

STATE OF MARYLAND
BEFORE THE PUBLIC SERVICE COMMISSION

**In the Matter of the Application of Delmarva)
Power and Light Company for an)
Increase in Its Retail Rates for the)
Distribution of Electric Energy)**

Case No. 9192

REBUTTAL TESTIMONY OF
JONATHAN WALLACH
ON BEHALF OF
THE OFFICE OF PEOPLE’S COUNSEL

Resource Insight, Inc.

SEPTEMBER 11, 2009

1 **Q: Please state your name, occupation, and business address.**

2 A: I am Jonathan F. Wallach. I am Vice President of Resource Insight, Inc., 5
3 Water Street, Arlington, Massachusetts.

4 **Q: Are you the same Jonathan F. Wallach that filed direct testimony in this**
5 **proceeding?**

6 A: Yes.

7 **Q: On whose behalf are you testifying?**

8 A: I am testifying on behalf of the Office of People's Counsel.

9 **Q: What is the purpose of your rebuttal testimony?**

10 A: This testimony responds to the pre-filed direct testimony by Staff witnesses
11 Charles Ermer and Gregory Campbell. Specifically, this testimony addresses:
12 (1) Mr. Ermer's recommendation that the Company include a minimum-size
13 analysis in its cost of service study for the next rate filing; and (2) Mr.
14 Campbell's recommendation regarding the customer charge for the Residential
15 (R) Service Classification.

16 **Q: Please summarize Mr. Ermer's findings and conclusions regarding the**
17 **allocation of distribution costs in the Company's cost of service study.**

18 A: Mr. Ermer finds that the Company's approach is generally reasonable. However,
19 Mr. Ermer is concerned that the Company is classifying as demand-related
20 certain distribution-plant costs that he believes are more appropriately classified
21 as customer costs, since such costs:

22 ... are required to serve customers regardless of their load requirements.
23 The customer component is therefore the theoretical minimum distribution
24 system required to serve customers at nominal load conditions.¹

¹ *Direct Testimony and Exhibits of Charles Ermer*, Case No. 9192, August 24, 2009, p. 16.

1 Mr. Ermer further notes that the Company did not classify customer costs
2 using a minimum-system approach. He then concludes that:

3 ... at least 10 percent of distribution plant costs that are physically required
4 to deliver electricity to customers should be classified as customer-related,
5 although this percentage could be much higher.²

6 **Q: Did Mr. Ermer derive this conclusion from the results of a minimum-
7 system analysis of the Company's distribution costs?**

8 A: No. In fact, Mr. Ermer does not provide any theoretical or quantitative basis for
9 his conclusion that at least 10% of distribution costs are customer-related.
10 Instead, Mr. Ermer provides an illustrative calculation of cost allocations to the
11 various customer classes that *assumes* for the purposes of the calculation that
12 10% (or 30%) of distribution costs are customer-related.

13 **Q: What does Mr. Ermer recommend with regard to the classification of
14 distribution costs in the Company's cost of service study?**

15 A: Mr. Ermer recommends that the Company undertake a minimum-size analysis
16 for the cost of service study in its next rate case filing.

17 **Q: How is the cost of the minimum distribution system generally derived?**

18 A: The most common methods used are: (1) the minimum-size method; or (2) the
19 zero-intercept method.

20 A minimum-size analysis attempts to calculate the cost of a utility's
21 installed units (transformers, poles, conductor-feet, etc.), were each of those
22 units the minimum size for that type of equipment that would ever be used on
23 the system. This type of analysis attempts to estimate the cost to install the same
24 number of units (poles, conductor-feet, transformers) as are currently on the

² *Id.*, p. 19.

1 system, assuming that each of those units are the smallest size currently used on
2 the distribution system.

3 The zero-intercept method attempts to estimate a functional relationship
4 between equipment cost and equipment size based on the current system, and
5 then to extrapolate that cost function to estimate the cost of equipment that
6 carries zero load (e.g., 0-kVA transformers), the smallest units legally allowed
7 (e.g., 25-foot poles), or the smallest units physically feasible (e.g., the thinnest
8 conductors that will support their own weight in overhead spans). The goal of
9 this procedure is to estimate the cost of equipment required to connect existing
10 customers, even if they had virtually no load.

11 Under either approach, the minimum-system cost is deemed to be
12 customer-related, with the remaining cost classified as demand-related.

13 **Q: Do minimum-system approaches generally produce reasonable**
14 **classifications of costs?**

15 A: No. As James Bonbright, Albert Danielson, and David Kamerschen explain in
16 their *Principles of Public Utility Rates*, these approaches are fundamentally
17 flawed because minimum-system costs, however estimated, are neither properly
18 classified as wholly customer-related nor demand-related.³ Instead, Bonbright,
19 Danielson, and Kamerschen argue that such costs are inherently “unallocable”:

³ In other words, these costs are not driven by either changes in the number of customers or by changes in customer demand.

1 But if the hypothetical cost of a minimum-sized distribution system is
2 properly excluded from the demand-related costs ..., while it is also denied
3 a place among the customer costs ..., to which cost function does it then
4 belong? The only defensible answer, in our opinion, is that it belongs to
5 none of them. Instead, it should be recognized as a strictly unallocable
6 portion of total costs.... But fully-distributed cost analysts dare not avail
7 themselves of this solution, since they are prisoners of their own
8 assumption that “the sum of the parts is equal to the whole.” They are
9 therefore under impelling pressure to fudge their cost apportionments by
10 using the category of customer costs as a dumping ground for costs that
11 they cannot plausibly impute to any of their other cost categories.⁴

12 Small customers are especially burdened when a high percentage of these
13 unallocable costs are inappropriately dumped into the customer-cost bin. The
14 Company should therefore not rely on these flawed methods to classify
15 distribution costs.

16 **Q: What is Staff’s recommendation with regard to Delmarva’s distribution**
17 **revenues?**

18 A: Relative to the revenue amount approved in Case No. 9093, Staff recommends a
19 decrease in distribution revenues of about \$4.7 million.⁵ According to Exhibit
20 GMC-7 of Mr. Campbell’s direct testimony, Staff recommends an allocation to
21 the R class of about \$3.4 million of the total \$4.7 million decrease. This
22 allocation represents a 4.5% decrease to the revenue amount approved for the R
23 class in Case No. 9093.

24 **Q: Does Staff also recommend a 4.5% decrease to base rates approved in Case**
25 **No. 9093 for the R class?**

26 A: No. Under Staff’s proposal, the average rate for the R class would *increase* by
27 about 1.7% compared to current base rates.

⁴ Bonbright, James C., Albert L. Danielsen, and David R. Kamerschen, *Principles of Public Utility Rates*, Arlington, VA: Public Utilities Reports, 1988., p. 492.

⁵ *Direct Testimony and Exhibits of Gregory Campbell*, Case No. 9192, August 24, 2009, p. 27.

1 This counter-intuitive result is due to the dramatic decline in retail sales
2 between the 2006 and 2008 test year and the offsetting impact of the Bill
3 Stabilization Adjustment (“BSA”) mechanism. As I explained in my direct
4 testimony, current residential rates were designed to recover the revenue amount
5 approved in Case No. 9093, using billing determinants for the 2006 test year.
6 Although actual sales since 2006 have dropped far below 2006 test-year levels,
7 the BSA mechanism has ensured that the Company continues to recover
8 revenues equivalent to the approved amount. The 4.5% revenue decrease
9 represents the decrease in revenue requirements for the R class from the 2006
10 test year, as approved in Case No. 9093, to Staff’s estimate for the 2008 test
11 year.

12 Although, by Staff’s estimate, costs have decreased by 4.5% from 2006 to
13 2008, the retail sales that generate revenues to cover these costs have also
14 declined between 2006 and 2008. Revenues for the 2008 test year (the product
15 of 2008 test-year billing determinants and current base rates) are less than the
16 amount approved in Case No. 9093 (the product of 2006 test-year billing
17 determinants and current base rates), because 2008 test-year billing determinants
18 are substantially lower than 2006 test-year levels. Staff is therefore
19 recommending a 1.7% increase in current base rates in order to bring the R rate
20 up to a level that, when applied to 2008 test-year billing determinants, generates
21 revenues sufficient to recover both the 4.5% decrease in allocated revenue
22 requirements *and* the loss of revenues (relative to the amount approved in Case
23 No. 9093) associated with the decline in retail sales between the 2006 and 2008
24 test years. The Company has been recovering these sales-related revenue losses
25 through an energy surcharge pursuant to the BSA. The 1.7% increase thus
26 effectively folds the BSA surcharge recovery of the sales-related deficiency into
27 base rates.

1 **Q: What does Mr. Campbell propose with regard to customer charge for the R**
2 **rate class?**

3 A: Mr. Campbell proposes to increase the customer charge from \$6.00 to \$7.00, or
4 by 16.67%.⁶

5 **Q: Is this proposed increase reasonable?**

6 A: No. Mr. Campbell's proposal unreasonably harms small residential customers
7 by inappropriately shifting recovery of sales-related revenue losses from the
8 volumetric BSA energy surcharge to a fixed customer charge.

9 **Q: How would Mr. Campbell's proposal shift recovery of sales-related revenue**
10 **losses from the volumetric BSA energy surcharge to a fixed customer**
11 **charge?**

12 A: As discussed above, if not for the drop in sales from 2006 test-year levels,
13 customer and energy charges for the R class could be decreased by 4.5% to
14 achieve Staff's estimate of R-class revenue requirements for the 2008 test year.
15 Moreover, the revenue losses associated with this sales decline are currently
16 being recovered through a volumetric energy surcharge under the BSA. Thus,
17 any increase in the customer charge effectively shifts recovery of sales-related
18 revenue losses from a volumetric energy surcharge to a fixed customer charge.

19 **Q: Why is it unreasonable to recover sales-related revenue losses through the**
20 **customer charge?**

21 A: As I discussed in my direct testimony with regard to the Company's proposed
22 increase to the customer charge, it is unreasonable because it effectively
23 allocates to small customers a larger share of the revenue losses than is their
24 responsibility. The revenue losses recovered through the BSA surcharge were

⁶ *Id.*, p. 32.

1 due solely to a decline in energy sales.⁷ As such, it is likely that customers
2 contributed to revenue losses in proportion to usage. It is therefore reasonable to
3 allocate such revenue losses on energy, as is the case when such losses are
4 recovered through the BSA energy surcharge. In contrast, recovering revenue
5 losses through a fixed customer charge effectively allocates a fixed amount of
6 revenue losses per customer, regardless of customer usage. As a result, smaller
7 customers are allocated the same share of revenue losses as larger customers,
8 even though smaller customers were likely responsible for a smaller share of
9 such costs.

10 **Q: What do you recommend with regard to setting of the customer charge for**
11 **the R class?**

12 A: As I did in my direct testimony, I recommend that the customer charge be
13 modified in proportion to the overall revenue change approved by the
14 Commission for the R class. For example, if the Commission were to approve
15 Staff's recommendation for a 4.5% revenue decrease, my recommendation
16 would be to also decrease the customer charge by 4.5% from \$6.00 to \$5.73.

17 **Q: Have you developed an illustrative rate design that reflects your**
18 **recommendation regarding the customer charge for the R class?**

19 A: Yes. Exhibit JFW-3 provides an illustrative design for the R rate class that
20 incorporates the effect of Commission adoption of: (1) Staff's recommendation
21 for a 4.5% revenue decrease; (2) Staff's proposal to eliminate the difference
22 between winter initial- and tail-block rates; and (3) my recommendation for the

⁷ In fact, customer count increased from 2006 to 2008, resulting in revenue growth from the customer charge.

1 customer charge.⁸ This illustrative design reduces the current customer charge
2 by 4.5%, commensurate with the revenue decrease proposed by Staff for the R
3 class. In addition, this illustrative design equalizes the initial- and tail-block
4 winter rates at the level proposed by Staff. Finally, this illustrative design
5 increases the summer energy rate to recover the remainder of Staff's estimate of
6 the revenue requirement allocated to the R class.⁹

7 **Q: Does this conclude your rebuttal testimony?**

8 A: Yes.

⁸ This exhibit was developed by modifying electronic-spreadsheet versions of Exhibit JFJ-1, which were provided in response to OPC Data Request No. 5, Question No. 15.

⁹ In contrast to Staff's proposed rate design, this illustrative rate design charges a higher rate for energy consumed in the summer than in the winter. As I discussed in my direct testimony, a seasonal differential in energy charges is consistent with generally accepted cost-causation principles and, as acknowledged by the Company, is justified by the timing of peak loads and capacity limitations on the Delmarva distribution system.

**Delmarva Power & Light Company - Maryland
Development of Service Classification Distribution Rates
Using Twelve Months Ending December 2008 Data**

Exhibit JFW-3

Service Classification Residential ("R")

1	Distribution Functional Revenue Requirements Total	\$ 71,760,665
2	Proposed Customer Charge Recovery	\$ 11,846,021
3	Proposed Demand/Energy Charge Recovery	\$ 59,914,644

4	<u>Delivery Service</u>	<u>Billing Determinants</u>	<u>Current Distribution Rate</u>	<u>Effective Annualized BSA Rate (See Note 1)</u>	<u>Present Revenue</u>	<u>Proposed Rate</u>	<u>Proposed Revenue</u>	<u>Revenue Change</u>	<u>Base Rate Change %</u>
5	Monthly Customer Charge	2,067,550	\$ 6.00		\$ 12,405,300	\$ 5.73	\$ 11,846,021	\$ (559,279)	-4.51%
6	Distribution								
7	Summer Energy Rate	719,478,722	\$ 0.027741	\$ 0.002198	\$ 21,540,228	\$ 0.029992	\$ 21,578,606	\$ 38,378	8.11%
8	Winter First Block Energy Rate	924,749,333	\$ 0.031293	\$ 0.002198	\$ 30,970,465	\$ 0.027750	\$ 25,661,794	\$ (5,308,671)	-11.32%
9	Winter Second Block Energy Rate	456,740,761	\$ 0.020206	\$ 0.002198	\$ 10,232,664	\$ 0.027750	\$ 12,674,556	\$ 2,441,892	37.34%
10	Total Delivery Service	2,100,968,816	\$ 0.033571		\$ 75,148,657	\$ 0.034156	\$ 71,760,977	\$ (3,387,680)	1.74%
11	Rounding Difference					\$	312		

Note 1 The "Effective Annualized BSA Rate" is determined by dividing the difference between allowed test year revenue and the revenue calculated using current rates and determinants divided by the service classification appropriate billing determinant for BSA Development.