

GOVERNMENT OF THE DISTRICT OF COLUMBIA  
OFFICE OF THE ATTORNEY GENERAL



Public Interest Division  
Public Advocacy Section

*E-Docketed*

**PUBLIC VERSION**

March 25, 2015

Ms. Brinda Westbrook-Sedgwick  
Public Service Commission  
of the District of Columbia Secretary  
1333 H Street, NW  
2<sup>nd</sup> Floor, West Tower  
Washington, D.C. 20005

**Re: Formal Case No. 1119 – In the Matter of the Joint Application of Exelon Corporation, Pepco Holdings, Inc., Potomac Electric Power Company, Exelon Energy Delivery Company, LLC and New Special Purpose Entity, LLC for Authorization and Approval of Proposed Merger Transaction.**

Dear Ms. Westbrook-Sedgwick:

On behalf of the District of Columbia Government, I enclose one Fully Conformed Set of Direct Testimony of Tyler Comings – Public Version. This document has been updated to reflect Joint Applicants' de-designation of certain information as being confidential. Please note a confidential version of this document was filed separately with the Commission under seal. If you have any questions regarding this filing, please do not hesitate to contact the undersigned.

Sincerely,

KARL A. RACINE  
Attorney General

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

**PUBLIC VERSION**

**IN THE MATTER OF  
THE MERGER OF EXELON CORPORATION,  
PEPCO HOLDINGS, INC., POTOMAC ELECTRIC  
POWER COMPANY, EXELON ENERGY DELIVERY  
COMPANY, LLC AND. NEW SPECIAL PURPOSE  
ENTITY, LLC**

**Formal Case No. 1119**

**Fully Conformed Direct Testimony and Exhibits of  
District of Columbia Witness**

**TYLER COMINGS**

**March 25, 2015**

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**DIRECT TESTIMONY OF TYLER COMINGS**

**I. INTRODUCTION AND PURPOSE OF TESTIMONY**

**Q Please state your name, business address, and position.**

**A** My name is Tyler Comings. I am a Senior Associate with Synapse Energy Economics, Inc. (Synapse), which is located at 485 Massachusetts Avenue, Suite 2, in Cambridge, Massachusetts.

**Q Please summarize your work experience and educational background.**

**A** I have nine years of experience in economic research and consulting. At Synapse, I have worked extensively on the energy planning sector, including economic impact analyses for Vermont energy efficiency programs for the Vermont Department of Public Service, a proposed Renewable Portfolio and Efficiency Standard in Kentucky for Mountain Association for Community Economic Development (MACED), a “Beyond Business as Usual” energy future for the U.S. for Civil Society Institute (CSI), and a proposed carbon standard for Natural Resources Defense Council (NRDC). I have worked on several cases involving coal and gas plant economics. I have provided consulting services for various other clients including: U.S. Department of Justice, District of Columbia Office of the People’s Counsel, New Jersey Division of Rate Counsel, West Virginia Consumer Advocate Division, Illinois Attorney General, Nevada State Office of Energy, Sierra Club, Earthjustice, Citizens Action Coalition of Indiana, Consumers Union, Energy Future Coalition, American Association of Retired Persons, and Massachusetts Energy Efficiency Advisory Council.

Prior to joining Synapse, I performed research in consumer finance for Ideas42 and economic analysis of transportation and energy investments at Economic Development Research Group.

1 I hold a B.A. in Mathematics and Economics from Boston University and an  
2 M.A. in Economics from Tufts University.

3 My full resume is attached as Exhibit DCG\_\_\_\_(C)-1.

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

5 **A** Synapse Energy Economics is a research and consulting firm specializing in  
6 energy and environmental issues, including electric generation, transmission and  
7 distribution system reliability, ratemaking and rate design, electric industry  
8 restructuring and market power, electricity market prices, stranded costs,  
9 efficiency, renewable energy, environmental quality, and nuclear power.

10 Synapse’s clients include state consumer advocates, public utilities commission  
11 staff, attorneys general, environmental organizations, federal government  
12 agencies, and utilities.

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

14 **A** I am testifying on behalf of the District of Columbia Government (“DCG” or “the  
15 District”).

16 **Q Have you submitted testimony in other recent regulatory proceedings?**

17 **A** Yes. I have submitted testimony before the Indiana Utility Regulatory  
18 Commission (Cause 44339) and the Kentucky Public Service Commission (Case  
19 No. 2013-00259). I am also evaluating the proposed merger in New Jersey for the  
20 Division of Rate Counsel before the New Jersey Board of Public Utilities (Docket  
21 No. EM1406).

22 **Q Have you testified in front of the District of Columbia Public Service  
23 Commission previously?**

24 **A** No, I have not.

1 **Q Have you conducted economic impact analyses previously?**

2 **A** Yes. I have conducted many economic impact analyses using both REMI and  
3 IMPLAN models—the latter being the model used by Witness Tierney in this  
4 case. At Economic Development Research Group, starting in 2005, I conducted  
5 economic impact analyses of highway projects, airports, and renewable energy  
6 and energy efficiency investments. At Synapse, I have continued to model the  
7 economic impacts of energy resource investments.

8 **Q What is the purpose of your testimony?**

9 **A** I was retained by DCG to review the Joint Applicants’ filing of the proposed  
10 merger. The Public Service Commission of the District of Columbia  
11 (“Commission”) explained in its baseline standard for merger evaluation at the  
12 outset of this proceeding, in Order No. 17530 stating: “for the proposed merger to  
13 be in the public interest, the proposed merger ‘must benefit the public rather than  
14 merely leave it unharmed.’”<sup>1</sup> My testimony reviews the economic impact analysis  
15 of the merger as presented in the Direct Testimony of Witness Susan F. Tierney.  
16 The issue of economic impacts falls under the first of the Commission’s “Revised  
17 Public Interest Factors” for evaluating the effects of the merger when considering  
18 “ratepayers, shareholders, the financial health of the utilities standing alone and as  
19 merged, and the economy of the District.”<sup>2</sup>

20 **Q On what aspects of the merger do the Joint Applicants base the economic**  
21 **impact estimates?**

22 **A** Witness Tierney estimates economic impacts of the merger based on the Joint  
23 Applicants’ pledge of a Customer Investment Fund and assumed improvements to  
24 reliability in the District of Columbia associated with the merger.

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<sup>1</sup> DC PSC Order No. 17530, page 9.

<sup>2</sup> DC PSC Order No. 17597, page 61.

1 **Q Are there any exhibits that accompany your testimony?**

2 **A** Yes. I am attaching my resume as Exhibit DCG\_\_\_\_(C)-1 and part of a data  
3 response from the Joint Applicants as CONFIDENTIAL Exhibit DCG\_\_\_\_(C)-2.

4 **Q Was your testimony prepared by you or under your direct supervision?**

5 **A.** Yes.

6 **II. SUMMARY OF TESTIMONY**

7 **Q Should the Commission accept the Joint Applicants’ economic impact**  
8 **analysis?**

9 **A** No. For reasons I will discuss further, the Joint Applicants’ economic impact  
10 analysis is misleading and grossly incomplete. As it stands, the analysis should  
11 not be taken into account as part of the Commission’s decision. The Joint  
12 Applicants have failed to adequately show that the merger will have a positive  
13 impact on the “economy of the District.”

14 **Q What are your findings regarding the economic impacts of the Joint**  
15 **Applicants’ proposed merger on the District of Columbia?**

16 **A** The economic impacts as presented by the Joint Applicants have the following  
17 flaws:

- 18 1. The economic impacts presented in the application ignore job losses from  
19 merger synergies—presenting only a positive, lop-sided view of the merger.
- 20 2. The presentation of economic impacts is misleading because it counts  
21 cumulative jobs in every year as “new jobs.”
- 22 3. The economic impacts from reliability improvements are overstated and based  
23 on a premise that the District of Columbia’s reliability standards would not be  
24 met by Pepco without the merger.

1 **Q What are your recommendations for the Commission?**

2 **A** I recommend, for the reasons explained in this testimony, that the Commission  
3 find that the Joint Applicants have not shown that the proposed merger will  
4 provide a direct and tangible benefit to the public with respect to the  
5 Commission’s Merger Evaluation Factor 1. The Commission should reject the  
6 economic impacts presented by the Joint Applicants because they do not reflect  
7 compliance with the Commission’s reliability standards and do not address the  
8 full impacts on the District of Columbia’s economy of the estimated job  
9 reductions at Pepco and PHI corporate workforces due to the merger.

10 **Q Did the Joint Applicants anticipate that there will be job reductions due to**  
11 **the merger?**

12 **A** Yes. Witness Crane plainly states that “the merger will result in some reductions  
13 in force.”<sup>3</sup> The Joint Applicants have proposed a commitment not to reduce the  
14 PHI utilities’ workforce (including Pepco) for two years after the merger is  
15 consummated.<sup>4</sup> However, this does not prevent reductions from occurring after  
16 the two-year period lapses. Also, this commitment does not apply to the PHI  
17 corporate workforce, which could be reduced immediately after the merger is  
18 consummated. Indeed, Witness Khouzami presents an analysis of “net synergy  
19 estimates” from the merger, including a “glidepath of O&M synergies” which  
20 shows estimated savings from job reductions at Exelon and PHI starting in the  
21 first year.<sup>5</sup> The Joint Applicants estimate that the merger will result in PHI  
22 corporate reductions including “397 planned terminations and 83 terminations of  
23 employees who refuse relocation.”<sup>6</sup>

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<sup>3</sup> Direct Testimony of Christopher M. Crane, page 19, line 10.

<sup>4</sup> Direct Testimony of Christopher M. Crane, page 19, lines 12-14.

<sup>5</sup> Joint Applicants-(F)-2, page 7 of 12.

<sup>6</sup> DCG DR 1-10, Attachment B, page 25. Attached as Confidential Exhibit DCG\_\_\_\_(C)-2



1 **Q Did the Joint Applicants estimate economic impacts from these job**  
2 **reductions?**

3 No, unfortunately. As shown in Table 1, the analysis presented by the Joint  
4 Applicants is only positive and one-sided. The Joint Applicants presented the  
5 positive impacts of the CIF and assumed reliability improvements, but have not  
6 estimated the negative impacts resulting from job losses at PHI and Pepco.

7 Despite modeling the economic impacts of the merger over a ten-year period—  
8 eight of which occur after the Joint Applicants’ two-year commitment period to  
9 freeze Pepco worker reductions—Witness Tierney “has not modeled any  
10 economic implications associated with that two-year commitment or any potential  
11 involuntary attrition after this period.”<sup>7</sup> She has also not accounted for the job  
12 reductions at PHI corporate that would result from merger “synergies” discussed  
13 elsewhere by the Joint Applicants.

14 The negative economic impacts of job reductions at both Pepco and PHI corporate  
15 should be accounted for in order to get a more complete view of the effect of the  
16 merger on the economy of the District of Columbia. Currently, it is unclear if the  
17 “net” impacts of the merger are positive or negative using the Joint Applicants’  
18 estimates. Instead, the Joint Applicants have chosen to present a positive, lopsided  
19 view of the merger in which no jobs are lost in the future. The economic impacts  
20 of the merger are, therefore, grossly incomplete and easily misconstrued.

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<sup>7</sup> Data Response to DCG Set 2, Question No. 38.

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**Table 1: Net Economic Impacts of the Merger<sup>8</sup>**

Year	(A) Joint Applicants' Economic Impact Estimates (High Range)	(B) Economic Impacts of PHI and Pepco Job Losses	(A - B) Net Economic Impacts of the Merger
2015	172	?	?
2016	114	?	?
2017	155	?	?
2018	195	?	?
2019	236	?	?
2020	275	?	?
2021	34	?	?
2022	34	?	?
2023	34	?	?
2024	34	?	?
<b>Cumulative Job-Years</b>	<b>1,281</b>	<b>?</b>	<b>?</b>
<b>Average Job Impact</b>	<b>128</b>	<b>?</b>	<b>?</b>

3

4 **Q Did you perform any economic impact analysis?**

5 **A** Yes. I performed a hypothetical impact analysis of job losses from the merger and  
6 an updated version of the Joint Applicants' impact analysis.

7 **Q What were the results of your analysis of job losses at PHI and Pepco?**

8 **A** In order to illustrate the impact of job losses, I used an example assuming that the  
9 139 current District of Columbia residents that work at PHI and PEPCO District  
10 of Columbia offices would lose their jobs as a result of the merger. (Witness  
11 Smith also discusses job reductions and locations.) The resulting economic impact  
12 of these direct job losses would be 231 jobs and nearly \$19 million in income lost

<sup>8</sup> AOBA-1-11 Attachment B.xlsx

1 to the District each year.<sup>9</sup> Over the 10-year analysis period performed by the Joint  
2 Applicants, this would mean -2,310 job-years (231 jobs for 10 years) and nearly -  
3 \$188 million in income impacts.<sup>10</sup> The negative impacts from this example would  
4 more than counteract the positive impacts presented by the Joint Applicants of  
5 1,281 job-years and \$105 million in income.

6 **Q What changes did you make to the Joint Applicants' positive economic**  
7 **impact analysis?**

8 **A** My updated analysis addresses two of my three main findings by: 1) reporting the  
9 job impacts by year and 2) assuming that the reliability standards in the District of  
10 Columbia will be met regardless of the merger. The Joint Applicants proposed  
11 three scenarios for spending of the Customer Investment Fund (CIF): direct bill  
12 credits to customers, credits to low-income customers, and energy efficiency (EE)  
13 investments. In my adjusted analysis, I focused on the EE spending scenario  
14 which has the largest impact of the three scenarios modeled by Witness Tierney.

15 **Q How do your updated results compare to those presented by the Joint**  
16 **Applicants?**

17 **A** My updated results show job losses, on average, in contrast to a gain of 1,281  
18 "new jobs" originally presented by the Joint Applicants. These updated results  
19 also do not include job losses at PHI and Pepco from the merger. Joint Applicants  
20 reported a range of 907 to 1,281 "new jobs" in the District of Columbia from the  
21 merger.<sup>11</sup> As I will discuss in more detail, the Joint Applicants' results actually  
22 represent the summation of jobs per year over the ten-year analysis period (2015-  
23 2024). Stated differently, the average job impact would be 91 to 128 jobs--the

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<sup>9</sup> AOBA-1-11 Attachment B-TC CONFIDENTIAL.xlsx

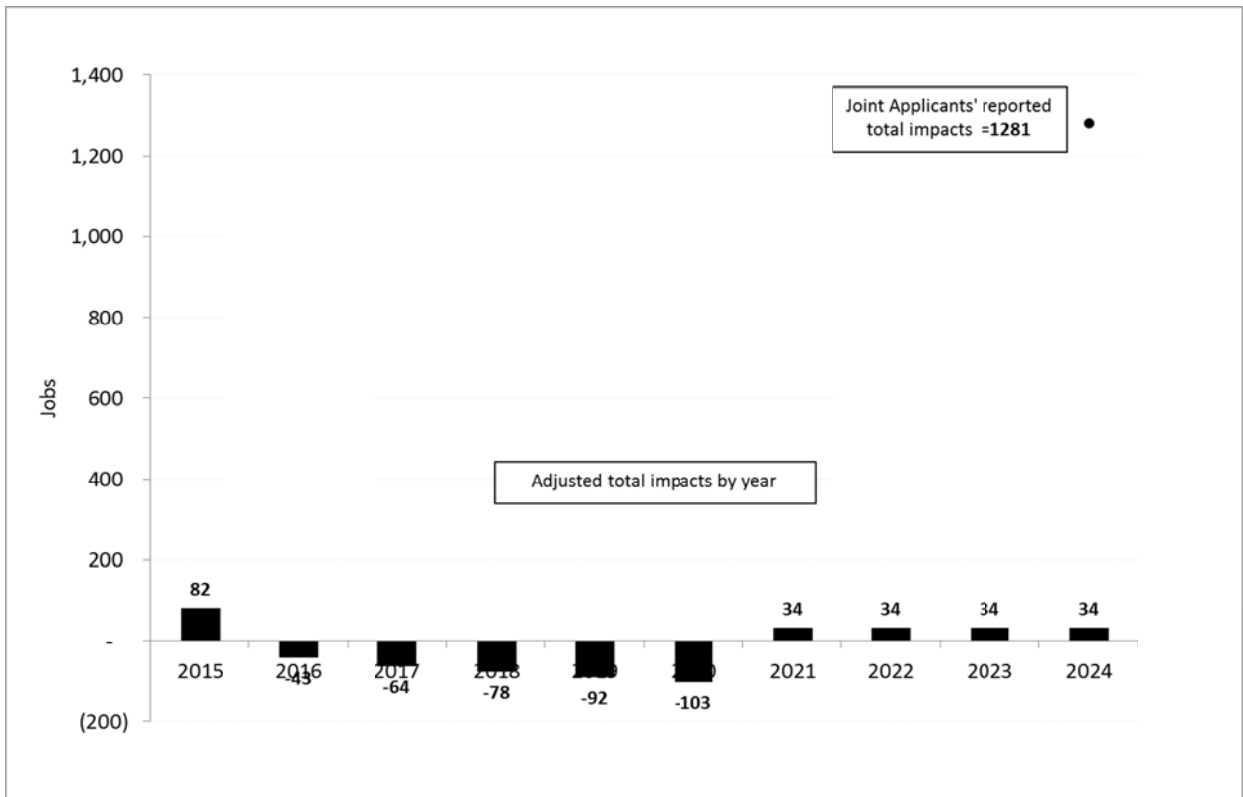
<sup>10</sup> Ibid.

<sup>11</sup> Direct Testimony Susan F. Tierney, page 7, line 8.

4 Joint Applicants’ reported job impacts divided by 10.<sup>12</sup> The high range of 128  
 5 jobs is based on the Joint Applicants’ scenario in which the Customer Investment  
 6 Fund (CIF) is spent on energy efficiency (EE) investments.

6 My updated analysis, shown in Figure 1, results in an average impact of -16 jobs  
 7 per year—as opposed to 128 average jobs from the Joint Applicants estimates.

7



8

9 **Figure 1: Updated Total Economic Impact Results - Jobs by Year**<sup>13</sup>

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12 *Note: This figure does not include impacts from PHI and PEPCO job reductions due*  
 13 *to the merger*

<sup>12</sup> This is done by dividing the total job-years by ten. Using the low end of the range (907 job-years) translates to 91 average jobs per year. Using the high end of the range (1281 job-years) translates to 128 average jobs per year.

<sup>13</sup> AOBA-1-11 Attachment B-TC.xlsx

1 **Q Should your updated analysis be considered “final” by this Commission?**

2 **A** No. My updated analysis corrects the Joint Applicants’ reliability assumptions,  
3 resulting in average job decreases over the period and presents the job impacts  
4 more clearly. However, it does not include an estimation of the economic impacts  
5 from job reductions at PHI and Pepco from the merger, since there was not  
6 sufficient evidence provided by the Joint Applicants to do so. My previous  
7 example of economic impacts from job losses was based on a hypothetical  
8 assumption that 139 District of Columbia workers would be cut as a result of the  
9 merger. When asked, the Joint Applicants failed to produce an estimate of job  
10 losses in the District of Columbia due to the merger.<sup>14</sup> Therefore, a rigorous  
11 analysis of the job loss impacts was not possible.

12 **III. THE JOINT APPLICANTS’ CLAIMED MERGER BENEFITS**

13 **A. THE ECONOMIC IMPACTS IGNORE JOB REDUCTIONS**

14 **Q Did the Joint Applicants anticipate that there would be job reductions due to**  
15 **the merger?**

16 **A** Yes. Witness Crane plainly states that “the merger will result in some reductions  
17 in force.”<sup>15</sup> Witness Khouzami claims:

18 The Merger of Exelon and PHI will create the opportunity to  
19 realize savings by eliminating overlap and duplication in company-  
20 wide operations, realizing economies of scale and streamlining  
21 corporate functions.<sup>16</sup>

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<sup>14</sup> Data Response to DCG Set 1 Question No. 61.

<sup>15</sup> Direct Testimony of Christopher M. Crane, page 19, line 10.

<sup>16</sup> Direct Testimony of Carim V. Khouzami, page 24, lines 1-3.

1 **Q Did the Joint Applicants estimate direct job reductions in Pepco’s workforce**  
2 **due to the merger?**

3 **A** No. Witness Crane discusses the Joint Applicants’ two-year commitment not to  
4 reduce employment at PHI utility subsidiaries, including Pepco.<sup>17</sup> However, this  
5 does not prevent reductions from occurring after the two-year period lapses.  
6 When asked to estimate the reductions in Pepco workforce from 2017 through  
7 2022, the Joint Applicants responded:

8 The Applicants do not have a projection of the number of full time  
9 equivalent positions, or a range of salary levels, that will be  
10 eliminated in the District of Columbia...<sup>18</sup>

11 **Q Did the Joint Applicants estimate economic impacts from Pepco workforce**  
12 **reductions?**

13 No, unfortunately. Despite modeling the economic impacts of the merger over a  
14 ten-year period—eight of which occur after the commitment period—Witness  
15 Tierney “has not modeled any economic implications associated with that two-  
16 year commitment or any potential involuntary attrition after this period.”<sup>19</sup>

17 **Q Does the two-year commitment also cover PHI corporate employees?**

18 **A** No. The two-year commitment does not apply to the PHI corporate workforce.  
19 Therefore, the PHI corporate workforce could be reduced immediately after the  
20 merger is consummated.

21 **Q Did the Joint Applicants estimate reductions in PHI corporate workforce in**  
22 **the District of Columbia due to the merger?**

23 **A** Not for the District of Columbia, specifically. Witness Khouzami presents an  
24 analysis of “net synergy estimates” from the merger, including a “glidepath of

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<sup>17</sup> Direct Testimony of Christopher M. Crane, page 19, lines 12-15.

<sup>18</sup> Data Response to DCG Set 1, Question No. 61.

<sup>19</sup> Data Response to DCG Set 2, Question No. 38.

1 O&M synergies,” which shows estimated savings from job reductions at Exelon  
2 and PHI starting in the first year.<sup>20</sup> Projections of PHI corporate job reductions  
3 were estimated to include “397 planned terminations and 83 terminations of  
4 employees who refuse relocation.”<sup>21</sup> However, it is unclear how many of these  
5 employees would be cut from the District of Columbia compared to other PHI  
6 jurisdictions.

7 **Q Did the Joint Applicants estimate economic impacts from these PHI**  
8 **corporate workforce reductions?**

9 **A** No. In addition to not including economic impacts from Pepco job reductions,  
10 Witness Tierney’s analysis has also not accounted for job reductions at PHI  
11 corporate in the District of Columbia that would result from merger “synergies”  
12 discussed elsewhere by the Joint Applicants.

13 **Q Did the Joint Applicants present the positive economic impacts of the**  
14 **merger?**

15 Yes. The Joint Applicants presented the economic impacts of the Customer  
16 Investment Fund and reliability improvements. The results of Witness Tierney’s  
17 analysis show positive economic impacts in each of the ten years.

18 **Q Should the economic impact results presented by the Joint Applicants be**  
19 **considered complete?**

20 Absolutely not. As shown in Table 2, the analysis presented by the Joint  
21 Applicants is a positive and one-sided view of the merger , in which no jobs are  
22 lost in the future. PHI corporate employees at long-term positions could be cut  
23 immediately, and Pepco utility employees could be reduced two years after the  
24 merger is complete. The negative economic impacts of job reductions at both  
25 Pepco and PHI corporate should be accounted for in order to get a more complete

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<sup>20</sup> Joint Applicants-(F)-2, page 7 of 12.

<sup>21</sup> DCG DR 1-10, Attachment B, page 25. Attached as Confidential Exhibit DCG\_\_\_\_(C)-2

1 view of the effect of the merger on the economy of the District of Columbia.  
 2 Currently, it is unclear if the “net” impacts of the merger are positive or negative  
 3 using the Joint Applicants’ estimates. The economic impacts of the merger are,  
 4 therefore, grossly incomplete and easily misconstrued.

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**Table 2: Net Economic Impacts of the Merger<sup>22</sup>**

Year	(A) Joint Applicants' Economic Impact Estimates (High Range)	(B) Economic Impacts of PHI and Pepco Job Losses	(A – B) Net Economic Impacts of the Merger
2015	172	?	?
2016	114	?	?
2017	155	?	?
2018	195	?	?
2019	236	?	?
2020	275	?	?
2021	34	?	?
2022	34	?	?
2023	34	?	?
2024	34	?	?
<b>Cumulative Job-Years</b>	<b>1,281</b>	<b>?</b>	<b>?</b>
<b>Average Job Impact</b>	<b>128</b>	<b>?</b>	<b>?</b>

11

<sup>22</sup> AOBA-1-11 Attachment B.xlsx



1 **Q Did you conduct an analysis of job losses at PHI and Pepco due to the**  
2 **merger?**

3 **A** Yes, but only as a hypothetical example. I relied on Witness Smith's analysis of  
4 job reductions, locations of workers and salaries. In order to illustrate the impact  
5 of job losses, I used an example assuming that the 139 current District of  
6 Columbia residents that work at PHI and PEPCO would lose their jobs as a result  
7 of the merger.

8 According to Witness Smith, these workers have an average salary of  
9 approximately \$96,000. Accounting for the number of workers, this would result  
10 in a direct loss of \$13.6 million in District of Columbia income per year (\$136  
11 million over 10 years).<sup>23</sup> I then applied multipliers from the IMPLAN model for  
12 the District of Columbia to generate the total economic impacts from these job  
13 losses.

14 **Q What were the results of your analysis of job losses?**

15 **A** The resulting economic impact of these direct job losses was -231 jobs and nearly  
16 -\$19 million in income each year. Over the 10-year analysis period performed by  
17 the Joint Applicants, this would mean -2,310 job-years (-231 jobs for 10 years)  
18 and nearly -\$188 million in income impacts.<sup>24</sup> The negative impacts from this  
19 example more than counteract the positive impacts presented by the Joint  
20 Applicants of 1,281 job-years and \$105 million in income.

21 **Q Are you claiming that these jobs would definitely be lost as a result of the**  
22 **merger?**

23 **A** No. This analysis is simply meant to illustrate where the Joint Applicants'  
24 analysis is lacking. The results are merely an indicator of the importance of an  
25 appropriately constructed, more informative economic analysis for this case,

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<sup>23</sup> Ibid

<sup>24</sup> AOBA-1-11 Attachment B-TC CONFIDENTIAL.xlsx

1           which would include the effects of corporate and utility job losses in the District  
2           of Columbia. The Joint Applicants have failed to do such analysis.

3   **Q    What does your example of job loss impacts tell the Commission?**

4   **A**    First, that a more complete analysis is needed to understand the net (i.e. balance  
5           of positive and negative) impacts of the merger. Second, that it is possible to do  
6           such an analysis, given the appropriate data. In my example, a hypothetical job  
7           loss figure was used in the absence of data from the Joint Applicants. The  
8           possible losses of PHI and Pepco jobs from the District of Columbia is an  
9           important matter, requiring the Commission’s consideration. The effect of  
10          eliminating these jobs should have been properly analyzed and the results  
11          provided to the Commission for review. Because the Joint Applicants failed to do  
12          that, they have presented the Commission with an incomplete case for Factor 1.

13   **B.    THE PRESENTATION OF ECONOMIC IMPACTS IS MISLEADING**

14   **Q    How do the Joint Applicants present the economic impact results?**

15   **A**    Witness Tierney presents a range of 907 to 1,281 “new jobs” in the District of  
16          Columbia from the merger.<sup>25</sup> Witness Crane also discusses “the creation of  
17          between 907 and 1,281 jobs in the District of Columbia.”<sup>26</sup> As discussed in the  
18          previous section, these estimates do not include job losses due to the merger.

19   **Q    Does this result mean that there are 907 to 1,281 new jobs in the District of  
20          Columbia workforce as a result of the merger?**

21   **A**    No. These impact results actually represent the job-years (i.e., cumulative job  
22          impacts per year) over the ten-year analysis period (2015-2024).

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<sup>25</sup> Direct Testimony of Susan F. Tierney, page 7, line 8.

<sup>26</sup> Direct Testimony of Christopher M. Crane, page 17, lines 22-23.

1 **Q Please explain the concept of job-years.**

2 **A** A job-year is the equivalent of one full-time job being performed for one year.  
3 This can be a useful measure in that it can represent both short- and long-term  
4 activities. However, it should be reported clearly and distinguished from “new  
5 jobs.” For instance, one long-term job being performed for ten years compared to  
6 ten short-term jobs needed for only one year (such as in construction) are both  
7 equal to ten job-years. To report these ten job-years as ten “new jobs” could lead  
8 one to conclude that ten more long-term jobs would be created, when this is not  
9 the case. Based on the examples above, the result could be reported as one long-  
10 term job or ten jobs that only last one year, or ten “job-years.”

11 **Q On what basis does Witness Tierney estimate the economic impacts of the**  
12 **merger?**

13 **A** Witness Tierney uses the Joint Applicants’ pledges of a Customer Investment  
14 Fund (CIF) and proposed reliability commitments. In this section, I discuss the  
15 impacts of each component individually and end by discussing the combined  
16 impacts.

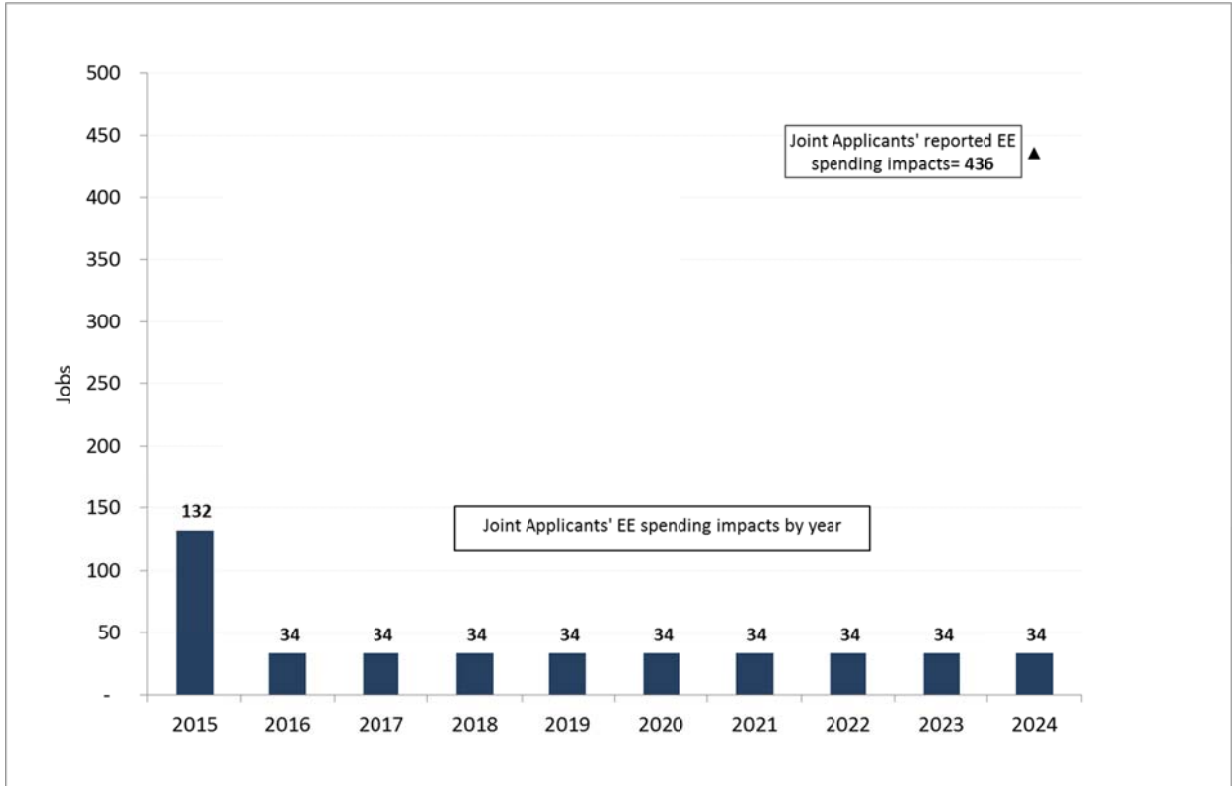
17 **Q How do the cumulative job-year impacts from the Customer Investment**  
18 **Fund compare to the job impacts per year?**

19 Figure 2 illustrates why presentation of job impacts matters. The results are taken  
20 directly from Witness Tierney’s workpapers and are simply recast to show the  
21 results by year. The figure shows the annual job impacts by year assuming the  
22 CIF is spent on energy efficiency investments. This activity generates an  
23 estimated 132 jobs in 2015 and 34 jobs in each subsequent year; which is the  
24 equivalent of 436 job-years (the number reported by Witness Tierney as “new  
25 jobs”).

2 **Q Does your criticism extend to the Customer Investment Fund itself?**

5 **A** No. I have no particular issue with the Joint Applicants offering the CIF and I do  
6 not deny that it would generate economic impacts in the District of Columbia.

7 However, I do take issue with how the impacts are presented.



6

8 **Figure 2: Original Economic Impacts from Customer Investment Fund EE**  
9 **Spending - Jobs by Year**<sup>27</sup>

9

11 *Note: This figure does not include impacts from PHI and PEPCO job reductions due*  
12 *to the merger*

13 **Q How do the cumulative job-year impacts from reliability improvements**  
14 **compare to the job impacts per year?**

15 Figure 3 shows the results from Witness Tierney’s analysis of reliability impacts,  
16 recast to show the jobs by year. These impacts are generated from an estimation

<sup>27</sup> AOBA-1-11 Attachment B.xlsx. Based on use of the Customer Investment Fund on EE spending.

1 of customers' value of outages, assuming that residents and businesses can re-  
2 spend or produce more, respectively, with increased reliability. The assumed  
3 improvement generates an estimated 40 jobs in 2015 and increases to 241 jobs in  
4 2020 with none in subsequent years. Over the 10-year period, this is the  
5 equivalent of 846 job-years (the number reported by Witness Tierney as "new  
6 jobs").

7 **Q Why do the new job impacts from reliability stop after 2020?**

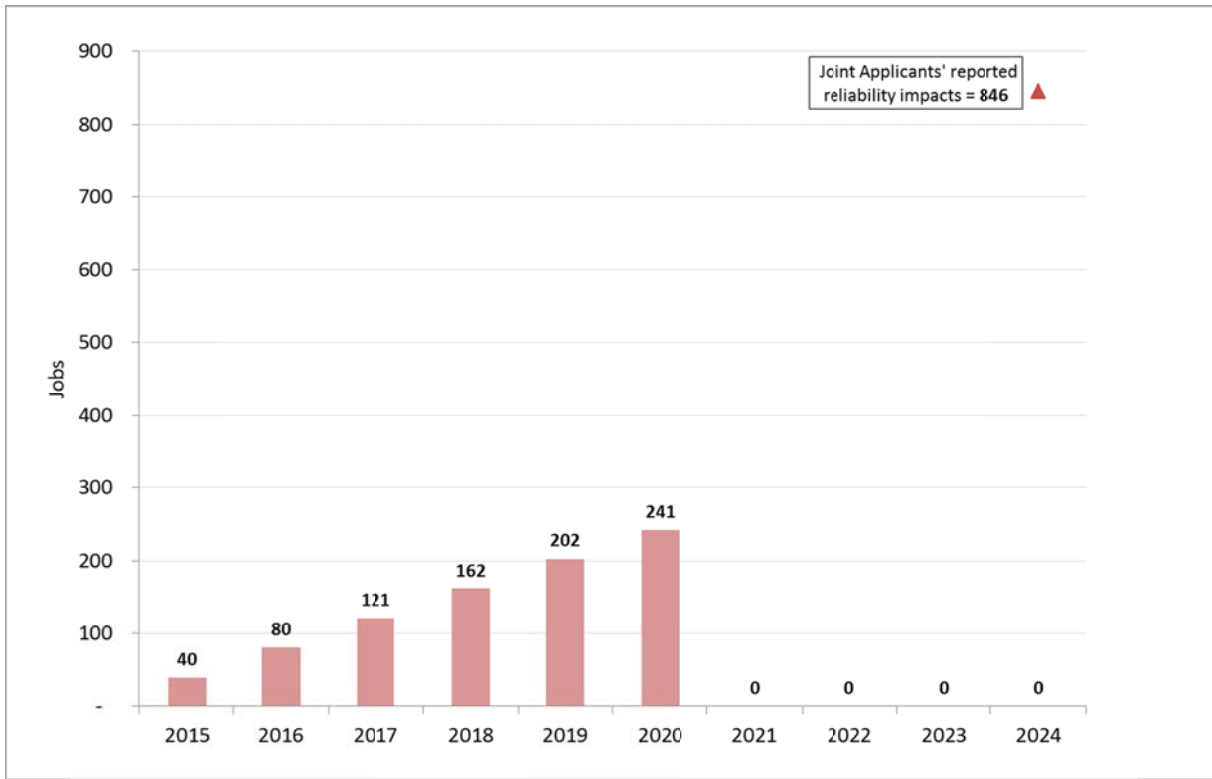
8 **A** The Joint Applicants' assumed reliability improvements from 2015 to 2020 only;  
9 thus, the impacts stop after 2020.<sup>28</sup>

10 **Q Do you agree with the assumptions underlying the reliability impacts?**

11 **A** No. I will explain in the next section why I think the impacts from reliability  
12 shown here are flawed. As with CIF spending impacts shown previously in Figure  
13 2, Figure 3 illustrates how the presentation of the impacts is critical.

---

<sup>28</sup> Direct Testimony of Susan F. Tierney, page 29, lines 7-8.



2

3 **Figure 3: Original Economic Impacts from Reliability - Jobs by Year<sup>29</sup>**

4

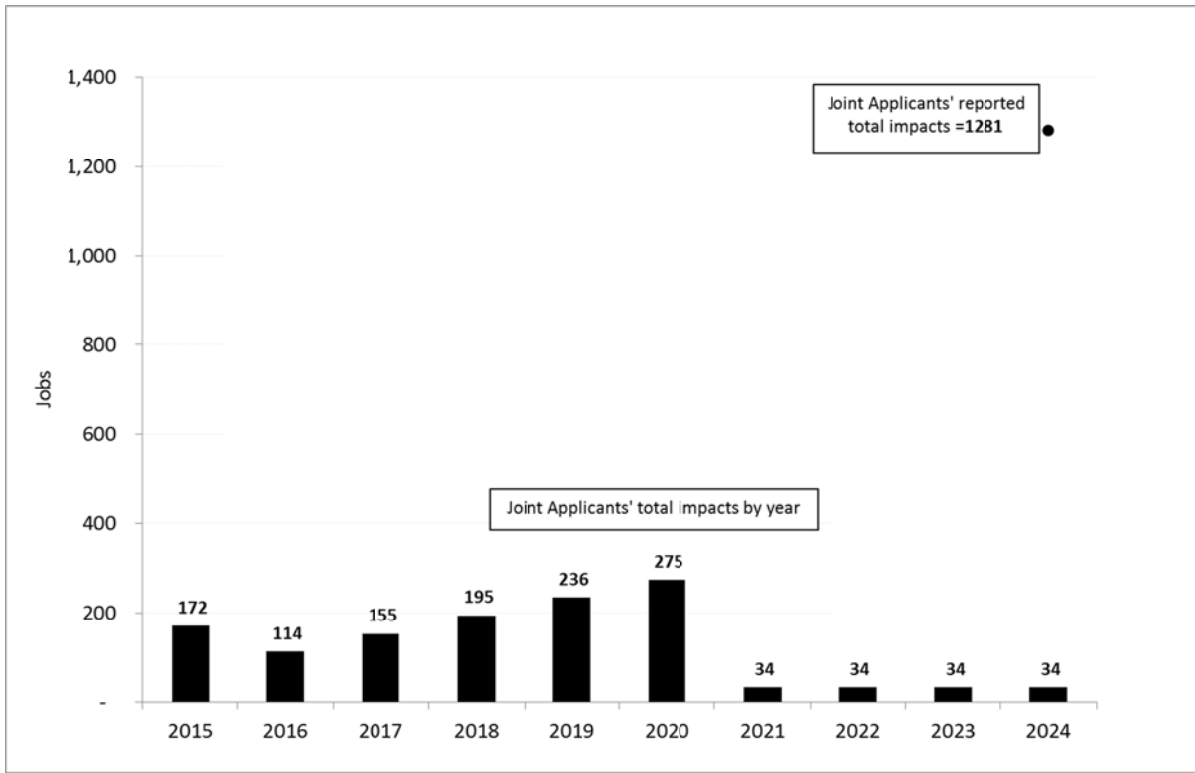
6 *Note: This figure does not include impacts from PHI and PEPCO job reductions due*  
 7 *to the merger*

7

9 **Q How do the cumulative job-years compare to the annual job impacts per**  
 10 **year?**

15 **A** Figure 4 shows the results from the previous two figures combined: the total  
 16 economic impacts from reliability improvements and the CIF spending scenario.  
 17 This scenario generates the highest job impact in 2020 (with 275 jobs). In each  
 18 subsequent year, 34 jobs are generated due to re-spending of efficiency savings.  
 19 Over the 10-year period, this is the equivalent of 1,281 job-years (the high end of  
 20 the range reported by Witness Tierney as “new jobs”).

<sup>29</sup> AOBA-1-11 Attachment B.xlsx



2

3 **Figure 4: Original Total Economic Impact Results - Jobs by Year<sup>30</sup>**

4

6 *Note: This figure does not include impacts from PHI and PEPCO job reductions due*  
 7 *to the merger*

7 **Q How is the presentation of job impacts by the Joint Applicants misleading?**

12 **A** Someone reading “new jobs” may assume that the numbers represent long-term  
 13 additions to the workforce in the District of Columbia. In reality, most of the job  
 14 impacts presented by the Joint Applicants represent short-term re-spending in  
 15 each year—not to be confused with long-term employment that occurs at PHI  
 16 corporate and utility entities.

<sup>30</sup> AOBA-1-11 Attachment B.xlsx. Based on use of the Customer Investment Fund on EE spending.

1 **Q What are the total job impact estimates by year, on average, from the Joint**  
2 **Applicants' results?**

3 **A** The average job impact for the 10-year period is between 91 to 128 jobs.<sup>31</sup>

4 **Q How do the average annual job impacts compare to the total workforce in**  
5 **the District of Columbia?**

6 **A** According to the latest annual data available from the Bureau of Labor Statistics,  
7 approximately 745,000 workers are employed in the District of Columbia.<sup>32</sup> The  
8 high range of annual impacts would represent a 0.017 percent increase in jobs.<sup>33</sup>  
9 Even the highest annual impact estimate of 275 jobs in 2020 represents 0.04  
10 percent of the current District of Columbia workforce. In the month that the Joint  
11 Applicants filed the petition (June 2014), the District of Columbia economy added  
12 3,600 jobs compared to the previous month.<sup>34</sup>

13 **C. THE ECONOMIC IMPACTS OF RELIABILITY IMPROVEMENTS IGNORE**  
14 **THE COMMISSION'S STANDARDS**

15 **Q Do the assumed reliability improvements presented by the Joint Applicants**  
16 **accurately characterize the effects of the merger?**

17 **A** No. As discussed by my colleague, Witness Chang, the Joint Applicants' assumed  
18 reliability improvements do not take the Commission's Electricity Quality Service  
19 Standards ("EQSS") into account properly.<sup>35</sup> The Joint Applicants compared their  
20 projected reliability goals to Pepco's historical reliability performance. However,  
21 since Pepco would have to abide by the EQSS with or without the merger, the

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<sup>31</sup> This is done by dividing the total job-years by the number of years. Using the low end of the range (907 job-years) translates to 91 average jobs per year. Using the high end of the range (1281 job-years) translates to 128 average jobs per year.

<sup>32</sup> Bureau of Labor Statistics (BLS), State and Area Employment Annual Averages, 2013. Available here: [http://www.bls.gov/sae/eetables/sae\\_annavg113.pdf](http://www.bls.gov/sae/eetables/sae_annavg113.pdf).

<sup>33</sup> This percentage comes from dividing 128 jobs by the approximately 745,000 existing jobs in DC, according to the latest BLS figure.

<sup>34</sup> Bureau of Labor Statistics (BLS), State Employment Seasonally Adjusted, Table D-1. Calculation is from DC employment in June 2014 (753,300) minus employment in May 2014 (749,700).

<sup>35</sup> DC Municipal Regulations, Chapter 15-36, Section 15-3603. Available here: <http://www.dcregs.dc.gov/Gateway/RuleHome.aspx?RuleNumber=15-3603>.



1 effect of the merger should be a comparison of the Joint Applicants' plan relative  
2 to the District of Columbia's standards.<sup>36</sup>

3 **Q Did you perform an analysis that incorporates the Commission's reliability**  
4 **standards?**

5 Yes. Figure 5 below shows the resulting reliability impacts of the merger  
6 assuming the Commission's reliability standards as the baseline. I re-ran the US  
7 Department of Energy ICE calculator (the same method used by Witness Tierney)  
8 to derive the value of reliability improvements in each year.<sup>37</sup>

9 The updated impacts show job losses between 2015 and 2020 (inclusive).  
10 Consistent with Witness Tierney's methodology, job growth would occur if the  
11 Joint Applicants' planned reliability metric is more stringent than the  
12 Commission's reliability standards, resulting in a net improvement with the  
13 merger. Estimated job losses occur if the Joint Applicants' planned reliability  
14 metric is less stringent than the Commission's reliability standards—as seen in  
15 2015 through 2020. In these years, job reductions are generated as a result of  
16 increased outage costs incurred by residents and businesses.

17 **Q In reality, would jobs be affected by changes in reliability?**

18 Not necessarily. The impacts from reliability are based on the value of the length  
19 and number of outages to customers. The underlying assumptions for this value  
20 constitute a component of the ICE calculator, which uses various estimates, in  
21 part relying on surveys of customers' willingness to pay for electricity service  
22 reliability.<sup>38</sup> However, the value that people and businesses ascribe to outages  
23 does not clearly translate to money in their pockets that can be re-spent.

24 Therefore, unlike the CIF, improvements in reliability are not a direct stimulus to

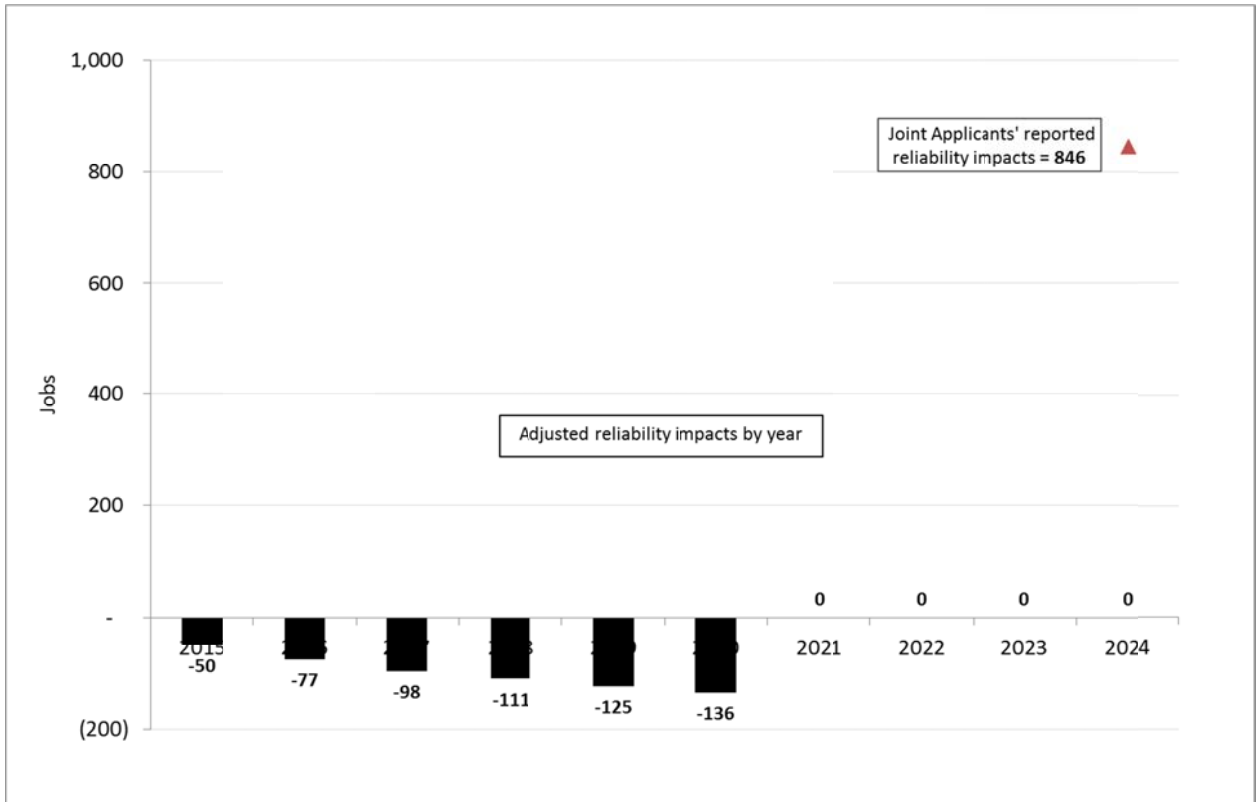
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<sup>36</sup> Direct Testimony of William M. Gausman, page 4, lines 2-3.

<sup>37</sup> DC – ICE results – TC.pdf

<sup>38</sup> See: <http://www.icecalculator.com/ice/relevant-reports.htm>

4 the economy. I do not to diminish the importance of reliability, only point out that  
 5 its incremental impacts on the economy are more difficult to estimate compared to  
 6 a more direct stimulus, such as a bill credit.



5

6 **Figure 5: Updated Economic Impacts from Reliability - Jobs by Year<sup>39</sup>**

7

9 *Note: This figure does not include impacts from PHI and PEPCO job reductions due*  
 10 *to the merger*

11 **Q How does the updated estimate of total impacts compare to those presented**  
 12 **by the Joint Applicants?**

13 **A** On average, my updated analysis shows job losses due to reliability. In contrast,  
 14 the Joint Applicants reported a range of 907 to 1,281 “new jobs” in the District of

<sup>39</sup> AOBA-1-11 Attachment B-TC.xlsx. Based on use of the Customer Investment Fund on EE spending.

1 Columbia from the merger.<sup>40</sup> As I discussed in the previous section, these results  
2 actually represent the summation of jobs per year (i.e., job-years) over the 10-year  
3 analysis period (2015-2024). Stated differently, the average job impact from the  
4 Joint Applicants’ results over the 10-year period is between 91 and 128 jobs.<sup>41</sup>

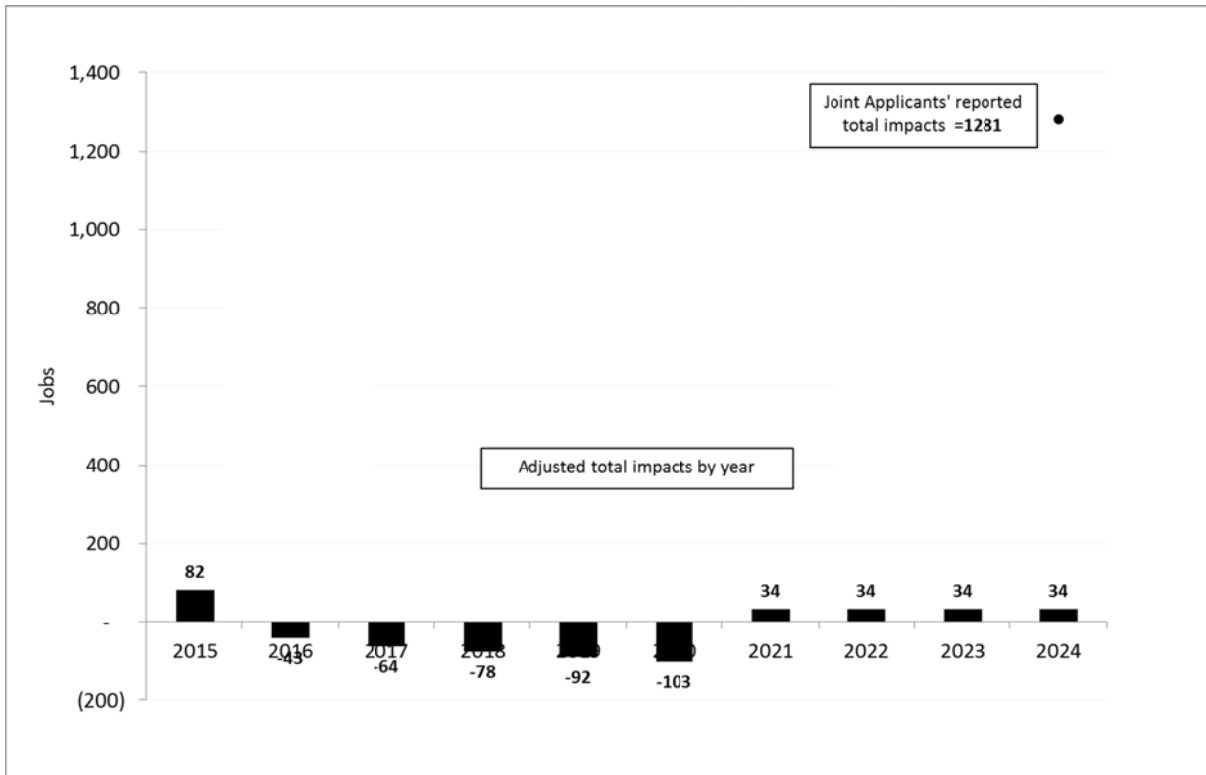
5 My results presented in Figure 6 show, after incorporating the Commission’s  
6 reliability standards and adding the impacts from the CIF (Figure 2), an average  
7 of -16 jobs per year—a sharp decrease from the 128 average jobs from the Joint  
8 Applicants estimates or the 1,281 “new jobs” that they reported. The average job  
9 impacts are a useful indicator of economic impact; however, job impacts fluctuate  
10 from year to year. For instance, in my updated analysis:

- 11 • The highest annual impact is 82 jobs in 2015.
- 12 • The lowest annual impact is a **loss** of 103 jobs in 2020.

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<sup>40</sup> Direct Testimony Susan F. Tierney, page 7, line 8.

<sup>41</sup> This is done by dividing the total job-years by the number of years. Using the low end of the range (907 job-years) translates to 91 average jobs per year. Using the high end of the range (1281 job-years) translates to 128 average jobs per year.



2

3 **Figure 6: Updated Total Economic Impact Results - Jobs by Year**<sup>42</sup>

4

6 *Note: This figure does not include impacts from PHI and PEPCO job reductions due*  
 7 *to the merger*

7 **Q Should your analysis be considered “final” by this Commission?**

15 **A** No. My updated analysis corrects the Joint Applicants’ reliability assumptions,  
 16 resulting in average job decreases over the period, and presents the job impacts  
 17 more clearly. However, it does not include an estimation of the economic impacts  
 18 from job reductions at PHI and Pepco from the merger, since there was not  
 19 sufficient evidence provided by the Joint Applicants to do so. My previous  
 20 example of economic impacts from job losses was based on a hypothetical  
 21 assumption that 139 District of Columbia workers would be cut as a result of the  
 22 merger. When asked, the Joint Applicants failed to produce an estimate of job

<sup>42</sup> AOBA-1-11 Attachment B-TC.xlsx. Based on use of the Customer Investment Fund on EE spending.

1 losses in the District of Columbia due to the merger.<sup>43</sup> Therefore, a rigorous  
2 analysis of the job loss impacts was not possible.

3 **IV. FINDINGS AND RECOMMENDATIONS**

4 **Q What are your findings?**

5 **A** The economic impact analysis, as presented by the Joint Applicants, has the  
6 following flaws:

- 7 1. The economic impacts presented in the application ignore job losses. These  
8 negative economic impacts should be accounted for in order to get a more  
9 complete view of the effect of the merger on the District of Columbia.  
10 Unfortunately, the Joint Applicants have neglected to take this critical  
11 component into account in the original economic impact estimates. Instead,  
12 they only present a positive, lop-sided view of the merger.
- 13 2. The presentation of economic impacts is misleading by presenting cumulative  
14 jobs by year as “new jobs.” Declaring 907 to 1,281 “new jobs” leads readers  
15 to assume that this represents long-term additions to the workforce in the  
16 District of Columbia. In reality, these are the accumulated job-years over a  
17 ten-year period. On average, the Joint Applicants’ are estimating an impact of  
18 91 to 128 jobs per year.
- 19 3. The economic impacts from reliability improvements are overstated. The Joint  
20 Applicants appear to have ignored the Commission’s standards when  
21 proposing future goals. After assuming these standards are met regardless of  
22 the merger, the job impact estimates are negative, on average, over the ten-  
23 year period.

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<sup>43</sup> Data Response to DCG Set 1 Question No. 61.

1 **Q What are your recommendations for the Commission?**

2 **A** For the reasons listed above, I recommend that the Commission find that the Joint  
3 Applicants have not shown that the proposed merger will provide a direct and  
4 tangible benefit to the public with respect to the Commission's Merger Evaluation  
5 Factor 1. The Commission should reject the economic impacts presented by the  
6 Joint Applicants because they fail to address the full impact on the District of  
7 Columbia's economy from estimated job reductions at Pepco and PHI corporate  
8 workforces due to the merger, and fail to reflect compliance with the  
9 Commission's reliability standards.

10 **Q Does this conclude your testimony?**

11 **A** It does.

I declare under penalty of perjury that the foregoing testimony is true and correct to the best of my knowledge, information, and belief.

Executed this 3<sup>rd</sup> day of November, 2014.

A handwritten signature in black ink, appearing to read "Tyler Comings". The signature is written in a cursive style with a large, sweeping initial "T".

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Tyler Comings



## Tyler Comings, Senior Associate

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### PROFESSIONAL EXPERIENCE

**Synapse Energy Economics Inc.**, Cambridge, MA. *Senior Associate*, July 2014 – present, *Associate*, July 2011 – July 2014.

Conducts research on energy system planning and coal plant economics, and performs economic modeling and analysis in support of a wide range of projects. Performs economic impact and benefit-cost analyses, statistical modeling, and research on environmental issues. Recent work includes developing economic impacts of energy efficiency programs in Vermont and a scenario of clean energy investments for the U.S.

**Ideas42**, Boston, MA. *Senior Associate*, 2010 – 2011.

Organized studies analyzing behavior of consumers regarding finances, and worked with top researchers in behavioral economics. Managed implementation and data analysis for a study of mitigation of default for borrowers that were at-risk of delinquency. Performed case studies for World Bank on financial innovations in developing countries.

**Economic Development Research Group Inc.**, Boston, MA. *Research Analyst, Economic Consultant*, 2005 – 2010.

Performed economic impact modeling and benefit-cost analyses using IMPLAN and REMI for transportation and renewable energy projects, including support for Federal stimulus applications. Performed statistical modeling, including results on the timing of effects of highway construction on economic growth in Appalachia. Developed a unique Web-tool for the National Academy of Sciences on linkages between economic development and transportation, and presented findings to state government officials around the country. Created economic development strategies and improvements to company's economic development software tool.

**Harmon Law Offices, LLC.**, Newton, MA. *Billing Coordinator, Accounting Liaison*, 2002 – 2005.

Allocated IOLTA and Escrow funds, performed bank reconciliation and accounts receivable. Projected legal fees and costs for cases at the firm.

**Massachusetts Department of Public Health**, Boston, MA. *Data Analyst (contract)*, 2002.

Designed statistical programs using SAS based on data taken from health-related surveys. Extrapolated trends in health awareness and developed benchmarks for performance of clinics and other healthcare facilities for statewide assessment.



## EDUCATION

**Tufts University**, Medford, MA  
Master of Arts in Economics, 2007

**Boston University**, Boston, MA  
Bachelor of Arts in Mathematics and Economics, 2002. *Cum Laude*, Dean's Scholar.

## ADDITIONAL SKILLS

**Software:** MS Office, STATA, SPSS, SAS, REMI, IMPLAN, Mathematica

**Programming:** C++

**Languages:** Conversant in French

## PUBLICATIONS

Comings, T., S. Fields, K. Takahashi, G. Keith. 2014. *Employment Effects of Clean Energy Investments in Montana*. Synapse Energy Economics for Montana Environmental Information Center and Sierra Club.

Daniel, J., T. Comings, J. Fisher. 2014. *Comments on Preliminary Assumptions for Cleco's 2014/2015 Integrated Resource Plan*. Synapse Energy Economics for Sierra Club.

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## **TESTIMONY**

**Kentucky Public Service Commission (Case No. 2013-00259):** Direct and supplemental testimony regarding East Kentucky Power Cooperative's Application for Cooper Station Retrofit and Environmental Surcharge Cost Recovery. On behalf of Sonia McElroy and Sierra Club. November 27, 2013 and December 27, 2013.

**Indiana Utility Regulatory Commission (Cause No. 44339):** Direct testimony in the Matter of Indianapolis Power & Light Company's Application for a Certificate of Public Convenience and Necessity for the Construction of a Combined Cycle Gas Turbine Generation Facility. On behalf of Citizens Action Coalition of Indiana. August 22, 2013.

*Resume dated July 2014*

Confidential Exhibit DCG (C)-2 Remains Confidential

## CERTIFICATE OF SERVICE

I hereby certify that on this 25th day of March, 2015, I caused true and correct copies of the foregoing Fully Conformed DCG Direct Testimony of Tyler Comings: Public Version, to be electronically delivered to the following parties:

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*/s/ Brian R. Caldwell*

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