BEFORE THE
PUBLIC SERVICE COMMISSION OF MARYLAND

Potomac Electric Power Company's Application for Adjustments to its Retail Rates for the Distribution of Electric Energy	CASE NO. 9820

DIRECT TESTIMONY

OF

BEN HAVUMAKI

ON BEHALF OF THE OFFICE OF PEOPLE'S COUNSEL

JANUARY 30, 2026

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INTRODUCTION

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

A. My name is Ben Havumaki. I am a Principal Associate at Synapse Energy Economics ("Synapse"), located at 485 Massachusetts Avenue, Cambridge, MA 02139.

Q. Please describe Synapse Energy Economics.

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

Q. Please summarize your professional and educational experience.

A. I started my career in the field of energy economics and regulation at Synapse in 2018. Since 2022, I have served as Synapse's lead macroeconomic modeler. In this capacity, I have conducted economic analyses of policies and programs in jurisdictions across the country – assessing the economics of renewable energy programs and clean energy pathways, electrification policies, and other related topic areas. In addition, I have expertise in benefit-cost analysis, rate design and cost allocation, and performance-based regulation.

I regularly serve as an expert witness in litigated proceedings. I have testified before utility regulatory commissions in Georgia, Illinois, New York, Minnesota, Rhode Island, New Hampshire, Pennsylvania, West Virginia, Nova Scotia, and New Brunswick. I hold a Bachelor of Arts degree in History from McGill University and a Master of Arts degree in Applied Economics from the University of Massachusetts. My resume is attached as Exhibit BH-1.

Q. On whose behalf are you testifying in this case?

A. I am testifying on behalf of the Office of People's Counsel ("OPC").

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to respond to the 2025 Net Economic Benefits Analysis and associated testimony prepared for Pepco by witness Sugandha D. Tuladhar, Ph.D. I identify specific issues with the study design and methods, and I also discuss concerns about the use of projected economic results to justify rate increases. I recommend that the Commission reject Dr. Tuladhar's study and not consider its impacts when evaluating Pepco's fully forecasted test year ("FFTY") proposal.

Q Have you previously testified before the Public Service Commission of Maryland?

A No, I have not testified before the Public Service Commission of Maryland ("Commission").

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

A. The sources for my testimony and exhibits are public documents, responses to discovery requests, and my personal knowledge and experience.

Q. Was your testimony prepared by you or under your direction?

A. Yes. I prepared this testimony.

I. Summary of conclusions and recommendations

Q. Please summarize your main conclusions.

A. After reviewing Dr. Tuladhar's study and supporting testimony, as well as the responses to discovery, my primary conclusion is that the study is both irrelevant to the present case and unreliable. This conclusion is based upon the following facts:

1. Economic impacts are relevant in limited cases, as a supplemental factor to be considered as part of decision-making rather than as the basis for authorizing utility rate increases.

2. Dr. Tuladhar's study does not provide relevant information for evaluating the proposed FFTY spending.
3. Dr. Tuladhar's study contains methodological flaws that make its results unreliable and raise doubts about whether net benefits will result from the proposed spending.
4. Dr. Tuladhar's study does not sufficiently describe how the proposed spending will affect its customers.

Q. What do you recommend?

A. I recommend that the Commission reject Dr. Tuladhar's 2025 Net Economic Benefits Analysis and not consider its results when evaluating the FFTY spending proposal.

II. Dr. Tuladhar's 2025 Net Economic Benefits Analysis is not relevant to this rate case.

Q. Please describe Dr. Tuladhar's 2025 Net Economic Benefits Analysis.

A. The 2025 Net Economic Benefits Analysis is an IMPLAN-based economic impact study authored by Dr. Tuladhar that estimates the economic impacts associated with Pepco's proposed FFTY transmission and distribution spending for calendar year 2026. The study is framed as a net analysis, comparing the economic benefits from Pepco's proposed spending to the economic costs from the rate increases that would be paid by all customers if the FFTY plan were to be approved.[1]

Q. What are the results of the 2025 Net Economic Benefits Analysis?

A. The study estimates net increases for the FFTY of approximately $549.66 million in gross domestic product ("GDP"), 4,431 full-time equivalent jobs, $363.75 million in labor income, and $920.58 million in economic output.[2] Dr. Tuladhar concludes that the FFTY spending plan "provides more good than harm from an economic perspective to the state of Maryland."[3]

Q. Why has Pepco provided this study?

A. Neither Dr. Tuladhar nor any of the other company witnesses specifically explain why this study has been filed or how the Commission should use it in evaluating Pepco's rate increase request. The study appears to be an attempt to generate additional goodwill for the company's large spending proposal.

Q. What is the Commission's task in a rate case?

A. The Commission's task is to evaluate whether a proposed change in rate is just and reasonable and appropriately reflects the costs of providing distribution service, based on the application of established ratemaking principles of prudency, used and useful, and reasonableness. I understand that the Commission must generally

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1 ML#325887, Errata to Direct Testimony of Sugandha Tuladhar, Ph.D ("Tuladhar Direct"), Schedule (SDT)-2 at 1–2 (Jan. 6, 2026).

2 *Id.* at 6; Schedule (SDT)-2 at 9, Table 2.

3 *Id.* at 6.

consider "the economy of the state" when supervising and regulating public utilities.[4] However, in my view, that consideration does not alter the regulatory standards the Commission must apply in this case—for which impacts to statewide GDP are of little relevance.

Q. Are economic impact studies commonly considered in the context of rate cases?

A. No. Economic impact studies are not typically considered when evaluating utility proposals to increase rates. Such studies do not establish that utility expenditures are necessary to provide safe and reliable service or are otherwise prudent, that the costs of any given expenditure was reasonable, or that the rates reflecting those costs are just and reasonable. To the extent that economic impacts are considered in the context of utility regulation, they are typically treated as a supplemental factor for use in program screening and policy design, ideally in the context of a comparison between multiple alternative options. In some jurisdictions, regulators have considered economic impacts when evaluating energy efficiency portfolios, demand-side management programs, and approaches to distributed generation resource compensation.[5]

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[4] Md. Code. Ann., Pub. Util. § 2-113(a)(2)(ii).

[5] *See, e.g.,* Rhode Island Public Utility Commission, *In re the Narragansett Electric Company D/B/A Rhode Island Energy's 2025 Annual Energy Efficiency Plan*, Order No. 25581 at 8–9 (Docket No.24-39-EE39-EE, Jan. 16, 2026) (noting "total benefits over the life of the installed electric and natural gas energy efficiency measures).

Q. How do economic benefits relate to the standard criteria for evaluating rate increases, including whether utility expenditures are prudent and used and useful, and whether a proposed rate is just and reasonable?

A. There is no obvious connection between economic impacts and the standard criteria for evaluating utility requests for rate recovery.

Q. Why is it important that economic studies consider multiple alternative options?

A. Economic studies can be useful in identifying which among several alternatives is the best economic choice. Consider, for example, the hypothetical case of a utility assessing several different viable possibilities to increase the penetration of distributed renewable generation in its service territory. In such a case, the utility could conduct benefit-cost analyses and include economic impacts as a supplemental factor. It is important to note that even in this hypothetical case, the option that produces the greatest net economic benefits would still not necessarily be the *best* option. Determining what the best option is would turn on the requisite decision-making criteria and the relative weight afforded to economic benefits versus other factors.

Q. Does Dr. Tuladhar's study involve any comparison between alternatives?

A. No. Dr. Tuladhar's study lacks a base case or formal alternative scenarios. The study treats the FFTY spending proposal as the only viable option.

Q. What is the problem with Dr. Tuladhar's approach in considering only one scenario?

A. It is safe to assume that the company would only bring forward *positive* results. It is also safe to assume that many different spending plans could plausibly have shown positive economic results. Since the mere existence of *some* economic benefits should not serve as the sole justification for the rate plan, it is not clear how to make use of the study results.

Q. Is Dr. Tuladhar's economic impact study relevant to evaluating Pepco's proposed rate increase?

A. No. Dr. Tuladhar's study is irrelevant to this case. As I noted above, the results of economic studies are not typically considered in rate cases. These results may be useful as supplemental information to assist in deciding between discrete alternatives. But Dr. Tuladhar's study lacking a base case or consideration of other alternatives, does not allow for this use. Indeed, there is no guidance at all on what to make of these results or how to apply them in evaluating the FFTY spending proposal.

Q. Is Dr. Tuladhar's study reliable for evaluating Pepco's proposed rate increase?

A. No. In addition to the issues that I've already discussed in the forgoing section that render Dr. Tuladhar's study irrelevant, there are serious methodological problems that affect the reliability of the study. I will elaborate on these issues in the following sections.

Q. What should the Commission do with this study?

A. It should reject the study and not consider its results when evaluating Pepco's rate increase proposal.

III. The 2025 Net Economic Benefits Analysis is not a complete net analysis

Q. How does Dr. Tuladhar describe the "net" study methodology?

A. As Dr. Tuladhar explains, his analysis calculates "net economic benefits by subtracting the economic costs from the economic benefits. If the economic benefits exceed the economic costs then there are net economic benefits to the economy. However, if the economic costs exceed the economic benefits then there are net negative economic benefits from the Plan spending."[6] The witness also claims the study is a "complete analysis" because it "considers both economic benefits and economic costs."[7]

Q. Does Dr. Tuladhar's study improve on the methodology that was used in the 2023 study?

A. The 2023 study did not consider economic costs at all, presenting only gross benefits.[8] The current study at least attempts to calculate costs, though as I will discuss, it does so incompletely and with significant methodological flaws.

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[6] Tuladhar Direct at 9:4-7.
[7] *Id.* at 10:14-15.
[8] *Id.* at 8:14-18.

Q. Is Dr. Tuladhar's study a "complete" net analysis?

A. The study is not a complete net analysis for two reasons: First, the study is asymmetric—it compares the benefits resulting from full scope of Pepco's proposed spending to costs and rate impacts reflecting only a portion of that spending. Second, without a base case, it is not clear what the actual incremental impacts of the FFTY spending would be. I will address each of these issues in turn.

A. The 2025 Net Economic Benefits Analysis is not a "net" analysis because it excludes certain costs despite considering all benefits.

Q. Please describe Dr. Tuladhar's asymmetrical approach to costs and benefits.

A. Dr. Tuladhar makes three specific methodological choices, each of which minimizes the scale of economic costs and biases the study toward positive results: (1) including the full scope of proposed spending when calculating benefits but only a share of the rate recovery of this spending; (2) assuming a "marginal propensity to consume" for residential customers; and (3) excluding transmission costs from the calculation of rate increases despite including transmission spending in the benefits calculation.[9]

[9] Pepco response to OPC DR 14-9.

Q. Please explain how Dr. Tuladhar minimizes economic costs by not considering the full rate impacts of the FFTY spending.

A. To calculate the economic benefits of its FFTY spending, Dr. Tuladhar considers the full proposed FFTY capital and operations and maintenance ("O&M") spending on distribution and transmission infrastructure in Maryland for calendar year 2026.[10] The analysis assumes approximately $349.91 million in capital expenditures and $295.27 million in O&M expenditures, for total modeled spending of approximately $645.18 million.[11] However, when calculating the economic costs resulting from Pepco's proposed rate increase—i.e., the adverse economic impacts associated with the reduction in consumer and business spending that results from consumers and businesses paying higher rates—Dr. Tuladhar counts only the first-year distribution revenue requirement associated with the FFTY capital expenditure.[12]

In short, Dr. Tuladhar's analysis compares the benefits of the full cost of Pepco's FFTY spending to the costs of only one year of cost recovery. Since capital expenditures are recovered through amortization over many years, the revenue requirement increase that Dr. Tuladhar's study assumes includes only a single year's worth of depreciation expense, return on investment, and taxes. The total revenue increase associated with the FFTY assumed for calculating economic

[10] Tuladhar Direct at 11:1-3.
[11] *Id.* at 11:11-13, Schedule (SDT)-2 at 13, Table 3.
[12] *Id.* at 12:12-15.

costs is thus only approximately $133.24 million.[13] In other words, Dr. Tuladhar uses a figure that is nearly five times larger to calculate benefits than it uses to calculate economic costs.

Q. What is the marginal propensity to consume?

A. The marginal propensity to consume ("MPC") is a value that Dr. Tuladhar uses in his modeling to reflect the assumed reduction in spending that will result from rate increases.[14] The underlying principle is that increases in the price of a certain necessary good or service (i.e., electricity) displaces spending on other things. The MPC quantifies this displacement relationship.

Q. How does the assumed marginal propensity to consume for residential customers contribute to the asymmetry in this analysis?

A. For residential customers, Dr. Tuladhar assumes an MPC of 62 percent.[15] This means that for every dollar of rate increase imposed on households, household spending on other goods and services is expected to fall by 62 cents. The use of an MPC thus reduces the projected economic costs of the rate increase.

Q. Is Dr. Tuladhar's use of a marginal propensity to consume for households reasonable?

A. The use of an MPC is a standard modeling approach, but Dr. Tuladhar's study ignores the knock-on implications of the assumed marginal propensity to

[13] *Id*. Schedule (SDT)-2 at 15, Table 4.
[14] *Id.*, Schedule (SDT)-2 at 15 n. 27 and 19, n. 41.
[15] *Id.*, Schedule (SDT)-2 at 15 n. 27.

consume. If residential customers are assumed to reduce consumption spending by 62 cents for every dollar of rate increase, then the remaining 38 cents must still be funded by these households. In other words, a substantial share of the benefits associated with Pepco's proposed rate increase would presumably be financed through depletion of savings and an increase in household debt. In turn, depleting savings and increasing debt will have deleterious economic impacts—reduced future consumption, reduced economic security, increased financial stress—but Dr. Tuladhar does not consider what those impacts might be. Dr. Tuladhar's approach understates the cost to households and to the wider economy from Pepco's proposed rate increase.

Q. Does Dr. Tuladhar's analysis include any spending on transmission investments?

A. Yes. Dr. Tuladhar's study considers the economic benefits associated with spending on transmission investments. These transmission investments total approximately $164.82 million, about 25 percent of the total spending included in the study.[16]

Q. Does Dr. Tuladhar's study include the cost impacts of transmission spending?

A. No. Despite considering the benefits of transmission spending, Dr. Tuladhar's analysis excludes the economic costs related to such spending.[17]

[16] Tuladhar Direct at 11:12-16. Capital and O&M spend related to distribution investments reflected in the study totaled $480.36 million. *Id.*
[17] Pepco response to OPC DR 14-9.

Q. Does it make sense for Dr. Tuladhar to ignore transmission cost impacts?

A. No. I assume that Dr. Tuladhar does not include transmission cost impacts because these costs are not part of the distribution revenue requirement at issue in this case. However, from an economic perspective, if transmission spending generates economic benefits that are counted in favor of the FFTY proposal, then the economic costs associated with paying for that transmission spending must also be counted. The fact that transmission costs will be recovered in a different proceeding is irrelevant for purposes of conducting an economic impact analysis.

Q. What are the implications of the asymmetries in how spending is counted for Dr. Tuladhar's analysis?

A. These asymmetries represent serious methodological limitations in this analysis. Dr. Tuladhar concludes that Pepco's FFTY spending will do more economic good than harm and generate significant increases in statewide GDP. However, the study's unbalanced treatment of costs and benefits throws this conclusion into question. By understating costs, Dr. Tuladhar has biased his study by artificially inflating the apparent net benefits of its proposed FFTY spending.

Q. Do the scenarios that are included in the study address this ratemaking asymmetry issue?

A. No. Neither of Dr. Tuladhar's two sensitivity cases include a fully symmetrical treatment of costs and benefits.[18]

[18] Tuladhar Direct, Schedule (SDT)-2 at 21-24.

Q. What would be the impact of considering all costs in the net analysis?

A. It is not clear, since the company has not provided this information. However, it is reasonable to expect that the net economic benefits would be substantially reduced.

Q. What is the fundamental question that a proper net economic analysis should answer?

A. The fundamental question is whether the economic benefit of Pepco's FFTY spending is greater than the economic cost of the higher customer rates resulting from that spending. In other words, is it better for the economy to take a dollar from customers and give it to Pepco to spend, or to leave the dollar in the customer's pocket? This is the equilibrating comparison that would reveal whether Pepco's spending represents an economically favorable use of customer money. If customers' own spending would generate equal or greater economic benefits than Pepco's spending, then forcing customers to pay higher rates to fund Pepco's spending would produce no net economic gain—or even a net economic loss.

Q. Did Dr. Tuladhar's study answer this fundamental question?

A. No. Pepco was specifically asked about this in discovery. Pepco simply stated in response that "the requested analysis has not been performed."[19] This is a critical omission. Without this comparison, Dr. Tuladhar cannot credibly claim that Pepco's spending plan generates net economic benefits—he can only claim that

[19] Pepco response to OPC DR 4-9(a).

Pepco's spending generates some level of economic activity, which is true of virtually any spending.

B. Without a base case, the 2025 Net Economic Benefits Analysis cannot demonstrate that the proposed spending is a reasonable use of ratepayer funds.

Q. What is a base case?

A. A base case (also called a "reference case") reflects the costs and benefits of business as usual. It should not be a hypothetical scenario but rather should reflect what the actual spending, costs, and economic impacts would be if the proposed spending under consideration did not occur. For Pepco, the base case should reflect the real alternative if Pepco's FFTY spending proposal were not to be approved in its entirety. Including a base case clarifies the actual choices facing regulators and allows for calculation of the truly incremental economic impacts of the proposed spending.

Q. What are the implications of the lack of a base case in the economic study?

A. Without a base case, it is not possible to conclude that Pepco's proposed FFTY spending plan is economically preferable to a different, and potentially more limited, alternative spending scenario. In reality, what Dr. Tuladhar claims are net benefits and net costs do not necessarily represent "net" values. The values Dr. Tuladhar's study claims would only be "net" if there was a feasible alternative scenario in which Pepco did not increase its spending at all. Actual net benefits and net costs are determined by actual net spending—that is, the amount of new or increased spending for which Pepco determines the scope and timing—which is likely to be considerably lower than the $645.18 million that Dr. Tuladhar flows into his IMPLAN analysis.[20]

Q. Why is it important to distinguish new or increased spending levels when conducting a "net" analysis?

A. There are certain non-discretionary expenditures that Pepco may be required to incur in order to meet the service standards required by Maryland law. Other expenditures, however, are largely discretionary, with the scope and timing determined by the utility. Spending that would occur irrespective of the Commission's decision effectively sets the baseline, as it does not alter the economic status quo. Whether a utility chooses to pursue new or increased—in other words, elective—spending does alter the status quo, and it introduces new economic benefits *and* new economic costs. It is possible that the costs of new or increased spending may exceed the benefits. In such a case, not undertaking this elective spending would result greater total net benefits. But, because Dr. Tuladhar's study does not include a base case, it is impossible to know whether Pepco's proposed spending actually achieves net benefits.

Q. Is it possible that all of Pepco's FFTY spending is necessary?

A. That would be unlikely. While the purpose of my testimony is not to evaluate the merits of Pepco's FFTY spending plan, I note that intervenors in utility rate cases

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[20] Tuladhar Direct, Schedule (SDT)-2 at 13, Table 3.

commonly dispute which utility investments are necessary to serve customers. I do not see why this case and Pepco's proposal should be any different. Moreover, if all of Pepco's FFTY spending was actually required to serve customers, then the company would have no need to buttress its case with an economic benefits study.

IV. The 2025 Net Economic Benefits Analysis does not reflect the actual impacts of the FFTY spending on Pepco's customers.

Q. What do the results of Dr. Tuladhar's study tell us about impacts on customers?

A. Very little. The study reports economic impacts at the state level for Maryland as a whole, not specifically for Pepco's customers or service territory. Moreover, the study provides no distributional analysis—we don't know which customers or Maryland residents would benefit and which would bear costs. These are serious deficiencies that limit the relevance of this study.

Q. Are economic impacts at the state level relevant to evaluating the impact of spending within Pepco's distribution service territory?

A. Not necessarily. Pepco's service territory covers only a portion of Maryland—primarily Montgomery and Prince George's Counties. The state of Maryland encompasses approximately 12,406 square miles, while Pepco's service territory is only about 640 square miles.[21] Economic impacts that materialize elsewhere in

[21] Errata to Direct Testimony of Robert T. Leming (Part I) at 5 (Jan. 6, 2026); U.S. Census Bureau, *State Area Measurements and Internal Point Coordinates*, *available at* https://www.census.gov/geographies/reference-files/2010/geo/state-area.html.

Maryland may not result in benefits to Pepco's customers, who will nonetheless bear 100 percent of the costs of the proposed spending through Pepco's proposed rate increase. Without analysis specific to Pepco's service territory, we cannot determine whether customers paying the rates will actually experience the economic benefits that Pepco claims.

Q. What are distributional impacts?

A. Distributional impacts refer to how economic benefits and economic costs are distributed across different groups. In other words, distributional impacts identify which groups—i.e., households, businesses, or geographic areas— stand to benefit economically from Pepco's spending and which groups will be negatively impacted.

Q. How can distributional impacts be considered within economic analyses?

A. Economic impact analyses may report results by income level, geographic area, or customer class to show who benefits and who pays. Results may also be disaggregated by economic sector. Without this breakdown, aggregate results can conceal significant disparities—some groups may benefit substantially while others bear disproportionate costs.

Q. Why is it important to consider distributional impacts?

A. The aggregate changes to economic metrics conceal important information about winners and losers. The issue of who benefits and who suffers the economic costs has major ramifications for determining whether Pepco's proposed spending would be in the public interest. Dr. Tuladhar's study does address downside effects, but only at a high level of aggregation: a loss of 622 full-time equivalent jobs and corresponding reduction in income of $41.85 million, a reduction in GDP of $78.63 million, and a reduction in output of $122.43 million.[22]

Q. Does Dr. Tuladhar provide any context for understanding the downside effects?

A. No. Neither Dr. Tuladhar's study nor his supporting testimony provide any context for understanding these downside impacts. At the least, Dr. Tuladhar should have provided details about the types of customers who would be adversely affected by the company's proposed spending plan. For example, the company could have addressed the specific sectors expected to be hit the hardest. This information can typically be gleaned from the outputs of the standard IMPLAN model that Dr. Tuladhar's analysis relies on. I requested IMPLAN results at the sectoral level to better understand where negative impacts were concentrated, but this information was not provided.[23]

Q. Why should Dr. Tuladhar address distributional impacts in greater detail?

A. Because without this context, it is impossible to fully understand how households and businesses in Pepco's service territory are affected by the economic impacts of the FFTY spending. While some households and businesses may benefit

[22] Tuladhar Direct at 16:16-19.
[23] Pepco response to OPC DR 14-14 and 14-15.

economically from Pepco's FFTY spending, other households would be made worse off. The mere fact that the aggregate results are positive does not necessarily mean that any given household or business within Pepco's service territory will be better off.

Q. Does the lack of analysis of distributional impacts raise any equity concerns?

A. Yes, it is possible that the FFTY spending would result in benefits disproportionately accruing to more advantaged customers, with customers of lesser means disproportionately bearing the costs of this spending. This would be the wrong sort of economic development.

Q. Does Dr. Tuladhar's study explain what the projected economic impacts would mean for an ordinary ratepayer?

A. No, and this is critical, missing information. Even if Dr. Tuladhar's projections about overall economic impacts were correct, Dr. Tuladhar says nothing about what this would mean for ratepayers. The only assured impact of Pepco's plan is that it would raise rates; for an average residential customer, this increase is projected to be $11.73 per month.[24]

Q. Is there a risk that Pepco's rate increases will reduce customer welfare?

A. Yes, it is entirely possible that Pepco's customers will be made worse off as a result of the FFTY spending. The only guaranteed impact for customers is the rate increase. Customers may or may not see service quality improvements, and they

[24] Direct Testimony of Peter R. Blazunas at 50, Table 4.

may either benefit or be harmed by the economic changes resulting from this spending.

Q. Could lower-income customers be adversely impacted by Pepco's spending?

A. Absolutely. Per Dr. Tuladhar's study, the FFTY spending is expected to result in 622 FTE job losses. Many of these lost jobs could be lower-wage positions, especially if the reduction in consumption spending that would result from rate increases is concentrated in the service sector. As noted earlier, I requested IMPLAN results at the sectoral level to better understand where these job losses were concentrated, but this information was not provided. Further, the projected new jobs may not be enduring positions, so the apparent increase in employment may be transitory. Dr. Tuladhar's study did not address whether these positions would be permanent or not. Finally, the projected rate increase would tax household budgets, resulting in less funds available for other purchases (and reducing welfare), while diminishing savings and increasing debt. From an energy burden standpoint, rate increases are often regressive, falling heaviest on those least able to afford them.[25]

Q. Does the projected GDP increase include increased profits to Pepco?

A. Yes. Pepco's proposed capital investments will increase revenues for the company, and higher incremental revenues are a contributor to the projected GDP

[25] American Council for an Energy-Efficient Economy, *Data Update: City Energy Burdens*, at 2 (Sept. 2024), https://www.aceee.org/sites/default/files/pdfs/data_update_-_city_energy_burdens_0.pdf.

growth. The increase in Pepco's profits represents a transfer of wealth from customers to shareholders. From a customer welfare perspective, paying more for electricity service to generate profits for Pepco's shareholders is not a benefit.[26]

V. Conclusion

Q. Please summarize your concerns with Dr. Tuladhar's study and your recommendation to the Commission.

A. Dr. Tuladhar has put forwarded a purported "net" benefits analysis in an apparent attempt to bolster the case for its large spending proposal, yet various issues in the study design limit its relevance and reliability. The study is irrelevant for several reasons. *First*, without a base case, the study cannot be used to claim that Pepco's spending plan is economically efficient. *Second*, it is not clear what to do with these study results since economic impacts are not generally considered in the context of rate cases. *Third*, since the study has been conducted at the state level rather than for Pepco's service territory alone, it is unclear what the economic impacts would be at the relevant geographic resolution. *Fourth*, the study also does not consider distributional and equity impacts.

Even if it were Commission practice to consider economic impact analyses in rate cases, Dr. Tuladhar's study is unreliable and cannot even support its limited

[26] Pepco was not able to quantify the extent of profits in the GDP results. *See* Pepco response to OPC DR 4-11.

claim of net economic benefits. The study does not consider the full economic costs of the FFTY spending, and the limited sensitivities included with the study are not fully symmetrical in the consideration of costs and benefits. Given these limitations, I recommend that the Commission reject Dr. Tuladhar's economic study and not consider it when evaluating Pepco's proposed rate increase.

Q. Does this conclude your direct testimony?

A. Yes, it does.

Ben Havumaki, Principal Associate

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PROFESSIONAL EXPERIENCE

Synapse Energy Economics, Inc., Cambridge, MA*. Principal Associate,* April 2024 – Present; *Senior Associate,* June 2021 – April 2024; *Associate,* July 2018 – June 2021.

- Provides research, analysis, and consulting services, frequently in the context of regulated proceedings, with expertise in the following topic areas:
    - Rate design and performance-based regulation: Evaluates utility proposals and formulates new recommendations based on best practices and informed by innovative emerging models. Evaluates rate designs for consistency with policy goals using quantitative modeling and jurisdictional data. Provides expert testimony and other formal input in the context of regulated proceedings.
    - Benefit-cost analysis: Evaluates utility BCAs with reference to best practices, including emerging standards for grid modernization and distributed energy resources. Engaged in the development of new BCA practices in the arenas of grid modernization and resilience.
    - Macroeconomic analysis: Uses the IMPLAN model in conjunction with primary research and analysis and core economic principles to evaluate the GDP, job, and income implications of major grid changes.
- Contributing author to reports covering a range of topics including plant decommissioning, transportation electrification, and distributed energy resources (DER) growth.

University of Massachusetts Boston, MA*. Graduate Teaching and Research Assistant,* 2017 – 2018

- Led ecosystem-valuation workshops for EPA-funded initiative to shape resilience policymaking in the Great Bay region of New Hampshire.
- Served as a teaching assistant in graduate econometrics course and undergraduate macroeconomics and urban economics courses.

Notre Dame Education Center and Jewish Vocational Service Boston, MA. *Math Instructor*, 2012 – 2017

- Taught foundational math to adult learners and standard high school math curriculum to students in non-traditional school program.

The City of New York New York, NY. *Senior Investigator*, 2007 – 2010

- Investigated complaints against officers of the New York City Police Department and issued disciplinary recommendations in formal reports to the agency board.

EDUCATION

University of Massachusetts, **Boston,** Boston, MA
Master of Arts in Applied Economics, 2018
Recipient of the Arthur MacEwan Award for Excellence in Political Economy

McGill University, Montreal, Quebec
Bachelor of Arts in History, 2007

PUBLICATIONS

Goldenberg, C., B. Havumaki, C. Lane, M. Whited, G. Wilson. *Fixing Multiyear Rate Plans: Building a firm foundation for cost control.* 2025. Rocky Mountain Institute and Synapse Energy Economics.

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Potomac Electric Power Company's Application for Adjustments to its Retail Rates for the Distribution of Electric Energy

Case No. 9820

Data Requests and Responses Referenced in the Direct Testimony

of Ben Havumaki

PEPCO Response to OPC DR 4-9

PEPCO Response to OPC DR 4-11

PEPCO Response to OPC DR 14-9

PEPCO Response to OPC DR 14-14

PEPCO Response to OPC DR 14-15

POTOMAC ELECTRIC POWER COMPANY
MARYLAND CASE NO. 9820
RESPONSE TO OPC DATA REQUEST NO.4

QUESTION NO. 9

Refer to Direct Testimony of Sugandha D. Tuladhar, Schedule (SGT)-2, Section 4.1 on Economic Benefits from Pepco's Spending and Section 4.2 on Economic Costs from Pepco's Proposed Rate Increase.

(a) From an IMPLAN perspective, state whether one dollar is more economically stimulative when spent by households and businesses according to their consumption patterns, or when collected via rates and spent by Pepco according to the FFTY spending plan.

(b) As a component of the response to (a), provide a dollar-weighted average multiplier showing the respective jobs, income, GDP, and output impacts at the direct, indirect, and induced levels for each dollar spent as part of the proposed FFTY plan, and compare this with the same multipliers for households, commercial, industrial, and government sectors. Please provide workpapers documenting the derivation of any new multipliers.

RESPONSE:

The DR responses below are based on the revised NERA analysis and the report "Analysis of Economic Impacts For Pepco's Fully Forecast Test Year (FFTY) in Maryland" which will be submitted.

(a) The requested analysis has not been performed.
(b) The requested analysis has not been performed.

SPONSOR: Sugandha Tuladhar, PhD.

POTOMAC ELECTRIC POWER COMPANY
MARYLAND CASE NO. 9820
RESPONSE TO OPC DATA REQUEST NO.4

QUESTION NO. 11

Refer to Direct Testimony of Sugandha D. Tuladhar, page 1, where the benefits of the proposed FFTY spending plan are overviewed.

(a) Were Pepco's investments in the FFTY planned or designed to maximize economic development benefits to Maryland? Please explain in detail.

(b) What portion of the modeled GDP or income gains accrues to Pepco or its shareholders as earnings or return on equity?

RESPONSE:

The DR responses below are based on the revised NERA analysis and the report "Analysis of Economic Impacts For Pepco's Fully Forecast Test Year (FFTY) in Maryland" which will be submitted.

(a) For details on how PEPCO planned or designed the FFTY investments, please see direct testimony of Company Witnesses Taiwo O. Alo, section IV, "Capital Budget Development and Planning Process," and Elizabeth Morgan O'Donnell, section V, "O&M Expense Overview," in the Maryland Public Service Commission, Case No. 9820, 2025 Rate Case.
(b) The requested analysis has not been performed.

SPONSOR: Sugandha Tuladhar, PhD.

POTOMAC ELECTRIC POWER COMPANY
MARYLAND CASE NO. 9820
RESPONSE TO OPC DATA REQUEST NO.14

QUESTION NO. 9
Refer to Direct Testimony of Sugandha D. Tuladhar, Schedule (SDT)-2, page 15, Table 4. Do the revenue requirements presented in this table include revenue requirements associated with both distribution and transmission spending, or only revenue requirements associated with distribution spending?

RESPONSE:

The following response pertains to both the original October 14th 2025 NERA Testimony and Errata filing from January 6, 2026.

The revenue requirements data provided by Pepco relates only to distribution spending, see Section 1 first paragraph of page 10 in Schedule (SDT)-2 of the original NERA Testimony and revised Schedule (SDT)-2 of the Errata filing that states "….Pepco's requested FFTY revenue requirement to set distribution rates…"

SPONSOR: Sugandha Tuladhar, PhD., Robert T. Leming, & Conor Nelson

POTOMAC ELECTRIC POWER COMPANY
MARYLAND CASE NO. 9820
RESPONSE TO OPC DATA REQUEST NO.14

QUESTION NO. 14
Refer to the response to OPC DR 4-2(f). The response references workbook tabs that provide *spending* by sector, while the request was for economic *impacts* (employment, income, GDP, and output) by sector. Please provide consolidated impacts by sector for the total budgeted CAPEX spending and the separately for the total budgeted O&M spending

RESPONSE:

The following response pertains to the Errata filing from January 6, 2026.

Please see tabs "MD_Benefits_CAPEX" and "MD_Benefits_OPEX" in MD 9820 OPC DR 4 – 4.1(b) Attachment that has the economic impacts by IMPLAN sector for the total budgeted CAPEX and O&M spending presented in Table 3 of revised Schedule (SDT)-2 of the Errata filing.

SPONSOR: Sugandha Tuladhar, PhD.

POTOMAC ELECTRIC POWER COMPANY
MARYLAND CASE NO. 9820
RESPONSE TO OPC DATA REQUEST NO.14

QUESTION NO. 15
Refer to the response to OPC DR 4-2(g). The response references workbook tabs that provide *spending* by sector, while the request was for economic *impacts* (employment, income, GDP, and output) by sector. Please provide consolidated impacts by sector for the total budgeted distribution CAPEX spending and the separately for the total budgeted O&M spending

RESPONSE:

The following response pertains to the Errata filing from January 6, 2026.

Please see tabs “MD_Benefits_CAPEX” and “MD_Benefits_OPEX”, columns E through I in MD 9820 OPC DR 4 – 4.1(b) Attachment that has the economic impacts by IMPLAN sector for the total budgeted CAPEX and O&M distribution spending presented in Table 3 of revised Schedule (SDT)-2 of the Errata filing.

SPONSOR: Sugandha Tuladhar, PhD.