A	2021A	2022A	2023B	2024B	2025B	2026B
Cantler	Capacity Expansion - Distribution	\$ 57,559	\$ 34,564	\$ 61,078	\$ 61,782	\$ 59,673	\$ 32,381	\$ 22,836
Cantler	Corrective Maintenance - Distribution	\$ 26,655	\$ 38,520	\$ 46,110	\$ 35,401	\$ 35,061	\$ 35,917	\$ 36,736
Cantler	Corrective Maintenance - Substation	\$ 5,911	\$ 1,872	\$ 1,561	\$ 1,537	\$ 1,620	\$ 1,630	\$ 1,648
Cantler	Facilities Relocation - PEPCO	\$ 4,004	\$ 5,969	\$ 3,698	\$ 21,047	\$ 14,282	\$ 10,701	\$ 5,123
Cantler	IT Business Unit Projects (Operations)	\$ 48,219	\$ 30,518	\$ 43,804	\$ 43,574	\$ 47,646	\$ 53,859	\$ 55,693
Cantler	IT Corporate Projects (Operations)	\$ 470	\$ 1,136	\$ 1,148	\$ 934	\$ 955	\$ 920	\$ 875
Cantler	New Business Connections - PEPCO	\$ 80,563	\$ 69,970	\$ 68,001	\$ 60,263	\$ 66,103	\$ 72,049	\$ 65,198
Cantler	Preventative Maintenance - Distribution	\$ 100	\$ 148	\$ 147	\$ 192	\$ 190	\$ 214	\$ 204
Cantler	Smart Grid Smart Meter	\$ -	\$ 18	\$ (19)	\$ 638	\$ 837	\$ 740	\$ 777
Cantler	System Performance - Automation	\$ 5,577	\$ 6,717	\$ 10,704	\$ 15,000	\$ 14,215	\$ 14,215	\$ 13,004
Cantler	System Performance - Distribution	\$ 62,758	\$ 83,957	\$ 79,456	\$ 94,508	\$ 108,145	\$ 110,872	\$ 161,066
Cantler	System Performance - Substation	\$ 74,892	\$ 70,051	\$ 70,970	\$ 46,145	\$ 63,845	\$ 93,070	\$ 87,327
Cantler	Tools	\$ 3,614	\$ 5,003	\$ 7,944	\$ 3,933	\$ 3,669	\$ 3,814	\$ 3,888
Barnett	All Other Project Types	\$ 2,655	\$ (709)	\$ 1,165	\$ 3	\$ -	\$ -	\$ -
Barnett	Equipment Refresh	\$ 3,747	\$ 2,674	\$ 3,318	\$ 2,565	\$ 3,656	\$ 6,014	\$ 4,574
Barnett	IT Corporate Projects (Non-Operations)	\$ 1,092	\$ 1,130	\$ 1,632	\$ 7,471	\$ 9,216	\$ 9,286	\$ 2,831
Barnett	Real Estate and Facilities	\$ 20,434	\$ 15,516	\$ 5,951	\$ 4,692	\$ 8,438	\$ 10,767	\$ 2,198
Bell-Izzard	Customer Operations	\$ 4,347	\$ 3,708	\$ 4,740	\$ 4,701	\$ 4,794	\$ 4,986	\$ 5,102
Bell-Izzard	IT Business Unit Projects (Customer)	\$ 6,997	\$ 17,463	\$ 12,942	\$ 14,760	\$ 13,845	\$ 15,470	\$ 20,471
	Subtotal Witness Cantler	\$ 370,324	\$ 348,442	\$ 394,604	\$ 384,954	\$ 416,241	\$ 430,384	\$ 454,375
	Subtotal Witness Barnett	\$ 27,929	\$ 18,611	\$ 12,067	\$ 14,732	\$ 21,310	\$ 26,066	\$ 9,602
	Subtotal Witness Bell-Izzard	\$ 11,344	\$ 21,172	\$ 17,682	\$ 19,461	\$ 18,640	\$ 20,456	\$ 25,574
	<b>Grand Total</b>	<b>\$ 409,596</b>	<b>\$ 388,225</b>	<b>\$ 424,353</b>	<b>\$ 419,146</b>	<b>\$ 456,190</b>	<b>\$ 476,906</b>	<b>\$ 489,551</b>

Note: Historical IT investments have previously been socialized without a Witness designation. For the purpose of this DR response to align with Table 1 of Witness Cantler's Direct Testimony the Company has mapped the 2020-2021 projects to Witness Cantler.

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 9

QUESTION NO. 24

Refer to Pepco's Response to AOBA Data Request 1-25. Due to the fact that the reconciliation of costs does not occur until the end of the MYP, confirm that if all else is held equal, the less Pepco spends of its approved amount in a given year of the MYP, the higher Pepco's return on equity will be. If not confirmed, explain why not?

RESPONSE:

This is not confirmed. As noted in the Company's response to AOBA Data Request 1-25, as well as the Direct Testimony of Company Witness O'Donnell (PEPCO (A)) and the Direct Testimony of Company Witness Leming (PEPCO (B)), through the reconciliation mechanism, all else being equal, any overstatement of expected costs would be refunded to customers and there would be no opportunity for financial gain to the Company. Accounting protocols require that when an over-earning is demonstrated, and money would be owed to customers, that a liability be recorded to reflect that financial obligation. Recording that liability reduces earnings and offsets any improvement in Pepco's return on equity resulting from lower spend. While the reconciliation process occurs towards the end of the MYP, annual informational filings which compare actual costs to those approved by the Commission occur annually.

SPONSOR: Robert T. Leming

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 1

QUESTION NO. 8

Pepco refers to its MYP as the “Climate Ready Pathway”. Explain how Pepco plans to track greenhouse gas reductions resulting from the MYP.

RESPONSE:

As stated in Company Witness O’Donnell’s Supplemental Direct Testimony (Page 25 line 15 through page 26 line 21), since October 31, 2022, Pepco has been filing quarterly reports on four of the tracking PIMs adopted in Order No. 20755. These PIMS include greenhouse gas reduction and provides information related to GHG emissions related to Pepco’s buildings in the District as well as the Company’s vehicle fleet. The GHG tracking PIM also provides GHG emissions estimates related to Standard Offer Service (SOS) and non-SOS energy consumption, as well as sulfur hexafluoride (SF6) emissions from Pepco’s operational equipment. Finally, as of its August 15, 2023 quarterly report, Pepco is providing estimates of GHG emissions related to the Company’s contractor vehicles.

SPONSOR: Elizabeth M. D. O’Donnell

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 3

QUESTION NO. 6

Refer to the Direct Testimony of Witness O'Donnell at page 17, lines 15-18, which states "in addition, improvements to the Company's interconnection process and the expansion of the current Team will enable more Distributed Energy Resources (DERs) to be deployed safely and timely, which should also increase customer satisfaction."

- A. Has the Company quantified how many more DERs can be deployed based on the proposed improvements to the interconnection process? If yes, provide the number of DERs. If not, explain why not.
- B. Did the Company consider proposing a performance incentive mechanism or tracking metric related to improvement in the interconnection process? Explain why or why not.

RESPONSE:

- A. No. The Company has not performed a quantitative analysis of DER deployment based on the process improvements and expansion of the interconnection team. The enhancements will improve the customer experience and streamline business efficiencies for the Company to accommodate the application volumes anticipated with the District's RPS goals.
- B. The Company's PIMs proposals are being addressed in the PIMs working group process and not in this MYP.

SPONSOR: Elizabeth M. D. O'Donnell and Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 5

QUESTION NO. 24

Refer to the Direct Testimony of Witness Cantler at page 24, lines 4-6 regarding Non-Wires Alternatives (NWA).

- A. How many NWAs has Pepco deployed in the last five years?
- B. Identify each project in the Company's Distribution Construction Program Report for which a request for information and/or a request for proposals was issued for non-wires alternatives
- C. How many projects in the Company's Distribution Construction Program Report did Pepco consider for NWAs?
- D. If NWAs were considered in the process of distribution construction planning, provide any models used in the analysis and all calculations in native format with all formulas intact Including data regarding the system need, the cost of the investment, and any assumptions regarding NWA cost, performance, and capability.
- E. Does Pepco conduct a benefit-cost analysis (BCA) when it compares NWAs to traditional distribution and substation investments? If yes, provide the BCA framework.
- F. Does Pepco account for the monetized value of avoided carbon emissions when it reviews NWAs? If yes, provide the dollar value per metric ton. If not, explain why not.
- G. Does Pepco account for the locational value of DERs on the distribution system when reviewing NWAs? If yes, explain the methodology for determining the value of DERs. If not, explain why not.

RESPONSE:

- A. Pepco does not have any non-wire solutions deployed in the District at this time. As part of the normal course of business, the Company reviews certain NWA solutions for projects in the District; however, none have been a deployed at this time.
- B. As part of DSP/NWA an RFP was issued for ITN: 74085 - Waterfront Sub.
- C. Pepco considers NWAs as options in the normal course of business. Examples of NWAs considered in this MYP, as referenced in Pepco (H)-2, include ITN: 74085 -Waterfront 5th Transformer, ITN: 62900 – Pepco Alabama Ave. Sub 136 Feeder 15166 Battery Substation, ITN: 62935 – Pepco Alabama Ave. Sub 136 Feeder 15166 Battery Distribution, and ITN: 67364 – Pepco Mt. Vernon Battery Energy Storage System.

- D. The Company considers non-wires solutions as the normal course of business in the District. Please see Pepco's response provided for AOBA DR 7-25.
- E. No, please see Pepco's response to AOBA DR 7-25. Please note that as part of the DSP/NWA process, the Company conducts formal BCA analysis to compare traditional distribution and substation investments.
- F. No, please see the Company's response provided for AOBA DR 7-25.
- G. No, please see the Company's response provided for AOBA DR 7-25.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO AOPA DATA REQUEST NO. 1

QUESTION NO. 9

Re: Exhibit Pepco (A), page 9, Figure 1. Please:

- a. Provide each metric, other than GHG emissions, that Pepco uses to measure “Sustainability” for its District of Columbia service territory;
- b. Detail each action/program Pepco has undertaken or plans to undertake within each year of Pepco’s proposed multi-year plan to address the impacts of “climate realities” on the reliability of its electric distribution system in the District and provide Pepco’s benefit-cost analysis for each program;
- c. Detail each action/program Pepco plans to undertake within calendar year 2023 to address the impacts of “climate realities” on the reliability of its electric distribution system in the District of Columbia;
- d. Provide Pepco’s assessment of the impacts “emerging climate realities” are expected to have on Pepco’s distribution system within Pepco’s current planning horizon, as well as the documents, studies, and workpapers relied upon to support that assessment.

RESPONSE:

- a. The company does not have metrics to measure sustainability. However, the Company is focused on actionable measures to reduce its greenhouse gas footprint, deliver innovative solutions that will empower customers to meet their climate change objectives and drive collaborative efforts with stakeholder and community partners to help achieve greater greenhouse gas reduction across the District.
- b. As discussed in the Direct Testimony of Company Witness Cantler (Question 10), the Company’s capital investment strategy during this MYP period (2023-2026) focuses on supporting a pathway to a climate ready grid through, amongst other things, improving grid resiliency. Improved grid resiliency is achieved by, but not limited to, projects initiated to replace aging and/or obsolete infrastructure and routinely and timely performing corrective maintenance work when and where necessary. As detailed in Exhibit PEPCO (H)-2, the Company provides all of its capital funded distribution construction projects, budgeted by year (including 2023) throughout the MYP, including the project’s scope and justification.
- c. See above response.
- d. As outlined in Company Witness Cantler’s Direct Testimony, (pg. 9, lines 10-12) the Company has acknowledged that grid resiliency is a priority given the more frequent occurrences of weather events attributed to climate change.

SPONSOR: Jaclyn Cantler and Elizabeth M. D. O’Donnell

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 1

QUESTION NO. 9

Refer generally to the Company's "Climate Ready Grid".

- A. What outcomes does Pepco seek to achieve through the Climate Ready Grid?
- B. How will Pepco determine if its implementation of a Climate Ready Grid was successful?
- C. What is the overall timeline for investments related to the Climate Ready Grid?
- D. Are all costs related to a Climate Ready Grid included in this MYP? If not, list the dockets where they are included.
- E. What are the expected benefits from investments associated with the Climate Ready Grid?
- F. How does Pepco propose to track the benefits and costs associated with its deployment of a Climate Ready Grid?

RESPONSE:

- A. As discussed in Company Witness O'Donnell's direct testimony (Page 5, lines 12-14) and the Company response to AOBA DR Set 1, question 3, the Climate Ready Grid is a series of investments into infrastructure and processes that seeks to advance system-readiness, support customers through the energy transformation and provides for the safe, affordable, reliable, and equitable advancement of climate and clean energy goals through investments in the tools, processes, and infrastructure to control the distribution system.
- B. As discussed in the Company response to AOBA DR Set 1, questions 3 and 8, The Company has not developed metrics associated with the Climate Ready Grid. However, as discussed in Witness Cantler's Direct Testimony, on page 8, lines 1-23 and page 9, lines 1-12, reliability is an integral component of a Climate Ready Grid that is quantifiable and measurable by well-established metrics within the utility industry. The Climate Ready Grid emphasizes the reliability and resiliency of the distribution system in order to advance the District's climate and clean energy goals.
- C. Subject to the timing of Commission approval, the investments will track closely with the goals and timeline of the District's climate and clean energy goals and is dependent on the pace of customer adoption.
- D. No. As stated, for example, in the Company's application in this case, "Pepco defines as a Climate Ready Grid – a series of investments in infrastructure and processes that advance

system-readiness and will support customers through the current energy transformation.” Accordingly, and while the investments and initiatives included in this MYP advance system-readiness and support customers through the current energy transformation, other investments and initiatives both now and in the future provide further support for the Climate Ready Grid. Current proceedings, other than Formal Case No. 1176, that support the Climate Ready Grid include Formal Case Nos. 1167, 1130, and 1160.

- E. The expected benefits from investments associated with the Climate Ready Grid include providing customers with a safe, affordable, and reliable energy system that allows for the equitable advancement of the District’s climate and clean energy goals through investments in the tools, processes, and infrastructure to support Pepco’s distribution system. The Company has demonstrated the benefits of Climate Ready Grid investments as part of the analyses of the programs advanced in Formal Case 1167. Those analyses included the 5-Year Action Plan BCA completed by the Brattle Group and filed on January 31, 2022 in Formal Case 1167 as document 114, and the formal application that advanced a subset of the programs from the 5-Year Action Plan in the Phase 1 Filing. Please refer to Company Witness O’Donnell’s Direct testimony (pages 46-47), and Company Witness Hledlik direct testimony (attachment G-2, pages 286-309) for information related to the BCA of the Phase I Application.
  
- F. The Company does not have metrics to track the benefits of the deployment of the climate ready grid. However, as noted in response DCG DR1-9 E, the Company has proposed the CSP Phase 1 programs which includes measurable benefits and a reporting mechanism associated with those programs. For the specifics related to the costs of these programs included in this filing, please refer to the reconciliation process discussed by Company Witness Leming (page 9, line 21-page 10, line 19) that assures the Commission that customers will pay the actual costs for investments in the electric distribution system.

SPONSOR: Elizabeth M. D. O’Donnell and Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO OPC DATA REQUEST NO. 4

QUESTION NO. 6

Referencing the testimony presented by Witness Cantler at page 8 regarding resiliency and ability to withstand and recover from deliberate attacks, accidents or naturally occurring events to the system infrastructure.

- a. The testimony states that planning used by PECO includes a N-1 criteria for distribution, sub-transmission and transmission facilities. In addition to those criteria, provide all new criteria to be used by Pepco to meet the Company's definition for resiliency that would influence the justification of a new capital project.
- b. Provide a complete list of projects included in the MYP that are required for resiliency and identify the planning criteria which requires the investment for each.
- c. Provide the most recent copy of Pepco's Distribution Standards Guideline 1442.

RESPONSE:

- a. The Company does not have any established new criteria. Per usual, all projects must meet the Company's existing criteria. Please see the Company's response provided in 4-6(b) for the types of projects that are initiated to support resiliency.
- b. There is no established listing available. As discussed in the Direct Testimony of Company Witness Cantler (Question 10), the Company's capital investment strategy during this MYP period (2023-2026) focuses on supporting a pathway to a climate ready grid through, amongst other things, improving grid resiliency. Improved grid resiliency is achieved by, but not limited to, projects initiated to replace aging and/or obsolete infrastructure and routinely and timely performing corrective maintenance work when and where necessary. As detailed in Exhibit PEPSCO (H)-2, the Company provides all of its capital funded distribution construction projects, budgeted by year (including 2023) throughout the MYP, including the project's scope and justification.

Additionally, project work such as Advanced Distribution Management System Implementation (ITN: 61976, see pg. 174 of Exhibit Pepco H-2), 69kV Distribution Line Improvements (ITN: 70240, see pg. 192 of Exhibit Pepco H-2), 69kV Feeder Rebuild (ITNs: 70242, 70423, on pg. 192-193 of Exhibit Pepco H-2) Champlain Bypass (ITN: 73368 on pg. 193) have all been identified within the project, solutions, justification slides (PSJ) of Pepco (H)-2 as directly supporting grid resiliency of the Company's distribution infrastructure.

- c. Please refer to the attachment labeled: FC 1176 OPC DR 4-6c

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 7

QUESTION NO. 22

Refer to Pepco (H)-1, Pepco (H)-2, and Pepco (H)-3.

- A. Which, if any, of the 62 programs included in the 5-year Action Plan are supported by the investments included in this MYP? In the response, please specifically relate individual investments that are included in this MYP to individual programs in the 5-year Action Plan.
- B. How do the investments included in this MYP filing relate to Pepco's 30-Year Transition Strategy, filed on November 30, 2021, in FC 1167?
- C. How do the investments included in this MYP filing relate to Pepco's Climate Solution Plan Phase I Application, filed on December 15, 2022, in FC 1167.
- D. What specific changes are reflected in the investment proposals in this MYP relative to Pepco's Climate Solution Plan Phase I Application, filed on December 15, 2022, in FC 1167?

RESPONSE:

- A. The 5-Year Action Plan is a policy document, and all the programs have not yet been formally proposed for Commission approval.

With respect to the investments in the MYP, As noted in OPC DR 4-6b, Witness Cantler's testimony and attachments primarily cover reliability investments to maintain Pepco's distribution grid or the platform for the Climate Ready Grid. These investments support a reliable grid, which is necessary to support achieving the District's goals.

Specific to Pepco's 5-Year Action Plan on pages 6, the Company referenced 34 programs that were already "In-Flight". Of the remaining 28 programs, the Company held 13 webinars with external parties to solicit feedback on the filings, including multiple webinars on the 5-Year Action programs. (See page 28 lines 9-20 of the CSP Phase 1 Application) Based on feedback from those sessions, the Company advanced 11 programs from the 5-Year Action Plan in its CSP Phase 1 Application filed on December 15th, 2022.

Included in this filing are an additional 14 programs, supported by Witness Cantler, Witness Bell-Izzard, Witness Bonikowski and Witness Vavala. Below is a table that outlines the programs included in this MYP. Importantly, the Company continues to look for opportunities to advance additional programs from the 5-Year Action Plan as well as new programs that evolve based on new information, technologies or solutions. Finally, some of the programs identified in the 5-Year Action Plan may get advanced in additional

Climate Solutions filings the Company could make, pending the outcome of this MYP and the CSP Phase 1 Application.

Project Name	Witness	CSP Program
Residential TOU implementation	Bonikowski	Residential Electric Vehicle Charging Time-of-Use Rate Program
Congress Heights Battery Demonstration (confirm known as Alabama Ave in H-2)	Cantler	Congress Heights Battery Demonstration Project
Mt Vernon BESS IT	Cantler	Mt. Vernon Substation Battery NWS Demonstration Program
EU ADMS Convergence - Stage 2 - Pepco	Cantler	ADMS
EU Outage Reporting and Analytics Implementation (Pepco)	Cantler	ADMS
EU Outage Reporting and Analytics ADMS Integration (Pepco)	Cantler	ADMS
Advanced Distribution Management System Implementation (Pepco)	Cantler	ADMS
EU ADMS Convergence - Stage 2 - Pepco	Cantler	ADMS
EU Outage Reporting and Analytics Implementation (Pepco)	Cantler	ADMS
Community Bill Presentment (changes) and Reporting (Interconnection Related)	Bell-Izzard	Community Solar Automation Program
Community Solar Automation - Integration with SAP - ALL PHI (Interconnection related)	Bell-Izzard	Community Solar Automation Program
HB818 Utility Consolidated Billing Community Solar	Bell-Izzard	Community Solar Automation Program
Interconnection Design and Process Streamlining Program	Bell-Izzard	Interconnection Design and Process Streamlining
Advanced DER Analytics	Vavala	Advanced DER Analytics Program
Planning and Forecasting System	Vavala	Planning and Forecasting System Program

B. As noted in Pepco’s 30-Year Transition Strategy, the document “is based around the observations of trends in customer technologies and grid infrastructure needs and how those intersect over the long-term path to decarbonization.” The Strategy discusses these elements as it relates to the four portfolios that Pepco outlined as part of its Climate Solutions Plan and related filings. The 30-Year Transition Strategy continues by noting, the “plan approaches decarbonization and electrification in a manner that maintains the ability to continue to provide safe and reliable service to all Pepco customers. The Company’s approach maintains this high reliability while also enabling the deployment of more distributed energy resources (“DERs”), such as solar and storage, and supporting increasing electric load. At its core, the Pepco’s Climate Solutions Plan advances the grid as a “platform,” where Pepco facilitates and activates the connections between the grid, customers, and communities. As the “connector,” Pepco is able to provide programs and opportunities for customers and communities to access and enable climate solutions equitably, inclusively, and affordably, while driving innovation and building resilience.

With this background in mind and as discussed in the Company response to OPC DR 4-6B, the programs and projects included in the Climate Ready Pathway support near-term reliability and resilience to provide a foundation as customers adoption of electrification-based technologies and more DER interconnect and rely on the Pepco's distribution system.

- C. As discussed in Company Witness O'Donnell's direct testimony (page 12, lines 11 -12 ) The proposed spending plan in this MYP complements the CSP Phase 1 Application.
- D. The investment proposals included in this MYP do not change the proposals included in Pepco's Climate Solutions Plan Phase 1 filing.

SPONSOR: Elizabeth M. D. O'Donnell and Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 7

QUESTION NO. 22

Refer to Pepco (H)-1, Pepco (H)-2, and Pepco (H)-3.

- A. Which, if any, of the 62 programs included in the 5-year Action Plan are supported by the investments included in this MYP? In the response, please specifically relate individual investments that are included in this MYP to individual programs in the 5-year Action Plan.
- B. How do the investments included in this MYP filing relate to Pepco's 30-Year Transition Strategy, filed on November 30, 2021, in FC 1167?
- C. How do the investments included in this MYP filing relate to Pepco's Climate Solution Plan Phase I Application, filed on December 15, 2022, in FC 1167.
- D. What specific changes are reflected in the investment proposals in this MYP relative to Pepco's Climate Solution Plan Phase I Application, filed on December 15, 2022, in FC 1167?

RESPONSE:

- A. The 5-Year Action Plan is a policy document, and all the programs have not yet been formally proposed for Commission approval.

With respect to the investments in the MYP, As noted in OPC DR 4-6b, Witness Cantler's testimony and attachments primarily cover reliability investments to maintain Pepco's distribution grid or the platform for the Climate Ready Grid. These investments support a reliable grid, which is necessary to support achieving the District's goals.

Specific to Pepco's 5-Year Action Plan on pages 6, the Company referenced 34 programs that were already "In-Flight". Of the remaining 28 programs, the Company held 13 webinars with external parties to solicit feedback on the filings, including multiple webinars on the 5-Year Action programs. (See page 28 lines 9-20 of the CSP Phase 1 Application) Based on feedback from those sessions, the Company advanced 11 programs from the 5-Year Action Plan in its CSP Phase 1 Application filed on December 15th, 2022.

Included in this filing are an additional 14 programs, supported by Witness Cantler, Witness Bell-Izzard, Witness Bonikowski and Witness Vavala. Below is a table that outlines the programs included in this MYP. Importantly, the Company continues to look for opportunities to advance additional programs from the 5-Year Action Plan as well as new programs that evolve based on new information, technologies or solutions. Finally, some of the programs identified in the 5-Year Action Plan may get advanced in additional

Climate Solutions filings the Company could make, pending the outcome of this MYP and the CSP Phase 1 Application.

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HB818 Utility Consolidated Billing Community Solar	Bell-Izzard	Community Solar Automation Program
Interconnection Design and Process Streamlining Program	Bell-Izzard	Interconnection Design and Process Streamlining
Advanced DER Analytics	Vavala	Advanced DER Analytics Program
Planning and Forecasting System	Vavala	Planning and Forecasting System Program

B. As noted in Pepco’s 30-Year Transition Strategy, the document “is based around the observations of trends in customer technologies and grid infrastructure needs and how those intersect over the long-term path to decarbonization.” The Strategy discusses these elements as it relates to the four portfolios that Pepco outlined as part of its Climate Solutions Plan and related filings. The 30-Year Transition Strategy continues by noting, the “plan approaches decarbonization and electrification in a manner that maintains the ability to continue to provide safe and reliable service to all Pepco customers. The Company’s approach maintains this high reliability while also enabling the deployment of more distributed energy resources (“DERs”), such as solar and storage, and supporting increasing electric load. At its core, the Pepco’s Climate Solutions Plan advances the grid as a “platform,” where Pepco facilitates and activates the connections between the grid, customers, and communities. As the “connector,” Pepco is able to provide programs and opportunities for customers and communities to access and enable climate solutions equitably, inclusively, and affordably, while driving innovation and building resilience.

With this background in mind and as discussed in the Company response to OPC DR 4-6B, the programs and projects included in the Climate Ready Pathway support near-term reliability and resilience to provide a foundation as customers adoption of electrification-based technologies and more DER interconnect and rely on the Pepco's distribution system.

- C. As discussed in Company Witness O'Donnell's direct testimony (page 12, lines 11 -12 ) The proposed spending plan in this MYP complements the CSP Phase 1 Application.
- D. The investment proposals included in this MYP do not change the proposals included in Pepco's Climate Solutions Plan Phase 1 filing.

SPONSOR: Elizabeth M. D. O'Donnell and Jaclyn Cantler

UPDATED RESPONSE- October 6, 2023:

- A. The 5-Year Action Plan is a policy document, and all the programs have not yet been formally proposed for Commission approval.

With respect to the investments in the MYP, As noted in OPC DR 4-6b, Witness Cantler's testimony and attachments primarily cover reliability investments to maintain Pepco's distribution grid or the platform for the Climate Ready Grid. These investments support a reliable grid, which is necessary to support achieving the District's goals.

Specific to Pepco's 5-Year Action Plan on pages 6, the Company referenced 34 programs that were already "In-Flight". Of the remaining 28 programs, the Company held 13 webinars with external parties to solicit feedback on the filings, including multiple webinars on the 5-Year Action programs. (See page 28 lines 9-20 of the CSP Phase 1 Application) Based on feedback from those sessions, the Company advanced 11 programs from the 5-Year Action Plan in its CSP Phase 1 Application filed on December 15th, 2022.

Included in this filing are an additional 13 programs, supported by Witness Cantler, Witness Bell-Izzard, Witness Bonikowski and Witness Vavala. Below is a table that outlines the programs included in this MYP. Importantly, the Company continues to look for opportunities to advance additional programs from the 5-Year Action Plan as well as new programs that evolve based on new information, technologies or solutions. Finally, some of the programs identified in the 5-Year Action Plan may get advanced in additional Climate Solutions filings the Company could make, pending the outcome of this MYP and the CSP Phase 1 Application.

<b>Project Name</b>	<b>Witness</b>	<b>CSP Program</b>
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Planning and Forecasting System	Vavala	Planning and Forecasting System Program

SPONSOR: Elizabeth M. D. O'Donnell and Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 9

QUESTION NO. 2

Provide a list of each investment included in the current Multiyear Rate Plan (MYP) proposal that supports the integration of Distributed Energy Resources (DERs).

RESPONSE:

The Direct Testimony of Company Witness Cantler on pg. 7, lines 13-14, reaffirms that one of “Pepco’s objective in investing in a Climate Ready Grid [is to] enable the development and interconnection of Distributed Energy Resources.” The Company’s position in this case is that, in order to accommodate building a Climate Ready Grid that directly supports the integration of DERs, specific investments are required. The Company would again refer you to the Direct Testimony of Company Witness Cantler on pg. 21, lines 21-19, “projects deployed like Remote Monitoring System (RMS) enables greater visibility into the distribution networks to accommodate more Distributed Energy Resources.”

Furthermore, Company Witness Cantler’s Direct Testimony on pg. 10, lines 1-5, also notes that, “ADMS is essential in sustaining grid stabilization and mitigating fluctuations that can occur when additional demand is placed on the grid, whether that be through the adoption of additional DER interconnections or as electrification continues to increase in the District.” Additionally, pg. 22, lines 2-5 of the same testimony state that, “the ADMS Project is to deploy foundational Distributed Energy Resource Management System (DERMS) capabilities – including DER Visualization, DER Estimation, DER forecasting, and DER Monitoring & Control – benefiting 9+ million electric customers across Exelon’s six utilities.”

For examples of projects that support the integration of DERs, such as the aforementioned projects, please refer to the following PSJ slides identified in Pepco (H)-2: (ITN: 72746, Pepco – Network RMS – Line), (ITN: 72748: Pepco – Network RMS – Telecom), (ITN: 61976 - Advanced Distribution Management System Implementation), (ITN: 84541 – EU ADMS Convergence – Stage 2 – Pepco), (ITN: 78124 – EU Outage Reporting and Analytics Implementation), (ITN: 78116 – EU Outage Reporting and Analytics ADMS Integration). Additionally, please also refer to project work identified within the Capacity Expansion – Distribution executive category of Pepco (H)-2 that have been identified within the PSJ slides as supporting increased hosting capacity.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 3

QUESTION NO. 14

Refer to the Direct Testimony of Witness O'Donnell at page 7, lines 13-17, which states that "Pepco's objective in investing in a Climate Ready Grid also enables the development and interconnection of Distributed Energy Resources(DER)" and "DERs primarily consists of Solar Photovoltaic (PV) systems".

- A. Explain how Pepco's compliance with the Local Solar Expansion Amendment Act of 2022 will affect the implementation of the MYP.
- B. Is Pepco at risk of being non-compliant with the Local Solar Expansion Amendment Act of 2022? If yes, how is this addressed in the MYP?
- C. Does Pepco have sufficient hosting capacity to be compliant with the Local Solar Expansion Amendment Act of 2022? If not, explain how this is addressed in the MYP.
- D. Explain how the MYP addresses or facilitates Pepco's compliance with Order No. 21600 regarding Community Renewable Energy Facilities (CREF) practices.
- E. Explain how the determination of reimbursing ratepayers for associated metering costs, as outlined in Order No. 21649, will impact the MYP, particularly related to setting revenues during the test year.
- F. Summarize all the ways Pepco is incorporating Commission Order No. 21600 into the MYP.

RESPONSE:

- A. The referenced law generally increases the required amount of local solar energy production in the DC Renewable Portfolio Standards. As such, Pepco is not subject to compliance under the law except in its role as administrator of the Standard Offer Service program.
- B. Please see the Company's response to DCG DR 3-14(a).
- C. While Pepco is not subject to compliance under the law, it is a facilitator as the entity responsible for interconnecting customers.
- D. The MYP does not address Order No. 21600, which was rendered after Pepco filed its MYP on April 13, 2023. However, any final directives issued by the Commission that require changes to Pepco's practices and procedures with regard to CREFs will be incorporated, as appropriate, into Pepco's costs of service in the MYP period.

- E. This matter is being actively litigated in Formal Case No. 1171. No final determinations related to potential reimbursements have been made at this time.
- F. This matter is being actively litigated in Formal Case No. 1171. Pepco's, as well as other parties' positions, are available for review in that docket.

SPONSOR: Elizabeth M. D. O'Donnell and Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 7

QUESTION NO. 32

Refer to Pepco's Climate Solutions Plan 5-Year Action Plan (CSP Plan), filed in FC1167 on page 11 of the direct testimony of Witness O'Donnell. Please also refer to pages 80 to 87 of Pepco's CSP Plan.

- A. Regarding the ADMS proposal on page 84 of the CSP Plan, is Pepco proposing investments related to Stages I, II, and III in its MYP? If yes, please list those investments and cite location within the MYP. If not, please explain why not and explain for each stage.
- B. Regarding the Advanced DER Analytics program on page 85 of the CSP Plan, does Pepco include investments in its MYP related to this program? If yes, please list those investments and cite location within the MYP. If not, please explain why not.
- C. Does PEPCO plan to complete and implement its Advanced DER Analytics program during the MYP? If yes, what metrics will Pepco track to show this program is successful? If not, please explain why not.
- D. Regarding the Planning and Forecasting System program on page 86 of the CSP Plan, does Pepco include investments in its MYP related to this program? If yes, please list those investments and cite location within the MYP. If not, please explain why not.
- E. When will the load forecasting system as described in the CSP Plan on page 86 be completed?
- F. Regarding the Geographic Information Systems and Data and Digitization and Optimization program on page 87 of the CSP Plan, does Pepco include investments in its MYP related to this program? If yes, please list those investments and cite location within the MYP. If not, please explain why not.

RESPONSE:

- A. Pepco is proposing investments related to ADMS Stages I and portions of ADMS II in its MYP. Portions of AMDS Stage II and ADMS Stage III are not included in the MYP because the spend is forecast to occur beyond the time frame of the MYP. The portions of ADMS Stage I and II that are included in the MYP can be found in PEPCO (H)-2 Distribution and Allocated Projects items 268 and 294.
- B. Pepco has not included any costs associated with this program in the MYP but will continue to evaluate funding this program in future years.

- C. See response to 7-32 B.
- D. See response to 7-32 B.
- E. See response to 7-32 B.
- F. Pepco has not included any costs associated with this program in the MYP but will continue to evaluate funding this program in future years.

SPONSOR: Elizabeth M. D. O'Donnell and Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO OPC DATA REQUEST NO. 6

QUESTION NO. 4

Please describe the Company's hosting capacity analysis (HCA) activities as follows:

- a) Describe the methodology the Company uses to calculate Hosting Capacity on a circuit.
- b) Is the Company aware of the concept of dynamic hosting capacity? If so, does the Company intend to investigate or implement dynamic hosting capacity in the future?
- c) What types of DER (solar, solar + storage, electric vehicle charging etc.) does the Company conduct HCA for? Does the Company intend to expand HCA analysis for different types of DERs if not currently available?
- d) What data source and granularity of data is currently used at the feeder and substation-level to conduct HCA?
- e) Reference DC Data Request No.3, Question No. 3 "The Company's load forecast is a "net" forecast and takes DER impact into account. It does not forecast DER load exclusively on a ten-year horizon."
- i) Why does the Company not forecast DERs separately?
- ii) Does the Company see the value in forecasting DERs separately? If so, when does the Company expect to do this?

RESPONSE:

- a. Pepco uses power flow software to calculate a hosting capacity value for each feeder using a stochastic methodology.
- b. Yes, the Company is aware of the concept of dynamic hosting capacity. Currently, Pepco utilizes a hosting capacity calculation methodology that is aligned with current interconnection practices. As technology and policy advances, Pepco is planning to incorporate new capabilities such as advanced inverter functionalities such as Volt-VAR control.
- c. Pepco conducts hosting capacity for PV Solar installations. Pepco also conducts an EV Load Capacity analysis and publishes on feeder-by-feeder maps reflecting most recent peak demand relative to equipment rating.
- d. Pepco uses hourly load and generation data input into power flow software to conduct feeder level hosting capacity analysis. Distribution feeder topology and equipment specifications are input from Geospatial Information System (GIS) of the Primary Voltage class (4kv or 13kV). Existing PV Solar Interconnections are placed at load bus premises (ie. Distribution Transformer) from Interconnection System of Record (Connect to Grid/IntellioConnect) with input parameters (AC Rating, Azimuth, Tilt, etc) along with Distributed Loads from AMI and/or SCADA and hourly generation profiles are simulated using Clear Sky estimates.

- e.
  - i. The Company's process to forecast DERs is being enhanced to incorporate DER forecasting separately. When we have the analytics/information to confidently forecast DER separately it will be incorporated.
  - ii. The Company anticipates that DERs will help with the electrification efforts of the District of Columbia. Pepco will evaluate the anticipated efforts of any additional legislation enacted by the District of Columbia that encourages DER installations beyond what we have seen to date, to incorporate into the forecasting process.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 7

QUESTION NO. 33

Refer to Pepco's Climate Solutions Plan 5-Year Action Plan (CSP Plan), filed in FC1167 on page 11 of the direct testimony of Witness O'Donnell. Please also refer to pages 88 to 93 of Pepco's CSP Plan.

- A. Regarding the Radial Hosting Capacity Improvements program on page 89 of the CSP Plan, does Pepco include investments in its MYP related to this program? If yes, please list those investments and cite location within the MYP. If not, please explain why not.
- B. On page 89 of the CSP Plan, Pepco states it has "already invested in software to model high volumes of DER saturation scenarios on the radial distribution system to identify limiting factors and potential violations of power quality and equipment capabilities without investing in system upgrades." Did Pepco use this software in the load forecasts used to develop its MYP capital plan? Please explain.
- C. Regarding the Mt. Vernon Substation Battery NWS Demonstration on page 90 of the CSP Plan, does Pepco include the cost of this demonstration project in the MYP? If yes, please list those investments and cite location within the MYP. If not, please explain why not.
- D. When will the Mt. Vernon Battery NWS Demonstration be completed and how will Pepco evaluate whether the demonstration was successful?
- E. Regarding the Distribution System Planning/Non-Wires Alternative Process on page 91 of the CSP Plan, Pepco states that "eligible capacity projects are identified on an annual basis." How many capacity projects were identified in the MYP?

RESPONSE:

- A. Pepco has not included any costs associated with this program in the MYP but will continue to evaluate funding this program in future years.
- B. Hosting Capacity was not used in our load forecasts as we do not have an established proactive investment program for Hosting Capacity Improvement at this time.
- C. Yes, Pepco included the cost of the Mt. Vernon Substation Battery NWS Demonstration under ITN 67364, found in Witness Cantler's Direct Testimony (Exhibit Pepco (H-2)).
- D. The current project in-service date is December 2023. However, given recent shifts in the projected load forecast in this area, the timing for the need for the deferral of the fourth transformer at the Mt. Vernon Substation is being reviewed.

- E. Capacity projects identified in the MYP are separate and distinct from the Distribution System Planning/Non-Wire Alternative Process (DSP/NWA) referred to in the question. To simplify, for the DSP/NWA process, the Company follows a procedure in which it identifies a constraint based on Pepco's peak load forecast, issues an RFP, and then reviews potential NWAs compared to a traditional solution. In contrast, Pepco's typical planning process considers non-wires solutions as alternatives to traditional utility solutions. For examples of Pepco's consideration of NWAs in its planning process, please see Pepco's response to AOBA DR7-25.

SPONSOR: Elizabeth M. D. O'Donnell and Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO AOPA DATA REQUEST NO. 1

QUESTION NO. 11

Re: Exhibit Pepco (A), page 10, lines 15-17. Please:

- a. Provide the Company's forecasts of the "growth in electrification" it anticipates within each year of its current planning horizon, as well as the workpapers, analyses, data, studies, and other documents relied upon to make such forecasts for its District of Columbia distribution system.
- b. Detail the impacts of the referenced "growth in electrification" on the Company's forecasted units of service (i.e., customers, kWh deliveries, and kW demands by rate class) for each year of the Company's proposed multi-year rate plan.
- c. Provide the Company's forecasts by year of the numbers of current users of gas heating customers heating systems that the Company expects to convert from gas service to electric service.

RESPONSE:

- a. Currently, the Company does not directly include electrification into its 10-year capacity/load forecasts. While identified and specific near-term usage and planned capacity additions have been incorporated, electrification has not been projected at levels that would be required to meet the District's anticipated goals for electrification.

For a detailed explanation of the Company's capacity planning forecasting and methodology, please see PEPCO (H)-1, Chapter 1 entitled "Load Growth."

- b. Please see Pepco's response to part (a) and note that, for distribution system planning purposes, as identified in the question, Pepco does not perform detailed analyses down to the rate class level regarding forecasted units of service.
- c. Pepco has not included conversions of gas heat to electrical heating sources in its most recent Ten-Year Forecast.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 5

QUESTION NO. 26

Regarding Pepco's load forecasts used to inform the development of Pepco's LRP, answer the following:

- A. Did Pepco incorporate forecasted electrification into its load forecast? If yes, provide the total MWh and coincident peak demand (MW) associated with electrification for each year of the load forecast in Excel format. If not, explain why not.
- B. To what extent did Pepco use "The Strategic Electrification Roadmap for Buildings and Transportation in the District of Columbia" as filed in Formal Case No. 1167 to inform its electrification forecast?
- C. Did Pepco include forecasted energy efficiency savings in its load forecast? If yes, provide the MWh savings and coincident peak (MW) reductions for each year of the load forecast in Excel format. If not, explain why not.

RESPONSE:

- A. Please see the Company's response to AOBA DR 1-11(a) and DCG 1-4.
- B. Please see the Company's Response provided for 5-26(a).
- C. The Company does not forecast energy efficiency separately from other load at this time. Please refer the Supplemental Direct Testimony of Company Witness Cantler (Exhibit 2H) under Question 7: "How are Capacity Planning peak load forecasts prepared."

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 5

QUESTION NO. 23

Has Pepco developed a grid modernization plan? If yes, provide a copy of the plan. If no, explain why not.

RESPONSE:

The Company incorporates grid modernization efforts into our planned investments as normal course of business but does not have a separate grid modernization plan. For example, investments in battery energy storage, 4kV conversions, and distribution automation included in this MYP are all modernizing our grid to support electrification efforts and DER enablement. In addition, the Company has proposed customer-focused programs to support electrification efforts in the Climate Solutions Plan filing FC 1167.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 5

QUESTION NO. 3

Provide an Excel spreadsheet with the forecasted increase in load from electric vehicles (EV) charging by ward over the Company's 10-year load forecast including number of EVs charging from the Pepco distribution system by ward and the assumed annual hourly EV charging load profile.

RESPONSE:

The Company does not forecast EV charging separately from other load at this time. Additionally, please also refer to the Supplemental Direct Testimony of Company Witness Cantler (Exhibit 2H) which discuss in further detail electrical vehicle charging and how it is incorporated into load forecasting on pg. 5, lines 17-21.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 5

QUESTION NO. 12

Explain in detail how the Company's distribution construction plan supports future deployment of distributed solar and storage. In your explanation, include details regarding any estimated benefits that the construction plan is expected to have with respect to expanded hosting capacity for solar and other DERs.

RESPONSE:

Pepco's construction program, taken in its entirety, is meant to promote the introduction of emerging technologies and DERs, and thus enabling a climate-ready grid, which includes the expanded interconnection of technologies such as solar and storage.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 3

QUESTION NO. 8

Refer to the Direct Testimony of Witness O'Donnell at pages 51 and 52 regarding the Remote Monitoring System (RMS).

- A. Is Pepco currently experiencing interconnection backlogs for DER interconnection? If yes, provide the total DERs in terms of the type of DER, total number of DERs, and total MW that are currently backlogged.
- B. Has Pepco denied interconnection requests from customers and DER developers? If yes, summarize the key reasons interconnection requests are denied.
- C. How much more DER (by MW, and by type) will this investment support?

RESPONSE:

- A. Pepco does not have a backlog for DER Interconnections. The Company processes applications based on an interconnection customer's position in the public queue.
- B. Yes. Please see Pepco's quarterly and annual reports in Formal Case No. 1050, which provide, among other data and information, the top reasons for deeming an application incomplete.
- C. This analysis has not been performed.

SPONSOR: Elizabeth M. D. O'Donnell and Morlon D. Bell-Izzard

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 5

QUESTION NO. 21

Refer to the Direct Testimony of Witness Cantler at page 22 regarding the Advanced Distribution Management System (ADMS) project and DERMS.

- A. Are there additional costs associated with the enablement of the DERMS capabilities of “DER Visualization, DER Estimation, DER Forecasting, and DER Monitoring & Control”? If yes, provide the cost of enabling each capability and indicate if Pepco is requesting recovery of those costs in the MYP?
- B. Has Pepco quantified the benefits of each of the DERMS capabilities?
  - I. Yes, provide that information. If not, explain why not.

RESPONSE:

- A. Pepco is not able to specifically identify what, if any, additional costs would be required. Additionally, the costs to deliver the DERMS capabilities are bundled together as they would be delivered as a package. As such, the bundled costs are not readily broken out by specific functionality.
- B. Pepco has not specifically quantified the benefits of the DERMS capabilities because the ADMS project, which is projected to include some of this functionality, has not yet gone through the project authorization process where those costs and benefits would be defined and approved.

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO AOBA DATA REQUEST NO. 10

QUESTION NO. 2

Re: Exhibit Pepco (2A), page 4, lines 5-10. Please provide the workpapers, data, analyses, assumptions, and studies that Pepco relies upon to quantify each of the benefits “achieved” by the modified MYP adopted by the Commission in Formal Case No. 1156 since its implementation.

RESPONSE:

There are no such workpapers, data, analyses, assumptions, and studies that specifically quantify the dollar value of each of the incremental benefits of the MYP the Commission adopted in Formal Case No. 1156; however, as indicated in the Supplemental Direct Testimony of Company Witness O’Donnell, the Supplier Diversity Program 2022 Annual Report and the Analysis of Economic Benefits do indicate the overall economic benefit, tax impact, employment, and diverse supplier spending associated with the MYP. Company Witness O’Donnell also addressed in her Direct Testimony the benefits of the MYP that Pepco has proposed in this proceeding. See Formal Case No. 1176, PEPCO (A): Direct Testimony of Company Witness O’Donnell at pages ii and 22-28.

SPONSOR: Elizabeth M. D. O’Donnell

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 8

QUESTION NO. 10

Refer to the Supplemental Direct Testimony of Witness O'Donnell at page 32, lines 8-12.

- A. Can the Company provide any quantitative data to demonstrate that the FC 1156 MYP provided benefits to customers? If yes, please provide that quantitative data in Microsoft Excel format. If not, please explain why not.
- B. Can the Company provide any quantitative data to demonstrate that the FC 1156 MYP achieved public policy goals? If yes, please provide that quantitative data in Microsoft Excel format. If not, please explain why not.

RESPONSE:

A-B. The Company has not performed the requested analysis. With an MYP, the Company can depend on a more timely recovery of investments which creates funding certainty. This funding certainty can lead to investments that create jobs and promote economic development in the state. The Company's MYP also improves revenue transparency and helps narrow the gap between earned and authorized Return on Equity (ROE). All of these lead to financial stability that improves the Company's credit profile and reduces borrowing costs, which benefit customers. Additionally, as discussed in Witness O'Donnell's Supplemental Testimony (page 4, lines 13 through page 5, line 3 and page 33, line 9- page 34, line 14), the MYP allows investments that maintain the reliability of the distribution system. Please refer to the Company response to AOBA DR 1-12 for a discussion related to the quantifiable reliability metrics.

SPONSOR: Elizabeth M. D. O'Donnell

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO AOPA DATA REQUEST NO. 7

QUESTION NO. 10

Re: Exhibit Pepco (H)-1, Page 11 of 82. The referenced page provides a discussion labeled “Source of Funds.” Please explain why that discussion included no reference to Contributions in Aid of Construction (“CAIC”).

RESPONSE:

Exhibit Pepco (H)-1 is net of project costs that receive Contribution in Aid of Construction (CIAC) therefore it is not mentioned in the referenced “Sources of Funds.”

SPONSOR: Jaclyn Cantler

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO AOBA DATA REQUEST NO. 10

QUESTION NO. 4

Re: Exhibit Pepco (2A), page 4, lines 13-16. Please:

- a. Identify each investment that Pepco has made since the Commission's approval of the modified MYP in Formal Case No. 1156 "to meet the District of Columbia's and the Commission's decarbonization and clean energy goals;"
- b. For each investment identified in response to part a. of this request:
  1. Provide the dollar amount invested in each calendar year;
  2. Document and explain the manner in which Pepco determined that the Company would not have made the investment in the absence of the modified MYP.
  3. Identify each investment that was mandated by legislation enacted by:
    - i. The District of Columbia City Council
    - ii. The U.S. Congress

RESPONSE:

- a. Pepco does not track its capital investments by whether they meet a specific District of Columbia and/or Commission decarbonization and clean energy goal. The analysis requested by FC 1176 AOBA DR10-4(a) has not been prepared. Please also refer to the Company's response to OPC DR4-1(b) and OPC DR4-6b.
- b. Not applicable.

SPONSOR: Elizabeth M. D. O'Donnell

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 8

QUESTION NO. 3

Refer to the Supplemental Direct Testimony of Witness O'Donnell at page 4, lines 11-18, which describes how the FC 1156 MYP facilitated investments that support the District of Columbia's energy policy goals.

- A. Please list the reliability investments made during the FC 1156 MYP that directly support the District's energy policy goals. For each investment, please include the specific policy supported.
- B. Please list the resiliency investments made during the FC 1156 MYP that directly support the District's energy policy goals. For each investment, please include the specific policy supported.
- C. Would Pepco have made the same reliability and resiliency investments during the FC 1156 MYP absent the energy policy goals of the District? If not, please list the specific investments Pepco would not have made.
- D. Please explain the distinction between investments that are required to meet the District's and Commission's decarbonization and clean energy goals and those that are foundational to a climate ready grid.

RESPONSE:

A-C. Please refer to the Company response to AOBA 10-4

D. The Company does not make a distinction between investments that are required to meet the Districts and Commission Goals and the investments that are foundational to a climate ready grid. As noted on page 3 lines 18-20 of my Direct Testimony, the Climate Ready Grid is "a series of investments into infrastructure and processes that advance system-readiness and will support customers through the current energy transformation." This investment strategy, inclusive of the core principles mentioned on page 9 of my Direct Testimony, inform the Company's approach to investments. The Climate Ready Grid is one of the ways the Company can support the achievement of the District's decarbonization and clean energy goals. As the District passes new policy goals, the Company's approach to the Climate Ready Grid should change in support of those outcomes and the role that Pepco has to support the achievement of those goals. Examples of how the Company is supporting the District goals are the programs that were included in Pepco's Phase 1 Climate Solution Filings (FC 1167) which included 11 climate solutions programs, The Energy Efficiency and Demand Response (FC 1160) which is designed to reduce energy usage for customers and the NEM petition filed in docket ET-2023-08-E-1. Importantly and as stated throughout my testimony, the MYP process is foundational to supporting the Climate Ready Grid

because it provides confidence to the Company regarding timely recovery of strategic utility investments.

SPONSOR: Elizabeth M. D. O'Donnell

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 9

QUESTION NO. 22

Refer to the Supplemental Direct Testimony of Witness O'Donnell at pages 16-17 regarding climate change initiatives.

- A. Answer the following question with a yes or no response: "Would Pepco have been able to develop its Climate Solutions Plans and Phase 1 programs filed in FC 1167 had it been operating under a traditional "cost of service" ratemaking?"
- B. Answer the following question with a yes or no response: "Would Pepco have developed and filed a petition related to NEM facility interconnection costs had it been operating under a traditional "cost of service" ratemaking?"

RESPONSE:

- A. The question cannot be fully answered with a simple yes or no. As the Company has explained, under traditional test year ratemaking, the Company would be required to file more frequent rate cases. However, as noted in the supplemental testimony of Company Witness O'Donnell, PEPCO (2B) (page 16, lines 10-14), because the Company did not have to submit a rate case for an extended period of time, the Company was able to devote additional-resources towards developing and proposing its Climate Solutions Plans and its Phase 1 programs filed in FC 1167.
- B. Please refer to part (a). Additionally, Pepco supports the interconnection of customer DERs and voluntarily submitted the referenced petition to lower barriers to participation for its residential customers. The question is asking a hypothetical that would depend on many factors, including the ability to timely recover "shared" costs that will be required as a result of the subject petition.

SPONSOR: Elizabeth M. D. O'Donnell

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO AOBA DATA REQUEST NO. 10

QUESTION NO. 15

Re: Exhibit Pepco (2A), page 10, lines 14-16. Please:

- a. Provide evidence that any party other than Pepco in the District of Columbia that has complained that “traditional, historic test year ratemaking has ... not sufficiently incentivize utilities to be efficient and encourages frequent rate case proceedings;”
- b. Provide the quantitative evidence on which Pepco relies to demonstrate improved operating efficiency achieved under the FC 1156 MYP.

RESPONSE:

- a. The Commission reached this conclusion when it stated in Order No. 21042 at ¶82: “We remain unconvinced by OPC’s claims that the adopted reconciliation process is time-consuming and expensive and would lead to higher regulatory costs than would otherwise be the case under a traditional rate case paradigm. The Commission believes that maintaining the status quo of traditional rate cases would result in more frequent resource-intensive rate proceedings, given the significant capital spending the Company currently undertakes, which is part of the reason the Commission advanced consideration of alternative forms of regulations AFORs. The Commission remains convinced that an MRP that sets rates for several years will in future years greatly reduce the regulatory burden on the Commission, OPC, and all stakeholders.”
- b. The Company’s Annual Information Filing and Final Reconciliation in Formal Case No. 1156 provided a detailed O&M expense variance analysis by FERC account as part of the FC 1156 MYP reconciliation filings. The Final Reconciliation indicates that in 2022, and despite the impacts of COVID-19 and inflation, Pepco was able to come within 1.9% of the overall O&M expenditure level projections.

SPONSOR: Elizabeth M. D. O’Donnell and Phillip S. Barnett

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 9

QUESTION NO. 3

Regarding Pepco's execution of the Formal Case (F.C.) 1156 MYP:

- A. What cost efficiencies did Pepco achieve related to distribution plant additions?
- B. Describe the steps Pepco took to execute its F.C. 1156 MYP capital plan at the lowest cost possible.
- C. Describe how Pepco created cost efficiencies related to the execution of its F.C. 1156 MYP capital plan.
- D. Did Pepco implement any non-wires alternatives (NWAs) as part of the F.C. 1156 MYP. If yes, list the NWA projects. If not, explain why not.

RESPONSE:

- A. The requested analysis has not been performed. Company Witness O'Donnell's Supplemental Direct Testimony, (Pepco 2A), on pg. 6, lines 1-7, states, "The annual reconciliation filings required as part of the FC1156 MYP provided details to the Commission and the parties regarding Pepco's actual O&M and capital expenditures and any variances from the O&M costs and capital investments that had been proposed [including plant additions]."
- B. Project Managers are challenged on their cost estimates during the Project Authorization process to provide the most accurate cost estimate for a project given known factors at that time (contractor availability, material cost, permitting costs, etc) and these cost estimates are the basis for the annual LRP. The Company may also recognize cost savings during the life of the project. Furthermore, the lowest cost option may not always be the optimal technical solution for a project and the Company considers other quantifiable and non-quantifiable project benefits when determining the optimal solution. Factors other than cost that are considered may include, but are not limited to, project duration, number of customers affected by proposed project work, labor and manpower required, etc.

Additionally, please refer to the Company's response provided for DCG DR 3-12, which identifies how the Company secured a lower cost of debt during the EMRP allowing for lower financing costs associated with capital expenditures.

- C. Please see the Company's response provided for DCG DR 5-2(a).
- D. Please see the Company's response provided for DCG DR 5-24(a).

SPONSOR: Jaelyn Cantler, Elizabeth M. D. O'Donnell & Amanda M. Holden

POTOMAC ELECTRIC POWER COMPANY  
DISTRICT OF COLUMBIA FORMAL CASE NO. 1176  
RESPONSE TO DCG DATA REQUEST NO. 3

QUESTION NO. 12

What efforts did the Company take to lower capital costs over the course of the Modified EMRP?

RESPONSE:

For the purposes of responding to this question, the Company assumes capital costs means the financing costs of funding capital expenditures. In Order No. 20755 approving the Modified EMRP, the Commission approved a weighted cost of long-term debt of 2.47%, with the ability for the company to true up the costs as a part of the annual reconciliation process. Over the course of the Modified EMRP, the Company's actual weighted cost of long-term debt was 2.30% and 2.31% for 2021 and 2022, respectively. Over the period of the Modified EMRP, Pepco was able to issue new debt at a cost lower than the overall debt portfolio cost, even in an environment of rising interest rates. The Company was able to maintain an investment grade credit rating over the 2021-2022 Modified EMRP period, in part due to the Commission's approved alternative rate making structure. As noted in Company Witness Holden's Direct Testimony. "The higher the credit rating, the greater the perceived likelihood that debt investors will receive their expected interest and principal payments and thus the investors will require a lower interest rate. All else equal, lower interest rates will result in lower customer rates."

SPONSOR: Elizabeth M. D. O'Donnell and Amanda M. Holden

## CERTIFICATE OF SERVICE

I hereby certify on this 12th day of January 2024, that I caused true and correct copies of the Direct Testimony of Courtney Lane on behalf of the District of Columbia Government to be emailed to the following:

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