

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF DELAWARE

IN THE MATTER OF THE APPLICATION OF )  
OF DELMARVA POWER & LIGHT COMPANY FOR ) PSC DOCKET NO. 12-546  
A CHANGE IN NATURAL GAS BASE RATES )

**PUBLIC VERSION**

DIRECT TESTIMONY

OF

GLENN A. WATKINS

ON BEHALF OF

THE ATTORNEY GENERAL OF THE STATE OF DELAWARE

JUNE 3, 2013

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1 **I. INTRODUCTION AND OVERVIEW**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Glenn A. Watkins. My business address is 9030 Stony Point  
4 Parkway, Suite 580, Richmond, Virginia 23235.

5 **Q. WHAT IS YOUR PROFESSIONAL AND EDUCATIONAL BACKGROUND?**

6 A. I am Executive Vice President and Senior Economist of Technical Associates,  
7 Inc., which is an economic research and consulting firm with offices in Richmond,  
8 Virginia. Except during 1987 when employed by Old Dominion Electric Cooperative as  
9 its forecasting and regulatory economist, I have worked in varying capacities with  
10 Technical Associates continuously since 1980.

11 During my career at Technical Associates, I have conducted cost of capital,  
12 revenue requirement, load forecasting, cost of service, and rate design studies involving  
13 numerous electric, gas, water/wastewater, and telephone utilities, and have presented  
14 expert testimony on these and other topics in Alabama, Arizona, Delaware, Georgia,  
15 Illinois, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Jersey,  
16 North Carolina, Ohio, Pennsylvania, Vermont, Virginia, South Carolina, Washington,  
17 and West Virginia. I hold an M.B.A. and B.S. in economics from Virginia  
18 Commonwealth University and am a Certified Rate of Return Analyst. A more complete  
19 statement of my professional and educational background appears in my Schedule GAW-  
20 1.

21 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

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1 A. I was retained by the State of Delaware Division of Public Advocate (“DPA”) to  
2 evaluate the revenue requirement and rate structure aspects of the current natural gas rate  
3 case filing of Delmarva Power & Light Company (“DPL” or “Company”). Since my  
4 retention, the Public Advocate resigned his position and the office is being filled by the  
5 state Attorney General’s office (“OAG”) until a new Public Advocate is appointed and  
6 confirmed.

7

8 **II. SUMMARY OF RECOMMENDATIONS**

9 **Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.**

10 A. Based on my analyses of DPL’s revenues, operating expenses, and rate base, as  
11 well as the cost of capital recommendations of OAG witness Dr. J. Randall Woolridge, I  
12 recommend an overall base rate revenue increase of \$0.706 million, as compared to the  
13 \$13.005 million increase DPL proposes in its March 11, 2013 Supplemental and Updated  
14 Filing.

15 With regard to class cost of service, I have determined that the Company’s study,  
16 which employs the Peak and Average method, reflects a fair and reasonable allocation of  
17 costs. I have also accepted the Company’s proposed class revenue distribution such that  
18 the overall authorized revenue increase should be scaled back in proportion to the class  
19 increases proposed by DPL.

20 With regard to Residential rate design, I recommend increasing the fixed monthly  
21 customer charge from \$10.40 to no more than \$12.50, as opposed to the \$13.40 charge

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1 requested by DPL. Furthermore, I recommend the gradual elimination of the seasonal  
2 declining-block usage rate available to heating customers.

3 With respect to the Company's proposed tariff change concerning main  
4 extensions, I recommend that the Commission defer a decision on the proposed tariff  
5 change in this case and establish a stakeholder working group to evaluate alternative  
6 methods that will better achieve the objective of making natural gas more available to  
7 Delawareans yet provide better assurances that existing ratepayers will not fund  
8 expansions that solely benefit new customers.

9  
10 **III. REVENUE REQUIREMENT**

11 **Q. BEFORE WE DISCUSS THE SPECIFICS OF YOUR REVENUE**  
12 **REQUIREMENT CALCULATIONS, IS THERE AN OVERARCHING**  
13 **DISAGREEMENT YOU HAVE WITH THE COMPANY'S JUSTIFICATION**  
14 **FOR ITS PROPOSED \$13.0 MILLION INCREASE IN BASE RATES?**

15 **A.** Yes. In developing its proposed revenue requirement, the Company has  
16 selectively adjusted numerous actual rate base and expense items which serve to increase  
17 its claimed cost of providing service, yet it has not adjusted for offsetting benefits that  
18 would decrease the overall revenue requirement. In large part, these adjustments relate to  
19 forecasted additions to plant in service as well as forecasted increases to expenses beyond  
20 the Company's own selected test year. In other words, DPL is proposing numerous "out

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1 of period” adjustments to rate base and expenses which increase costs without a  
2 reasonable matching of out of period benefits.

3 **Q. ARE THERE ACCEPTED RATEMAKING PROCEDURES THAT HELP**  
4 **ENSURE A PROPER AND REASONABLE MATCHING OF THE COSTS AND**  
5 **BENEFITS OF PROVIDNG PUBLIC UTILITY SERVICES?**

6 A. Yes. Perhaps the most important traditional ratemaking procedure is the concept  
7 of a “test year.” The test year concept establishes a definitive time period that measures a  
8 utility’s level of investment, revenue and expenses and in which the flow of revenues and  
9 expenses matches the timing of the utility’s investment. The theory behind the test year  
10 concept is that it reasonably reflects (matches) both the costs and benefits of providing  
11 service. However, because actual booked accounting records for a given time period may  
12 reflect abnormalities during any “test year,” adjustments for “known and measurable”  
13 charges are often warranted. It should be noted that the “test year” may either be  
14 historical or forecasted depending on the practices of the particular regulatory authority.  
15 However, regardless of whether a historical or forecasted test year is employed, it is  
16 imperative to match all costs and benefits of providing service. Indeed, the critical  
17 matching principle is violated when only one-sided adjustments are proposed; clear  
18 biases are created when the timing of investments, revenues, and expenses are cherry-  
19 picked between historical and forecasted levels. In this case, such biases are clearly  
20 present in the Company’s Application: DPL has utilized an amalgamation of historical

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1 and forecasted levels by cherry-picking items that increase its revenue requirement and  
2 ignoring others that may offset its cost of providing service to its customers.

3 **Q. PLEASE EXPLAIN THE STRUCTURE OF YOUR REVENUE REQUIREMENT**  
4 **CALCULATIONS.**

5 A. Schedule GAW-2 provides a summary of the test year (calendar year 2012) per  
6 books, DPL's proposed, and my recommended levels of rate base and operating income  
7 at current rate levels. In addition, this Schedule also shows the revenue increase required  
8 to enable the Company an opportunity to earn its fair rate of return of 6.66% as  
9 recommended by OAG witness Dr. J. Randall Woolridge. Schedule GAW-3 provides a  
10 summary of the Company's proposed proforma accounting adjustments while Schedule  
11 GAW-4 provides a summary of my individual rate base and operating income  
12 adjustments to the rate base and expense levels proposed by DPL. Schedules GAW-5  
13 through GAW-19 provide the detail of each of my adjustments to the Company's  
14 proposed levels.

15 **A. Operating Revenues**

16 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO DPL'S OPERATING**  
17 **REVENUES.**

18 A. The Company selected a test year ending December 31, 2012. Furthermore, it  
19 proposes to value its level of investment (rate base) as of the end of the test year  
20 (12/31/2012).

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1           Because rate base is considered “stock” in that it measures a level of investment at  
2 a particular point in time, while operating income is considered a “flow” as it measures  
3 revenues and expenses over the flow of time (year), it is important to properly match the  
4 timing of the stock value of rate base with the flowing measure of revenues and expenses.  
5 Because revenues are received, and expenses are incurred, over the course of an entire  
6 year, an average test year rate base is normally appropriate. While DPL has made some  
7 adjustments to revenues to coincide with its end of test year rate base valuation, it erred  
8 by not including all revenues that coincide with this valuation. Specifically, DPL has  
9 adjusted a portion of historical, weather normalized revenues to reflect customer growth  
10 that occurred during the test year; i.e., it has restated revenues based on end of test year  
11 number of customers. However, in making this test year customer growth adjustment,  
12 the Company only included the additional fixed monthly customer charge revenue  
13 received from this growth; it did not reflect the usage charge revenue associated with this  
14 growth. In other words, the Company’s calculations assume that the growth (whether  
15 positive or negative) in customers by rate schedule generated no usage revenue; i.e., these  
16 customers have no gas usage. As shown in my Schedule GAW-5, my adjustment  
17 corrects for this oversight by ascribing usage to these new customers at the average  
18 monthly level of usage by rate schedule. It should be noted that I have only adjusted for  
19 customer growth relating to the Residential (Rates RG-R and RG-RSH) and Small  
20 Commercial/Industrial (Rate GG) rate schedules as these classes constitute almost all of  
21 the Company’s number of customers; the rate classes associated with Large

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1 Commercial/Industrial customers experience a significant level of migration from one  
2 rate schedule to another. My customer growth adjustment results in an additional  
3 \$239,838 in base rate (delivery) revenue and an increase of \$720 in regulatory taxes.

4 **Q. DO YOU HAVE ANY OTHER COMMENTS RELATING TO THE COMPANY'S**  
5 **STATED LEVEL OF TEST YEAR REVENUES?**

6 A. Yes. The winter months of calendar year 2012 were exceptionally mild, both in  
7 the early part of the year (January through March) as well as during the late fall (October  
8 through December). Although the Company made an upward weather normalization  
9 adjustment to reflect the unusually mild weather, I have been unable to assess the  
10 reasonableness of DPL's adjustment because the Company provided no support for or  
11 calculations showing how its adjustments were made. To clarify, the Company's updated  
12 filing reflects and shows a +\$5,548,165 weather normalization adjustment, but there is no  
13 support whatsoever as to how this adjustment was made in either the Minimum Filing  
14 Requirements or the Company witnesses' schedules. The OAG attempted to obtain such  
15 information: in data requests AG-A-35 through AG-A-38, submitted on March 22, 2013,  
16 it asked the Company to provide support for and show all calculations for each of its  
17 adjustments. In addition, Staff Data Request PSC-RR-15 specifically requested all  
18 calculations, workpapers, and source documents supporting DPL's revenue adjustments.  
19 The spreadsheet that the Company provided simply had hard keyed weather  
20 normalization adjustments by rate schedule and month; it neither demonstrated how the

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1 Company made its adjustment nor permitted the OAG or any other party to ascertain for  
2 itself how the adjustment was made.

3 On May 16, 2013, the OAG again requested the Company to provide this  
4 information. Late in the afternoon on May 30, 2013, the Company responded in an email  
5 from Delmarva legal counsel that stated in pertinent part: “This particular request is for a  
6 very large amount of information contained in many different electronic files. Company  
7 analysts are available to facilitate a review of this information in our offices. Therefore, I  
8 suggest your consultants provide some dates and times when they are available to meet  
9 with our people to review this information and we will set something up.” Putting aside  
10 the fact that this offer came with only one business day for the OAG to come to the  
11 Company’s office to review the requested information, the Company’s position is  
12 questionable at best in this age of electronic computers and digital media. I routinely  
13 request and obtain exceptionally large data files from utilities concerning such items as  
14 hourly load data, plant asset records that contain literally hundreds of thousands data  
15 points with no burden on the responding party. Moreover, I have examined several dozen  
16 weather normalization analyses performed by natural gas LDCs and electric utilities  
17 around the country. There has not been a single instance in which there was any  
18 confusion, disagreement, or concern on the part of the utilities, as this is a duty they  
19 clearly have in responding to legitimate discovery and involves nothing more than  
20 producing electronic documents that support the particular utility’s application. Finally,

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1 weather normalization adjustments are not overly complex or data intensive in that they  
2 involve simple linear regressions involving one or two independent variables.

3 **B. Rate Case Expenses**

4 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO DPL'S PROPOSED LEVEL**  
5 **AND TREATMENT OF RATE CASE EXPENSES.**

6 A. Although rate case expenses are incurred solely for the benefit of shareholders in  
7 order to increase earnings through higher rates, these expenses are generally regarded as a  
8 legitimate cost of doing business for regulated utilities. Therefore, a reasonable level of  
9 rate case expenses is usually reflected in rates. However, the key concept is  
10 "reasonable:" ratepayers should not serve as an open check book for any expense, or any  
11 proposed level of expense, that Delmarva incurs in a rate case. With "reasonableness" in  
12 mind, I have made adjustments to both the level and treatment of DPL's proposed rate  
13 case expenses.

14 With respect to the Company's proposed level of rate case expenses, it proposes  
15 to include in base rates its expected fees of \$92,600 associated with its cost of capital  
16 witness, and \$315,000 in fees associated with outside legal counsel. The proposed level  
17 of the cost of capital witness' fee for which DPL seeks rate recovery is nothing short of  
18 exorbitant and is therefore unreasonable. Although I have no intention of quibbling over  
19 the quality of service provided by the Company's cost of capital witness, I do know that  
20 the total (not to exceed) fees of the Staff and OAG cost of capital witnesses in this case  
21 are each under \$30,000, or less than a third of those for DPL's witness. Consequently, I

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1 recommend a ratemaking allowance for cost of capital witness fees of no more than half  
2 (\$46,300) of the Company's requested \$92,600 level.

3 In response to PSC-RR-20 seeking support for its requested level of external legal  
4 fees, the Company responded simply that "the amount for external legal consultants is an  
5 estimate based on internal discussions." This response provides no support for its  
6 proposed rate recovery of outside legal expenses. I have evaluated DPL's actual outside  
7 legal fees in prior cases. In response to PSC-RR-22, the Company indicated that its  
8 actual outside legal expenses for recent cases were as follows:

9

<u>Docket No.</u>	<u>Outside Legal Fees</u>
10 09-414	\$105,325
11 10-237	\$58,217
11 11-528	\$119,404

12 I note that Docket 09-414 was a fully-litigated case which went all the way through to  
13 Commission deliberations. Given the lack of support for its proposed outside legal fees  
14 as well as recent costs incurred for these services, I recommend an allowance of  
15 \$120,000, which is slightly higher than the highest level of recent expenses.

16 **Q. NOTWITHSTANDING THE LEVEL OF DPL'S REQUESTED RATE CASE**  
17 **EXPENSES, WHAT DISAGREEMENTS DO YOU HAVE REGARDING THE**  
18 **RATEMAKING TREATMENT OF SUCH EXPENSES?**

19 A. When base rates are established in this case, they will remain in effect until DPL's  
20 next rate case. In recent years, these rate cases have occurred about once every three  
21 years. Therefore, when developing the Company's revenue requirement, it is important

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1 to normalize these once-every-three-year expenses over the course of time in which these  
2 rates will be in effect. While I have no disagreement with the Company's proposal to  
3 spread these expenses over a three-year period, I do disagree with the Company's  
4 proposal to capitalize (amortize) these expenses by including two-thirds of its total  
5 requested level in rate base.<sup>1</sup> It is simply not proper to treat rate case expenses as an  
6 investment (with rate case recognition); rather, the total allowable amount incurred in one  
7 year (a rate case year) should be normalized over three years and treated only as an  
8 expense. Indeed, in is my understanding that the Commission's practice for several years  
9 now has been to normalize – not amortize – rate case expense.

10 **Q. PLEASE SUMMARIZE YOUR ADJUSTMENTS TO THE COMPANY'S**  
11 **PROPOSED RATE CASE EXPENSES.**

12 A. As shown in my Schedule GAW-6, my adjustments result in a reduction of  
13 \$80,433 in O&M expenses and a reduction of \$250,278 in rate base.

14 **C. Salaries & Wages**

15 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO DPL'S PROPOSED LEVEL OF**  
16 **SALARIES AND WAGES.**

17 A. In its updated filing, DPL proposes to escalate actual test year salaries and wages  
18 expenses to a forecasted level of labor rates as of June 2014. The Company's proposed

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<sup>1</sup> The Company proposes to amortize these expenses over three years and add the unamortized balances (2-years) to rate base, thereby earning a return on an expense level.

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1 adjustment increases actual test year salary and wage levels by \$607,550 or 3.71%.<sup>2</sup>  
2 Whether this almost 4% increase is known and measurable is frankly not relevant given  
3 other aspects of the Company's filing and should be eliminated. As was mentioned  
4 earlier and as will be discussed throughout this testimony, DPL has selectively made out  
5 of period adjustments that increase its revenue requirement, but has not considered or  
6 reflected corresponding adjustments that reduce its revenue requirement. For ratemaking  
7 purposes, it is imperative that there be a matching of the time period for all investments,  
8 revenues, and expenses. So that this fundamental matching principle is fully understood,  
9 remember that DPL selected a 2012 test year and valued revenues based on its customer  
10 profile as of December 31, 2012. The Company did not forecast customer and revenue  
11 growth through 2014 (which would reduce its required revenue increase), but did  
12 increase salaries and wages well beyond the test period (which increases the required  
13 revenue increase). Indeed, DPL has not reflected *any* other cost-saving forecasts or  
14 adjustments that would decrease its revenue requirement; it has only reflected out of  
15 period, forecasted increased costs. Had DPL desired to use a forecasted test period it  
16 should have done so in a complete and unbiased manner consistent with the  
17 Commission's Minimum Filing Requirements. Instead, the Company has selectively  
18 increased various rate base and expense levels beyond the test year in developing its  
19 requested \$13.0 million base rate increase.

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<sup>2</sup> Actual test year expense of \$16,381,593 compared to proposed level of \$16,989,143 per DPL 12+0 Adjustments WP#4.1.

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1 As shown in my Schedule GAW-7, my salaries and wages adjustment removes  
2 DPL's out of period forecasted costs and reduces O&M expense by \$607,550 and payroll  
3 taxes by \$33,139.

4 **D. Non-Executive Incentive Compensation**

5 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO NON-EXECUTIVE INCENTIVE**  
6 **COMPENSATION.**

7 A. While DPL has removed actual 2012 executive incentive compensation which is  
8 primarily tied to the Company's financial performance, it has included all "non-  
9 executive" incentive compensation. Although I have no objection to the inclusion of  
10 non-executive incentive compensation that is directly tied to safety, or customer service  
11 and satisfaction (as the Commission has previously held could be recovered in rates),  
12 incentives that are tied to the Company's financial performance only benefit shareholders  
13 and should not be reflected in rates. During the test year, total non-executive incentive  
14 compensation was \$894,431. Of this amount, \$363,632 was tied to financial performance  
15 while the other \$530,799 in incentive compensation relates to safety and customer service  
16 goals.<sup>3</sup> I recommend that the \$530,799 of non-executive incentive compensation related  
17 to achieving safety and customer service goals be included in rates, but the \$363,632  
18 associated with financial performance be excluded. As shown in Schedule GAW-8, my  
19 O&M adjustment (-\$363,632) also reduces payroll taxes by \$27,818.

20 **E. Medical/Dental/Vision Healthcare Expenses**

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<sup>3</sup> Per response to PSC-RR-29.

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1 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO THE COMPANY’S PROPOSED**  
2 **LEVEL OF MEDICAL/DENTAL/VISION HEALTHCARE BENEFIT**  
3 **EXPENSES.**

4 A. I have two areas of disagreement with what I will generically refer to as the  
5 Company’s proposed healthcare benefit costs. My first area of disagreement relates to  
6 the Company’s proposed out-of-period adjustment to inflate actual test year amounts by  
7 \$310,059, or 11.52%.<sup>4</sup> Although the Company has elected to use a 2012 test year and not  
8 reflect revenue growth or expense savings beyond the test year, it has escalated 2012  
9 healthcare benefit expenses well into 2014. Similar to my recommended rejection of out-  
10 of-period salaries and wages expenses, I also recommend the disallowance of these  
11 forecasted future healthcare benefit costs.

12 My second area of disagreement relates to the method in which Company witness  
13 Ziminsky escalated actual expenses. Mr. Ziminsky inflated 2012 actual expenses by  
14 various “trend factors” provided in a letter to Pepco Holdings, Inc. from Lake Consulting,  
15 Inc. that purportedly reflects a survey of healthcare insurance “trend factors” in the  
16 Virginia, Maryland, and District of Columbia area. Although this survey was apparently  
17 conducted by an actuarial consulting firm, the letter provided by Lake Consulting, Inc. is  
18 not an actuarially sound estimate of DPL’s future healthcare benefit costs nor does Lake  
19 Consulting, Inc. offer an actuarial opinion as to DPL’s healthcare costs or obligations.  
20 Indeed, the Lake Consulting, Inc. letter is nothing more than a survey of alleged health

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<sup>4</sup> Calculated per Schedule (JCZ-S)-10.

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1 insurance company “trend factors” in states and areas other than Delaware, without any  
2 showing that the same “trend factors” are applicable to Delaware.

3 In addition to public utility ratemaking, I also practice the economic aspects of  
4 insurance regulation. In the insurance industry, the term “trend factor” is a specific term  
5 of art and is but one element considered within the insurance ratemaking process.<sup>5</sup>  
6 Furthermore, there is no way to ascertain how Lake Consulting, Inc. developed this  
7 survey of insurance company trend factors, what these trend factors actually represent, or  
8 if these trends are actuarially appropriate for DPL. As indicated earlier, the Lake  
9 Consulting, Inc. letter does not represent an actuarial opinion of DPL’s future healthcare  
10 benefit expenses or obligations, and at best is hearsay. Furthermore, there is no  
11 indication that Mr. Ziminsky has any expertise in actuarial science or in the costs of  
12 providing future healthcare benefits that would justify his reliance on this letter. Given  
13 these facts, neither Mr. Ziminsky’s testimony nor the Lake Consulting, Inc. letter should  
14 be considered.

15 As shown in my Schedule GAW-9, I have removed \$310,059 of DPL’s proposed  
16 future healthcare benefit costs.

17  
18  
19 **F. Forecasted Additions To Reliability Plant In Service**

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<sup>5</sup> In the insurance industry the term “trend” represents the expected change only in severity and frequency of losses incurred. Other factors included in establishing insurance rates are investment income, expense levels, profit factors, legislated or otherwise mandated benefit changes and/or availability criteria.

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1 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO DPL'S PROPOSED**  
2 **INCREASES TO RELIABILITY PLANT IN SERVICE.**

3 A. As with the other adjustments previously discussed, DPL proposes to forecast  
4 additions to "reliability" plant in service well beyond its selected test year.<sup>6</sup> Specifically,  
5 the Company proposes to increase plant in service to a level valued as of December, 2013  
6 -- a full year beyond the test year. In other words, DPL is seeking rate recognition of  
7 plant investment that it has not even begun to incur yet, with no assurances that these  
8 expenditures will in fact be made. Again, these forecasted additions well beyond the test  
9 year clearly violate the matching principle of costs and benefits.

10 So that this issue is clearly understood, it should be remembered that this  
11 Commission recognizes Allowance for Funds Used During Construction ("AFUDC"),  
12 which compensates DPL for the financing costs of future plant in service. As shown in  
13 my Schedule GAW-10, my adjustment reduces DPL's adjustment to net plant by \$18.559  
14 million and Accumulated Deferred Income Taxes ("ADIT") by \$1.823 million with a net  
15 rate base adjustment of -\$16.736 million. In addition, my adjustment reduces the  
16 Company's proposed depreciation expense by \$0.417 million associated with this future  
17 plant investment.

18 **G. Advanced Metering Infrastructure ("AMI") Plant Additions**

19 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO THE COMPANY'S PROPOSED**  
20 **RATE RECOGNITION OF AMI PLANT INVESTMENT.**

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<sup>6</sup> "Reliability plant" relates to plant replacements and other additions relating to its existing customer base, but excludes main extensions and other improvements attributable to customer growth.

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1 A. In order to understand the Company's proposed ratemaking treatment of AMI  
2 equipment as well as my recommended adjustments to the Company's proposed levels, a  
3 brief history of DPL's transition to automatic metering reading may be helpful.

4 In Docket No. 07-28, the Commission approved DPL's plan to initiate and  
5 implement near real time and fully automatic meter reading capabilities for the  
6 Company's electric and gas operations. Although the primary benefits of near real time  
7 and automatic meter reading capabilities are associated with DPL's electric operations,  
8 the Company's gas customers should also benefit from reduced meter reading expenses  
9 associated with a smaller labor force required to read and record customers' gas usages  
10 each month.<sup>7</sup> Unlike the electric side of the business, the gas side did not require  
11 installation of new meters; rather, the Company planned to install and deploy an Interface  
12 Management Unit ("IMU") on each meter, which would send a digital signal to the  
13 Company relaying each meter's usage. When the natural gas AMI/IMU program was  
14 approved, it was anticipated that these devices would be fully deployed and operational  
15 by 2011, at which time the Company would substantially reduce its meter reading work  
16 force, thereby significantly reducing its meter reading expenses with such efficiencies  
17 and savings accruing to ratepayers. However, the gas IMU program has been saddled  
18 with numerous problems and setbacks such that as soon as one problem was solved,  
19 another design, manufacturing, or installation problem occurred. Indeed, as of April

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<sup>7</sup> Furthermore, because DPL's meter readers typically manually read both electric and gas meters, the automation of only electric meters would still require a significant labor force to read the Company's gas meters without a gas AMI program.

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1           2013 the majority of the required IMUs are still not operational, and DPL continues to  
2           maintain its meter reading labor force and traditional meter reading expense levels.

3           In addition, the Commission should be aware of the fact that there is a difference  
4           between the number and costs IMUs that are “in service” on the Company’s books and  
5           records (and for which the Company is seeking recovery in this case) versus the number  
6           of IMU’s that are fully activated and operational. In his direct testimony at page 8, DPL  
7           witness Collacchi indicates that as of October 31, 2012, approximately 32% of the  
8           planned IMUs have been installed. These installed IMUs equate to about 41,000  
9           devices.<sup>8</sup> Mr. Collacchi goes on to say that of the approximately 41,000 installed IMU’s  
10          (reflected in plant in service), only 3% of the installed units (about 1,200) have actually  
11          been activated for over the air meter reading.

12          In addition to the \$6,700,856 of natural gas AMI equipment that was “in service”  
13          on the Company’s books but was not necessarily deployed or operational as of December  
14          31, 2012, the Company is proposing an additional \$8,058,013 in AMI gross plant that it  
15          expects to place into service during 2013; i.e., beyond the test year. In addition to the  
16          inappropriateness of the Company’s proposed out-of-period rate base and expense  
17          adjustments associated with AMI plant discussed in my previous adjustments, there  
18          should be no rate recognition of any AMI program costs until such time as the program is  
19          fully operational and savings are realized by ratepayers. As will be discussed later in my  
20          testimony, such is not the case in the Company’s proposals. That is, DPL proposes to

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<sup>8</sup> Calculated per DPL response to AG-A-50.

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1 include all current and future investment and costs associated with its AMI program in  
2 this rate application even though meter reading and other expenses remain at historical,  
3 pre-automated levels. As such, I recommend no rate recognition of any AMI-related  
4 costs in this base rate case. However, considering the Commission's approval of an AMI  
5 program, as well as my understanding of the problems associated with the operational  
6 deployment of IMUs, I recommend that the Company be allowed to recover its full  
7 investment in such equipment through depreciation in future rates such that recovery of  
8 this investment will be deferred until such time as benefits are realized by ratepayers in  
9 their base rates. Furthermore, so that ratepayers are not burdened with carrying costs  
10 associated with this program that is some two years overdue and has not yet generated a  
11 penny in savings or any other benefits associated with this program, the Company should  
12 not be allowed to defer any return on its AMI investment (debt or equity) until such time  
13 as the AMI program is operational and fully functioning, and ratepayers are receiving the  
14 benefits of lower meter reading costs in their base rates.

15 As shown in my Schedule GAW-11, I recommend no rate recognition of the  
16 Company's AMI plant in service as of December 31, 2012, which totals \$6,102,060 in  
17 net plant, \$1,136,366 in AMI-related CWIP and \$621,868 in ADIT, for purposes of this  
18 rate case. Furthermore, I recommend the elimination of the Company's proposed out-of-  
19 period (2013) forecasted additions to AMI plant which total \$7,211,465 in net plant, a  
20 reversal of the \$1,136,366 in CWIP, and recognition of \$676,650 in ADIT. With regard

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1 to operating income, I recommend no rate recovery in this case of \$991,447 of  
2 depreciation expense associated with AMI plant investment.

3  
4 **H. Metering Reading Expenses**

5 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE COMPANY'S PROPOSED**  
6 **METERING READING EXPENSES.**

7 A. As discussed earlier in my testimony, ratepayers have yet to receive any savings  
8 associated with the Company's long overdue AMI program. To make matters worse,  
9 Company witness Ziminsky proposes to increase meter reading expenses for ratemaking  
10 purposes above those levels actually booked during the test year. On pages 21-22 of his  
11 direct testimony, Mr. Ziminsky states:

12 I have included an adjustment to remove a non-recurring test period  
13 reduction to meter reading expense related to settlement proceeds from  
14 Silver Spring Network, the manufacturer of the IMUs. These products  
15 had manufacturing issues related to them which caused the suspension of  
16 deployment. These settlement proceeds compensate for higher-than-  
17 expected manual meter reading expenses incurred by the Company,  
18 which resulted from a delayed IMU deployment. **By removing the**  
19 **credit, the meter reading expense reflects the expected level which**  
20 **will be reflective of the rate effective period prior to any O&M**  
21 **savings being realized. [Emphasis added]**  
22

23 What Mr. Ziminsky is saying is that even though the Company's test year (2012)  
24 actual booked meter reading expense totaled \$643,605, Mr. Ziminsky proposes to inflate  
25 this per books amount by \$1,147,546 to reflect settlement proceeds from the IMU vendor  
26 such that for ratemaking purposes, DPL is requesting a meter reading expense of

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1       \$1,791,151. For ratemaking purposes, the Company is requesting that ratepayers pay for  
2       a full return on (rate of return) and of (depreciation) the expected future investment in  
3       AMI equipment that is long overdue, not yet deployed, and requires significant future  
4       investment before the AMI program is fully operational. At the same time, DPL is  
5       requesting that ratepayers continue to fund the Company's meter reading expenses at  
6       even higher levels than those actually booked during 2012 (with no meaningful activation  
7       or operation of IMUs).

8               Most troubling in Mr. Ziminsky's characterization of his proposed adjustment to  
9       meter reading expenses is the contradiction between it and information provided in  
10       confidential discovery responses. In its response to AG-A-45, the Company provided a  
11       table setting forth the various reasons for and components of a [REDACTED]

12       [REDACTED]

13       [REDACTED]

14       [REDACTED]

15       [REDACTED]

16       [REDACTED]

17       [REDACTED]

18       [REDACTED]

19       [REDACTED]  
20       [REDACTED]  
21       [REDACTED]  
22       [REDACTED]  
23       [REDACTED]

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1  
2  
3  
4  
5  
6  
7  
8  
9

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

10 [REDACTED] As such, I

11 have reversed Mr. Ziminsky’s proposed positive adjustment to increase test year meter  
12 reading expenses such that my adjustment brings meter reading expense back to a normal  
13 level.

14 **I. Affiliate Credit Facility Costs**

15  
16 **Q. PLEASE EXPLAIN YOUR ADJUSTMENTS TO DPL’S PROPOSED INCLUSION**  
17 **OF A PORTION OF AN UNREGULATED AND AFFILIATED COMPANY’S**  
18 **CREDIT FACILITY COSTS.**

19 A. In this case, DPL proposes an adjustment to include expenses and an allocated  
20 portion of an unregulated affiliate’s investment in credit facilities. In response to PSC-  
21 RR-45, the Company indicated that DPL and its sister companies utilize Pepco Holding,  
22 Inc. (“PHI”) credit facilities “to provide for their respective liquidity needs, including  
23 obtaining letters of credit, borrowing for general corporate purposes, and supporting their  
24 commercial paper programs.” In other words, instead of using an independent outside  
25 commercial bank or financial institution, DPL has entered into an agreement to pay its  
26 unregulated affiliate for short-term borrowing privileges. I am unaware of independent

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1 financial institutions charging customers substantial fees over and above the interest rates  
2 charged for short-term loans and lines of credit, let alone charging for the recoupment of  
3 capital investment costs to its customers, but I am particularly concerned with this  
4 adjustment for two reasons. First and foremost: although these costs primarily relate to  
5 short-term debt (which costs substantially less than long-term debt), this debt is not  
6 included in the capital structure, so ratepayers receive no benefit from these lower capital  
7 costs. Second, DPL's cash working capital and storage gas inventory are financed with  
8 short-term debt, but are included in rate base at the full cost of capital. Thus, DPL's total  
9 requested cost of capital is significantly higher than its short-term debt costs, and  
10 shareholders will receive a much higher rate of return on these financed investments  
11 (total cost of capital). In sum, the Company is requesting that ratepayers bear the burden  
12 of these costs, yet ratepayers receive absolutely no benefit from these costs: there is no  
13 reflection of short-term debt costs at all, let alone short-term debt costs lower than those  
14 that could be obtained in the market.

15 My next concern relates to the fact that this is an affiliate transaction. The  
16 Company has made no showing or provided any documentation supporting either the  
17 need for such costs or why it was less expensive to obtain the credit from PHI, let alone  
18 whether these costs are valued at the lower of book or market. For these reasons, I  
19 recommend no rate recognition of these affiliated company credit facility costs. My  
20 adjustment, shown in Schedule GAW-13, decreases expenses by \$118,094 and decreases  
21 rate base by \$182,203.

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1 **J. Annualization of Depreciation Expense**

2 **Q. PLEASE EXPLAIN THE COMPANY'S AND YOUR ADJUSTMENTS TO**  
3 **REFLECT THE ANNUALIZATION OF DEPRECIATION EXPENSE.**

4 A. As discussed earlier in my testimony, the Company is using an end of test year  
5 rate base (as opposed to average year rate base). Similarly, the Company is proposing to  
6 annualize depreciation expense based on end of test year (December, 2012) plant  
7 balances. In other words, since the Company experienced plant additions throughout the  
8 2012 test year and also books depreciation expense on a monthly basis, its per books  
9 depreciation expense does not reflect a full year of depreciation associated with plant that  
10 was placed in service during 2012. Thus, DPL proposes to adjust actual per books  
11 depreciation expense associated with plant placed in service during the test year by  
12 annualizing the December 2012 depreciation expense for each 2012 vintage year plant.  
13 The Company's proposed annualization adjustment results in an increase to depreciation  
14 expense of \$382,802.

15 While I am not opposed to the concept of annualization based on end of year plant  
16 balances, assuming the Commission agrees with my recommendation to disallow all out-  
17 of-period plant additions, an adjustment is necessary to eliminate the annualization of  
18 depreciation associated with AMI additions booked as plant in service during 2012. As  
19 discussed previously, I recommend no rate recognition of AMI-related costs in this case.  
20 Therefore, I have made a downward adjustment of \$113,399 to reflect the elimination of  
21 AMI depreciation annualization as shown in my Schedule GAW-14.

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1 **K. Cash Working Capital (“CWC”)**

2 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE COMPANY’S CWC**  
3 **ALLOWANCE.**

4 A. DPL is requesting a CWC allowance of \$12,498,707. Of this amount, more than  
5 half (\$6,451,201) is associated with purchased gas costs. I have eliminated the purchased  
6 gas component of the Company’s requested CWC allowance for three reasons. First, a  
7 significant amount of the Company’s purchased gas is purchased and stored in the spring  
8 and summer months and withdrawn from storage and sold during the cold winter months.  
9 In this case, the Company’s “other” working capital allowance reflects the carrying costs  
10 associated with gas storage inventories. Second, the Company’s gas costs are collected  
11 in a distinct and separate rate mechanism. Within this gas cost recovery mechanism is a  
12 provision for carrying costs associated with over and under recovery of gas costs. Third,  
13 and most important with respect to the gas cost recovery mechanism, DPL’s gas cost  
14 rates are established based on forecasted wholesale natural gas prices as well as  
15 forecasted usage. Obviously, in some periods, the Company overestimates such costs,  
16 while in other periods it underestimates expected gas costs. When all of these factors are  
17 considered, there is no place in the CWC allowance for purchased gas costs. Therefore,  
18 as shown in Schedule GAW-15, I have eliminated \$6,451,201 in rate base associated with  
19 the Company’s requested CWC allowance.

20 **L. Prepaid Insurance**

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1 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE COMPANY’S PROPOSED**  
2 **LEVEL OF PREPAID INSURANCE.**

3 A. In its Updated Filing, the Company reflects \$14,514 of prepaid insurance  
4 expenses within its miscellaneous rate base items. However, in response to PSC-RR-10,  
5 the Company acknowledged that this proposed rate base item is already reflected in its  
6 CWC request, and stated that it will eliminate prepaid insurance from rate base during the  
7 rebuttal phase of this proceeding. My Schedule GAW-16 eliminates \$14,514 of prepaid  
8 insurance from the Company’s proposed rate base.

9 **M. Customer Advances**

10 **Q. PLEASE EXPLAIN YOUR ADJUSTMENT RELATING TO CUSTOMER**  
11 **ADVANCES.**

12 A. In its Updated Filing, the Company’s rate base reflects customer advances of \$0.  
13 However, in response to PSC-RR-11, the Company acknowledged that it inadvertently  
14 excluded \$1,200 of these ratepayer supplied funds and that this balance will be corrected  
15 during the rebuttal phase of this proceeding. My adjustment reflects recognition of this  
16 \$1,200 level of customer’s advances as shown in my Schedule GAW-17.

17 **N. Construction Work In Progress (“CWIP”)**

18 **Q. PLEASE EXPLAIN THE COMPANY’S PROPOSED AND YOUR**  
19 **RECOMMENDED RATEMAKING TREATMENT OF CWIP.**

20 A. In order to explain the Company’s proposed ratemaking treatment of CWIP it is  
21 important to understand the bases for, and concepts of, AFUDC and CWIP. In the

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1 strictest sense, there should be no allowance for, or rate recognition of, AFUDC or CWIP  
2 in the ratemaking process because these allowances relate to plant that is not yet in  
3 service and is therefore not used and useful. However, because of long construction  
4 times for certain public utility projects as well as the time between the time a particular  
5 project is placed into service and the time in which the Company files its next rate case,  
6 many, if not most, regulatory authorities allow recognition of either AFUDC or CWIP.

7 Both methods compensate the utility for the carrying costs of plant investments  
8 during construction. They differ, however, in that AFUDC accrues financing costs  
9 associated with a project during the construction period and adds these accrued lost  
10 “opportunity costs” to gross plant balances such that the utility recovers these lost  
11 opportunity costs (and earns a return on the uncollected AFUDC balance) over the course  
12 of the asset’s service life. Thus, under the AFUDC approach, a utility does not earn a  
13 “cash” return on these construction costs during a given rate period but rather, defers  
14 recovery of these costs (with interest) over the course of an asset’s service life. Because  
15 the AFUDC costs are reflected in rate base, and earn a full rate of return, the present  
16 value of these deferred opportunity costs is the same as if the utility were allowed  
17 immediate recovery. CWIP, on the other hand, allows for a “cash” return on construction  
18 projects while they are being built. In other words, when CWIP is included in rate base,  
19 the Company’s rates reflect the opportunity costs associated with construction projects  
20 even though these plant investments were not yet in service when rates were established.

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1           It is important to recognize that if a regulatory commission allows recoupment of  
2 lost opportunity costs during construction and before a plant is placed in service, either  
3 the AFUDC or CWIP approach should be used. However, in this case, DPL is requesting  
4 *both* AFUDC treatment of construction costs as well as a cash return under the CWIP  
5 approach. Such a proposal is nothing more than double recovery of financing costs  
6 incurred during construction and before an asset is placed into service for the use and  
7 benefit of ratepayers. Although DPL reduced its requested earnings level by an amount  
8 of imputed AFUDC income earned during the test year, this imputed AFUDC income  
9 relates only to that income ascribed to AFUDC accruals occurring during the test year. It  
10 does not negate or eliminate AFUDC accruals that accrued in all prior years.

11           It is my understanding that this Commission has traditionally accepted the  
12 AFUDC concept relating to plant construction financing costs, and has rejected prior  
13 attempts in recent cases to also include CWIP in rate base. In this regard, DPL's plant  
14 balances reflect the accrual of AFUDC. As such, I have eliminated the Company's  
15 adjustment to include CWIP in rate base. My adjustment is shown in Schedule GAW-18  
16 and results in a net reduction to rate base of \$9,095,071 (net of my previous disallowance  
17 of AMI CWIP). I have also reversed the Company's AFUDC income credit of \$276,786.

18           **O. Interest Synchronization**

19           **Q. PLEASE EXPLAIN YOUR INTEREST SYNCHRONIZATION ADJUSTMENT.**

20           A.           For ratemaking purposes, interest expense (as used for determining income taxes)  
21 is calculated as a utility's total rate base multiplied by the weighted cost of debt. Because

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1 I have made several adjustments to the Company's proposed level of rate base, I must  
2 synchronize interest expense with my rate base adjustments. As shown in Schedule  
3 GAW-19, my interest synchronization adjustment reduces the Company's tax deductible  
4 interest expense by \$1,123,118, which has the effect of increasing State income taxes by  
5 \$97,711 and increasing Federal income taxes by \$358,892.

6 **IV. CLASS COST ALLOCATIONS AND REVENUE DISTRIBUTION**

7 **Q. PLEASE BRIEFLY EXPLAIN THE CONCEPT OF A CLASS COST OF**  
8 **SERVICE STUDY ("CCOSS") AND ITS PURPOSE IN A RATE PROCEEDING.**

9 A. Generally there are two types of cost of service studies used in public utility  
10 ratemaking: marginal cost studies and embedded, or fully allocated, cost studies.  
11 Consistent with the practices of this Commission, DPL has utilized a traditional  
12 embedded cost of service study for purposes of establishing the overall revenue  
13 requirement in this case, as well as for class cost of service purposes.

14 Embedded CCOSSs are also referred to as fully allocated cost studies because the  
15 majority of a public utility's plant investment and expense is incurred to serve all  
16 customers in a joint manner. Accordingly, most costs cannot be specifically attributed to  
17 a particular customer or group of customers. To the extent that certain costs can be  
18 specifically attributed to a particular customer or group of customers, these costs are  
19 directly assigned in the CCOSS. The costs jointly incurred to serve all or most  
20 customers, therefore, must be allocated across specific customers or customer rate  
21 classes.

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1           It is generally accepted that to the extent possible, joint costs should be allocated  
2 to customer classes based on the concept of cost causation. That is, costs are allocated to  
3 customer classes based on analyses that measure the causes of the incurrence of costs to  
4 the utility. Although the cost analyst strives to abide by this concept to the greatest extent  
5 practical, some categories of costs, such as corporate overhead costs, cannot be attributed  
6 to specific exogenous measures or factors, and must be subjectively assigned or allocated  
7 to customer rate classes. With regard to those costs in which cost causation can be  
8 attributed, there is often disagreement among cost of service experts on what is an  
9 appropriate cost causation measure or factor; e.g., peak demand, energy or throughput  
10 usage, number of customers, etc.

11 **Q. IN YOUR OPINION, HOW SHOULD THE RESULTS OF A CCROSS BE**  
12 **UTILIZED IN THE RATEMAKING PROCESS?**

13 A.           Although there are certain principles used by all cost of service analysts, there are  
14 often significant disagreements on the specific factors that drive individual costs. These  
15 disagreements can and do arise as a result of the quality of data and level of detail  
16 available from financial records. There are also fundamental differences in opinions  
17 regarding the cost causation factors that should be considered to properly allocate costs to  
18 rate schedules or customer classes. Furthermore, and as mentioned previously, some cost  
19 causation factors cannot be realistically ascribed to some costs such that subjective  
20 decisions are required.

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1           In these regards, two different cost studies conducted for the same utility and time  
2 period can, and often do, yield different results. As such, regulators should consider the  
3 CCOSS as a guide, with the results being used as one of many tools to assign class  
4 revenue responsibility.

5 **Q. PLEASE EXPLAIN THE BASIC CONCEPTS OF COST ALLOCATION FOR**  
6 **PUBLIC UTILITIES AND NATURAL GAS LDCs.**

7 A.           As I mentioned earlier, the majority of a LDC's plant investment serves  
8 customers in a joint manner. In this regard, the LDC's infrastructure benefits all  
9 customers. If all customers were the same size and had identical usage characteristics,  
10 cost allocation would be simple (even unnecessary). However, in reality, a utility's  
11 customer base is not so simple. Customers (or customer groups) tend to vary greatly in  
12 the amount of service required throughout the year, and there are small usage and large  
13 usage customers; therefore, differences in usage should be considered. Because different  
14 groups of customers also utilize the system at varying degrees during the year,  
15 consideration should also be given to the demands placed on the system during peak  
16 usage periods.

17 **Q. WITH REGARD TO NATURAL GAS LDCs, IS THERE ANY ASPECT OF**  
18 **CLASS COST ALLOCATIONS THAT TENDS TO OVERSHADOW OTHER**  
19 **ISSUES OR IS OFTEN CONTROVERSIAL?**

20 A.           Yes. For virtually every natural gas LDC, the largest single rate base item  
21 (account) is mains. Furthermore, several other rate base and operating income accounts

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1 are typically allocated to classes based on the previous assignment of mains. As such, the  
2 methods and approaches used to allocate mains to classes are by far the most important  
3 (in terms of class rate of return [“ROR”] results) and usually are the most controversial.

4 **Q. HAVE YOU EXAMINED THE CCROSS SPONSORED BY DPL WITNESS M.**  
5 **NORMAND?**

6 A. Yes.

7 **Q. WHAT MAINS ALLOCATION METHODOLOGY DID MR. NORMAND**  
8 **EMPLOY?**

9 A. Mr. Normand utilized what is known as the Peak and Average (“P&A”) approach  
10 to allocate DPL’s mains investment and related costs. In this regard, Mr. Normand  
11 utilized a variant of the P&A method in which the weighting between peak demand and  
12 annual usage (average demand) is based on the system load factor. In other words,  
13 DPL’s system load factor is about 25%. As such, Mr. Normand’s P&A allocator is  
14 weighted 25% based on annual (average) usage and 75% based on peak (design day)  
15 demand.

16 **Q. DO YOU AGREE WITH MR. NORMAND’S USE OF THE PEAK AND**  
17 **AVERAGE METHOD?**

18 A. Yes. The P&A method reasonably assigns costs to customer classes and reflects  
19 cost causation, as this method appropriately recognizes that mains costs are incurred to  
20 meet both peak day demands as well as to serve customers every day of the year.  
21 Although it is my opinion that a 50%/50% weighting between peak and average demand

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1 would more closely reflect cost causation, Mr. Normand's load factor approach is  
2 frequently used in the industry. Moreover, and as will be discussed later, DPL witness  
3 Santacecilia appropriately used Mr. Normand's CCOSS results only as a guide in  
4 developing her recommended class revenue distribution.

5 As such, even though my preferred 50%/50% P&A weighting would have some  
6 impact on class rates of return, the differences would not be significant. Therefore, given  
7 the facts that Mr. Normand has employed the proper basic framework to allocate mains  
8 (i.e., the P&A method, modifications to reflect a 50%/50% split between peak and  
9 average demand would not result in significant differences in class RORs), as well as the  
10 recommendations of Ms. Santacecilia, I find Mr. Normand's mains allocation approach  
11 acceptable for purposes of this case.

12 **Q. DO YOU HAVE ANY COMMENTS REGARDING OTHER ASPECTS OF MR.**  
13 **NORMAND'S CCOSS?**

14 A. Yes. As indicated earlier, any CCOSS involves considerable informed judgment.  
15 While I may have selected somewhat different allocators for specific accounts, my  
16 review and examination of Mr. Normand's CCOSS has led me to conclude that there are  
17 no inherent biases or errors in his analysis.

18 **Q. WHAT IS YOUR OVERALL ASSESSMENT OF THE CCOSS STUDY**  
19 **SPONSORED BY MR. NORMAND?**

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1 A. When used only as a guide, and as one of many tools in establishing class revenue  
2 responsibility, it is my opinion that Mr. Normand’s CCOSS provides a fair and unbiased  
3 allocation of cost responsibility. Thus, I have accepted Mr. Normand’s CCOSS results.

4 **Q. PLEASE PROVIDE A SUMMARY OF MR. NORMAND’S CCOSS RESULTS AT**  
5 **CURRENT RATES.**

6 A. The following table provides class RORs and indexed (relative) RORs at current  
7 rates:

8 DPL CCOSS Results At Current Rates<sup>9</sup>

<u>Class</u>	<u>ROR</u>	<u>Indexed ROR</u>
Total Residential	5.80%	93%
General Service	7.55%	122%
Medium-Volume General	10.43%	168%
Large-Volume General	3.63%	58%
QFCP	-15.92%	-256%
Street Lighting	6.96%	112%
<u>Total Company</u>	<u>6.21%</u>	<u>100%</u>

14 **Q. WHAT CONCLUSIONS CAN BE DRAWN FROM THESE CCOSS RESULTS?**

15 A. The residential and lighting classes are contributing to profits at about the same  
16 rate as the system-wide average (93% and 112% of the system average, respectively); the  
17 general service class is contributing somewhat more than the system average level of  
18 profitability (122% indexed ROR); the medium-volume general service class is  
19 contributing considerably more than the system average ROR (168% indexed ROR); and  
20 the large-volume general service and QFCP classes are substantially underperforming at

<sup>9</sup> Per DPL response to AG-COS-1. Note: the Company discovered a calculation error in its as-filed CCOSS and provided a corrected CCOSS in this response.

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1 58% and -256% respective indexed RORs. These relative class rates of return can then  
2 be used as a guide in developing revenue responsibility, particularly as it relates to the  
3 allocation of the overall (system-wide) authorized revenue increase.

4 **Q. PLEASE PROVIDE A SUMMARY OF THE COMPANY'S PROPOSED**  
5 **REVENUE INCREASES BY CLASS.**

6 A. The following table summarizes witness Santacecilia's proposed class revenue  
7 distribution based on the Company's initial request of \$12.174 million:

8 DPL Proposed Class Revenue Increase Distribution  
9 (\$000)

10 Class	Current Delivery Revenue	Proposed Increase	Percent Increase	Percent Of System Average
11 Total Residential	\$45,720.8	\$7,782.0	17.0%	98%
General Service	\$17,698.0	\$2,869.7	16.2%	93%
12 Medium-Volume General	\$3,379.3	\$328.9	9.7%	56%
Large-Volume General	\$3,118.2	\$784.8	25.2%	145%
QFCP	\$76.0	\$408.8	537.9%	--
13 Street Lighting	\$0.8	\$0.1	17.0%	98%
Total Company	\$69,993.1	\$12,174.4	17.4%	100%

14  
15 **Q. PLEASE EXPLAIN THE GENERAL APPROACH USED BY MS.**  
16 **SANTACECILIA TO DEVELOP HER PROPOSED CLASS REVENUE**  
17 **INCREASE ALLOCATIONS.**

18 A. Ms. Santacecilia correctly used witness Normand's CCOSS as a guide in  
19 establishing class revenue responsibility. That is, Ms. Santacecilia recognized that  
20 CCOSS results are not surgically precise. As such, Ms. Santacecilia generally recognized  
21 that relative rates of return within plus or minus 15% are reasonably close to the system

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1 average rate of return. Furthermore, Ms. Santacecilia generally considered the  
2 ratemaking concept of gradualism in that she limited all legacy class' increase to no more  
3 than approximately 150% of the system-wide average increase. It should be noted that  
4 the Company's proposed large percentage increase for Qualified Fuel Cell Providers  
5 ("Rate QFCP") is a result of the recent introduction of this rate (May 2012); costs were  
6 not initially ascribed to this new tariff and this is the first rate case in which this tariff has  
7 been evaluated. Ms. Santacecilia discusses the details of Rate QFCP on pages 6 and 7 of  
8 her direct testimony.

9 **Q. IS MS. SANTACECILIA'S PROPOSED CLASS REVENUE DISTRIBUTION**  
10 **REASONABLE?**

11 A. Yes. In my opinion, Ms. Santacecilia reasonably considered proper ratemaking  
12 concepts in that she recognized allocated costs and, at the same time, mitigated increases  
13 to reflect gradualism.

14 **Q. YOUR RECOMMENDED REVENUE INCREASE OF \$0.706 MILLION IS**  
15 **CONSIDERABLY LOWER THAN THE COMPANY'S REQUESTED**  
16 **INCREASE. GIVEN THIS DISPARITY IN OVERALL REVENUE INCREASES,**  
17 **HOW SHOULD THE COMMISSION DISTRIBUTE ANY AUTHORIZED**  
18 **OVERALL INCREASE IN THIS CASE TO INDIVIDUAL CLASSES?**

19 A. I recommend that Ms. Santacecilia's relative class revenue distribution be  
20 accepted such that all class increases will be scaled-back proportionally.

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**V. RATE DESIGN**

**Q. PLEASE EXPLAIN THE CURRENT RESIDENTIAL RATE STRUCTURE.**

A. Currently, the residential rate structure is comprised of a fixed monthly customer charge of \$10.40 plus usage charges. For non-heating customers, the usage charge is a flat per CCF charge (\$0.45802). Residential customers with installed natural gas space heating enjoy a declining-block usage rate in the winter months. That is, during the non-heating season (June through September), the current usage rate is \$0.45802/CCF (the same as non-heating customers). However, during the heating season, a declining-block rate is triggered such that the first 50 CCF is priced at \$0.45802/CCF while all usage in excess of 50 CCF is priced at a lower rate of \$0.36754/CCF.

**Q. WHAT ARE THE COMPANY'S RESIDENTIAL RATE DESIGN PROPOSALS?**

A. DPL witness Santacecilia recommends increasing the residential customer charge from \$10.40 to \$13.40 per month. This \$3.00 increase equates to a 29% increase in fixed monthly charges. Furthermore, Ms. Santacecilia recommends maintaining the seasonal declining-block rate structure as well as the same relative price differential within the usage blocks; i.e., the current tail block usage rate is 80% of the first usage block and this 20% differential is proposed to remain.

**Q. DO YOU AGREE WITH MS. SANTACECILIA'S PROPOSED 29% INCREASE IN THE RESIDENTIAL CUSTOMER CHARGE FROM \$10.40 TO \$13.40?**

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1 A. No. Even though Ms. Santacecilia's proposed \$13.40 customer charge may be  
2 justifiable from purely a "cost" perspective, the proposed 29% increase in this fixed  
3 monthly charge does not reasonably reflect gradualism. As such, I recommend that the  
4 residential customer charge be increased to no more than \$12.50 per month which would  
5 represent a 20% increase in this charge.

6 **Q. DO YOU HAVE ANY RECOMMENDATIONS RELATING TO THE**  
7 **RESIDENTIAL USAGE CHARGE RATE STRUCTURE?**

8 A. Yes. I recommend the gradual elimination of the seasonal declining-block usage  
9 rate available to residential heating customers. The current declining-block usage rate is  
10 clearly at odds with cost causation and is contrary to conservation efforts.

11 **Q. WHY IS THE CURRENT SEASONAL DECLINING-BLOCK USAGE RATE AT**  
12 **ODDS WITH COST CAUSATION?**

13 A. First, remember that the discounted (lower) usage rate per CCF only applies  
14 during the heating season. However, because of the peak demands placed on DPL's  
15 system during the colder winter months, a price signal that encourages additional  
16 consumption during these peak periods is clearly at odds with the manner in which costs  
17 are incurred. Furthermore, and as is often seen in the electric utility industry, seasonal  
18 rates are often designed to encourage off-peak usage and discourage on-peak usage. In  
19 other words, rates are properly designed such that off-peak usage (per unit) rates are  
20 lower than on-peak usage rates. Under DPL's current rate structure, just the opposite is  
21 true.

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1           Second, it is well known that residential heating customers have a significantly  
2 lower load factor than non-heating customers.<sup>10</sup> This is because non-heating customers  
3 tend to not be nearly as weather sensitive as heating customers and so their usage is rather  
4 constant throughout the year. On the other hand, residential heating customers demand  
5 more and more of the Company's facilities as cold weather and natural gas usage  
6 requirements increase. Because high load factor customers evenly spread their demands  
7 throughout the year, these customers are cheaper to serve (on a per unit of consumption  
8 basis) than low load factor customers.

9 **Q. PLEASE EXPLAIN WHY THE CURRENT SEASONAL DECLINING-BLOCK**  
10 **RATE STRUCTURE IS CONTRARY TO CONSERVATION EFFORTS.**

11 A.           Under DPL's current residential rate structure, the marginal price of natural gas  
12 delivery service is considerably less than the average price. This means that as a  
13 consumer uses more and more natural gas, his/her average cost per unit of natural gas  
14 declines. It is generally agreed that in order to promote efficient conservation, a rate  
15 structure should be designed such that a price signal is provided in which the marginal  
16 price is greater than the average price of natural gas. Such a price signal will discourage  
17 inefficient usage not only on peak days but during all periods throughout the year.

18 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE GRADUAL**  
19 **ELIMINATION OF THE CURRENT SEASONAL RESIDENTIAL DECLINING-**  
20 **BLOCK RATE STRUCTURE?**

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<sup>10</sup> Load factor is defined as average daily usage divided by peak day usage wherein average daily usage is annual throughput divided by 365 days.

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1 A. In order to avoid rate shock or otherwise disproportionately large increases to  
2 certain large residential customers, I recommend that for purposes of this case, the second  
3 usage block (greater than 50 CCF in the heating season) be priced at 90% of the first  
4 usage block. This compares to the current 80% rate differential. In DPL's next general  
5 rate case, this declining-block rate can then be totally eliminated.

6 **VI. MAIN EXTENSIONS**

7 **Q. IS DPL PROPOSING ANY TARIFF CHANGES RELATING TO RESIDENTIAL**  
8 **MAIN EXTENSIONS?**

9 A. Yes. Under its current tariff provisions, the Company utilizes a five times annual  
10 revenue test to determine the amount of customer contributions to extend mains which is  
11 then recorded as a contribution in aid of construction. As set forth in Section XVII of the  
12 Company's proposed tariff (Leaf No. 27), DPL proposes to change its main extension  
13 policy for existing subdivisions and neighborhoods to allow up to 100 feet of main  
14 extensions per applicant at no charge. In this regard, the proposed 100-foot allowance  
15 will be cumulative for all new applicants within a particular main extension project. In  
16 other words, if there are ten applicants for a particular main extension, the allowable  
17 footage for the project would be 1,000 feet. In situations in which the 100 foot limit per  
18 applicant is exceeded, all new applicants will share evenly in the incremental cost above  
19 the 100 foot threshold. The additional incremental cost will be based on the average  
20 installed cost per foot installed during the preceding three calendar years (plus any other  
21 required system improvements).

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1           The Company's current main extension tariff section also includes a Refundable  
2           Qualifying Deposit ("RQD") provision from applicants which is refundable if gas heating  
3           equipment is installed and connected for service within five years of the date that gas  
4           service is available. The Company is proposing to eliminate the RQD and the five times  
5           annual revenue test provisions from its main extension provision.

6   **Q. DO YOU SUPPORT THE COMPANY'S PROPOSED TARIFF CHANGE?**

7   A.           Not at this time and not as written. As a matter of public policy, I support the  
8           objective of making natural gas available to more Delawareans. However, there are no  
9           win-win scenarios in which all current and potentially new ratepayers benefit from  
10          extending DPL's main and service availability. It is commonly known that the costs of  
11          installing new mains exceed the historical cost of mains that existing customers have  
12          been paying for. Furthermore, with respect to existing residences, there is a strong  
13          tendency for residences to not convert their existing heating sources (electric or oil) until  
14          such time as replacement is necessary. In other words, as a matter of simple economics,  
15          residences will not undergo the expense of purchasing natural gas furnaces and installing  
16          internal piping (and in some cases installing duct work), to accommodate natural gas heat  
17          until their existing heating source needs replacing. Therefore, even if the investment in  
18          infrastructure required to make natural gas service available is offered at no charge, a  
19          high percentage of residences are not likely to convert to natural gas for at least several  
20          years. With this being said, if mains are extended at no charge to existing residences but  
21          few of these residences utilize natural gas for heating, very little revenue will be

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1 generated to offset the investment costs required to extend these mains. Under these  
2 circumstances, existing ratepayers will be footing the bill for the majority of these new  
3 main extensions.

4 It should also be understood that under Section VII of the proposed tariff, new  
5 residential customers (applicants) will also receive up to 100 feet of service line.<sup>11</sup>  
6 Because most main extension requests will include multiple new connections (applicants)  
7 and the proposed 100-foot extension limit is cumulative by project, coupled with the fact  
8 that a high percentage of such applicants will not immediately convert to natural gas for  
9 space heating, it is apparent that the proposed tariff provision will indeed result in  
10 existing ratepayers paying for these new projects that largely benefit only new customers.  
11 Furthermore, as I understand the tariff provisions, there is no long-term requirement for  
12 new customers to remain DPL customers. As such, residences in an existing  
13 neighborhood could get together and file a joint petition for a main extension even though  
14 several of the residences may have no intention of converting to natural gas for space  
15 heating and then quickly terminating gas service once the new mains are installed and  
16 new service lines are run to each residence. Additionally, under the proposed tariff  
17 provisions, a neighborhood association, ad hoc committee, etc. may serve as an  
18 “applicant” representing numerous potential new customers; however, I am not aware of  
19 any legal obligation for these residences to actually become customers of DPL or to  
20 remain as customers of DPL.

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<sup>11</sup> Service line represents the piping between the Company’s gas main system and the point of connection with the applicant’s gas line (usually at or near an exterior corner wall of the residence).

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1 **Q. DO YOU HAVE ANY SOLUTIONS OR RECOMMENDATIONS CONCERNING**  
2 **THE EXTENSION OF MAINS TO EXISTING NEIGHBORHOODS AND**  
3 **SUBDIVISIONS WITHIN DPL’S SERVICE AREA?**

4 A. As I indicated earlier, there are no “win-win” scenarios that I am aware of. The  
5 LDC industry has faced the dilemma of main extensions since the Federal ban on new  
6 customers was lifted some three decades ago. As natural gas prices have plummeted and  
7 as the real prices of electricity and oil have tended to increase, natural gas has become  
8 more and more attractive to residential energy users. In this regard, the offering of a 100-  
9 foot main extension limit may be good public policy if there are somehow reasonable  
10 assurances or requirements that existing residences will immediately or shortly thereafter  
11 (within one or two years) convert to natural gas for space heating requirements. In this  
12 regard, I recommend that the Commission defer a final decision on the proposed tariff  
13 changes for this case and instead order the formation of a collaborative working group  
14 between the Company, Staff, Public Advocate/Attorney General’s Office, and other  
15 interested stakeholders to evaluate how natural gas can be made more available to  
16 Delawareans while at the same time preventing free rides to potential new customers that  
17 have no intention of using any economically justified level of natural gas. The working  
18 group would explore possibilities to ensure that reasonable levels of revenue will be  
19 achieved from new connections if main extensions are provided at no charge to new  
20 customers including deposit requirements to ensure reasonable and timely conversions to  
21 natural gas. The working group should also investigate other tariff possibilities

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1 including, but not limited to, the creation of “new” service area surcharges, and  
2 abandoning the current five year revenue test in favor of a more accurate (albeit more  
3 complicated) net present value modeling approach for main extensions.

4 I note that after Chesapeake Utilities Company filed a similar proposal for  
5 extending natural gas to unserved areas, the Commission Staff, the Public  
6 Advocate/Attorney General, Chesapeake and other interested stakeholders conducted  
7 workshops in which they discussed the issues raised by Chesapeake’s application  
8 (including no-cost main extensions, the method by which Chesapeake determined  
9 whether a requested main extension was cost-effective, and surcharges for new service  
10 areas) and were able to resolve their issues to the satisfaction of all participants such that  
11 Chesapeake will be submitting a revised proposal for the Commission’s consideration.

12 **Q. DOES THIS COMPLETE YOUR TESTIMONY?**

13 A. Yes.

14