

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY :
COMMISSION :
 : DOCKET NO. R-2014-2428743
v. :
 :
PENNSYLVANIA ELECTRIC COMPANY :

SURREBUTTAL TESTIMONY

OF

MARLON F. GRIFFING, PH.D.

ON BEHALF OF THE

PENNSYLVANIA OFFICE OF CONSUMER ADVOCATE

JANUARY 6, 2015

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1 **I. INTRODUCTION**

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

3 A. My name is Dr. Marlon F. Griffing. I am a Senior Consultant with the
4 economic consulting firm of Snavely King Majoros & Associates Inc.
5 (Snavely King). My business address is Suite 350, 4351 Garden City
6 Drive, Landover, MD 20785.

7
8 **Q. Are you the same Dr. Marlon F. Griffing who filed Direct Testimony**
9 **on behalf of the Pennsylvania Office of Consumer Advocate in these**
10 **dockets before the Pennsylvania Public Utilities Commission**
11 **(Commission)?**

12 A. Yes. I am filing Surrebuttal Testimony regarding the cost of capital for
13 the FirstEnergy electric distribution companies in these dockets before
14 the Commission. The FirstEnergy Companies are Metropolitan Edison
15 Co. (Met-Ed), Pennsylvania Electric Co. (Penelec), Pennsylvania Power
16 Co. (Penn Power), and West Penn Power Co. (West Penn). Following
17 the convention I adopted in my Direct Testimony, I will use the term
18 "Companies" when referring to all four companies. When I need to refer
19 to an individual company I will use their names or abbreviations as noted.

20
21 **Q. What is the purpose of your Surrebuttal Testimony?**

22 A. I respond to the Rebuttal Testimony of FirstEnergy witness Dr. Michael J.
23 Vilbert regarding return on equity (ROE).

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Q. Have you changed any of the recommendations you made in your Direct Testimony as a result of the Rebuttal Testimony of the other parties?

A. No.

Q. Please summarize your position regarding ROE.

A. My basic recommended ROE for the Companies was 9.27 percent. When this ROE was used as the input for calculating overall rates of return (ROR), the results for the respective companies are 7.24 percent for Met Ed, 7.49 percent for Penelec, 7.69 percent for Penn Power, and 7.33 percent for West Penn.

Q. Have you advocated other adjustments to the ROE?

A. Yes. In my Direct Testimony I noted that OCA witness Barbara R. Alexander documented that the Companies have provided low to average quality of service when compared with the level of service provided by other Pennsylvania electric distribution companies (EDCs). Further, Ms. Alexander showed that the Companies' service reliability has deteriorated. In response to the concerns raised by Ms. Alexander, I stated that the Commission should consider reductions of 10 to 25 basis points in the ROE, depending upon the severity of the shortcomings in customer service and service reliability for each company. I continue to

1 recommend that the Commission consider making those ROE reductions.

2
3 **II. RESPONSE TO DR. MICHAEL J. VILBERT'S REBUTTAL**
4 **TESTIMONY**

5 **Q. Please summarize the comments of Companies' witness Dr. Vilbert**
6 **about your Direct Testimony.**

7 A. Dr. Vilbert makes several comments about my Direct Testimony, but I
8 will concentrate on two areas regarding my use of the discounted cash
9 flow (DCF) model to calculate a recommended ROE for the Companies.
10 These areas are my selection of companies for inclusion in my Revised
11 Comparison Group—that is, the set of electric distribution companies I
12 used in my ROE computations—and my use of annual, rather than
13 quarterly, estimated dividend growth rates and expected dividend yields
14 in the DCF model. Further, I briefly respond to Dr. Vilbert's continued
15 advocacy for the After-Tax Weighted Average Cost of Capital
16 (ATWACC) adjustment. I also accept his criticism regarding the
17 exclusion of Duke Energy from my ROE calculations.

18
19 **1. Selecting Outlier Companies**

20 **Q. Please explain how you chose to exclude companies with low ROEs**
21 **and high ROEs from your Revised Comparison Group.**

22 A. I used economic theory and my expert judgment to exclude both
23 companies with exceptionally low ROEs and companies with

1 exceptionally high ROEs from the Revised Comparison Group. To use
2 companies with ROEs at either end of the range I calculated in my Direct
3 Testimony would have distorted the ROE for the Companies.

4
5 **Q. What aspect of economic theory did you use?**

6 A. Economic theory states that the higher the risk of an investment, the
7 greater the yield the investment must offer to attract the funds of
8 investors. Therefore, I excluded companies with ROEs so low as to not
9 be competitive with other investment instruments of lesser risk. The
10 yields of these debt instruments is not equal to the yields of the ROEs of
11 the companies in question, but is great enough so as to make it unlikely
12 that investors would bear the greater risk of investing in common equity
13 when they have the opportunity to invest in the debt instruments.
14 Similarly, for companies that have very high ROEs, it is not reasonable to
15 include them in the calculation of an ROE for the Companies. Their
16 returns are so high that investors would not require such yields to commit
17 funds to the common equity of most electric distribution companies. I
18 have called these companies at both ends of the ROE range outliers
19 because they are different than the majority of other electric distribution
20 companies.

21
22 **Q. Please elaborate on the process you used to exclude companies with**
23 **low ROEs.**

1 A. Several companies had combinations of forecasted dividend growth rates
2 and expected dividend yields that were quite low. Dr. Vilbert used a
3 criterion of the current bond yield on Standard & Poor's (S&P) BBB-
4 rated utility bonds plus 250 basis points to exclude several companies at
5 the low end, as well. As Dr. Vilbert stated, the difference in the returns
6 for these low-risk bonds compared with the ROEs for the EDCs is not
7 enough to cause investors overlook the risk difference and commit funds
8 to the common equity of the companies.

9
10 **Q. Please continue.**

11 A. Dr. Vilbert's yield-plus-250 basis points standard was equal to a return of
12 about 7 percent. He excluded five of the six companies that I excluded
13 from the Revised Comparison Group because they had ROEs less than 7
14 percent. I chose to exclude Pinnacle West Capital in addition to these
15 five companies. See Griffing Direct Exhibit ____ (MFG-3) Schedule 2.

16
17 **Q. What process do you use to exclude companies from your ROE**
18 **calculation?**

19 A. I do not disagree with Dr. Vilbert's use of a yield-plus criterion to guide
20 exclusions at the low end of the ROE range. As Dr. Vilbert recognizes,
21 excluding companies requires subjective judgment in addition to theory.
22 See Vilbert Exhibit ____ (Vilbert Rebuttal), page 14. The choice of 250
23 basis points rather than some other quantity above the utility bond-yield

1 average is itself subjective, after all. Therefore, I also look for gaps
2 between ROEs rather than just excluding firms below or above given
3 standards. Otherwise, companies with nearly identical ROEs, an
4 indication that they are similar to one another, end up being treated
5 differently in the ROE analysis.

6
7 **Q. Why did you exclude Pinnacle West?**

8 A. Pinnacle West has an ROE of 7.84 percent, 18 basis points below the
9 8.02 percent ROE of CenterPoint Energy. On the other hand, the two
10 EDCs immediately above CenterPoint, Southern Co. (8.04 percent) and
11 Westar Energy (8.12 percent), have ROEs that are within 10 basis points
12 of CenterPoint's. I chose to include all three of these companies because
13 they are so closely clustered and to exclude Pinnacle West.

14
15 **Q. Could another choice have been made?**

16 A. Yes. I could have included Pinnacle, but I concluded that doing so would
17 have kept in a company that would have unfairly brought down the
18 Companies' ROE.

19
20 **Q. Please explain how you chose to exclude two companies at the top of
21 the ROE range from the Revised Interest Group.**

22 A. There is no firm basis similar to the bond-yield-plus standard used by Dr.
23 Vilbert to use to establish a high threshold for exclusion from ROE

1 calculation. However, it is asymmetrical to only exclude companies with
2 unreasonably low ROEs and not to exclude companies with unreasonably
3 high ROEs. Thus, I also looked for gaps between the ROEs of
4 companies at the top end of the scale to identify outliers there.

5
6 **Q. What companies did you choose for exclusion and why?**

7 A. Otter Tail Corp. has an ROE of 14.99 percent, while the next ROE is the
8 12.22 percent of PNM Resources. Thus, Otter Tail's 14.99 percent ROE
9 is 2.77 percent higher than the ROE of any other EDC. Such a gap is
10 quite large in the context of EDC ROEs. For example, PNM's ROE is 97
11 basis points greater than the 11.25 percent ROE of Black Hills Corp., the
12 company with the third-highest ROE in the Comparison Group. In
13 contrast, the company next in line, Ameren, at 11.17 percent, trails Black
14 Hills by 8 basis points. Given these breaks between the cited ROEs,
15 Otter Tail and PNM stand apart from the other EDCs, which is why I
16 have elected to exclude them from the Revised Comparison Group.

17
18 **Q. Do the Companies not have to compete with high-ROE companies for
19 capital?**

20 A. Yes, but the ROEs of Otter Tail and PNM so far exceed the ROEs of the
21 great majority of EDCs that the Companies can offer investors an
22 opportunity to earn an ROE much lower than the ROEs of those two
23 companies and still compete successfully in the equity markets. In the

1 current markets, there is no risk-return tradeoff that requires EDCs to
2 offer ROEs at the level of these two outlier companies. To include Otter
3 Tail and PNM in the analysis would unreasonably increase the
4 recommended ROE for the Companies.

5
6 **Q. Are your exclusions of a total of six companies with low ROEs and**
7 **two companies with high ROEs arbitrary?**

8 A. No. I found a breaking point at each end of the range of ROEs for
9 electric distribution companies where there were clusters of companies
10 with similar ROEs. The ROEs of the companies below and above those
11 clusters were different enough to warrant excluding them from the
12 Revised Comparison Group. The group's membership numbers 22
13 companies (21 if Duke Energy is excluded) with a total range of ROEs
14 from 8.02 percent to 11.25 percent, or a span of 3.23 percent. By way of
15 comparison, these 22 companies have a total difference that is only 48
16 basis points greater than the difference between Otter Tail and PNM
17 Resources.

18
19 **2. Annual versus Quarterly Growth Rates in the DCF Model**

20 **Q. Please summarize the role of growth rates in the DCF model.**

21 A. The ROE is calculated in the DCF model by finding the sum of two
22 terms, the dividend growth rate and the expected dividend yield. The
23 dividend growth rate is calculated using current growth-rate forecasts of

1 expert analysts. The expected dividend yield is computed using current
2 dividends paid and current common equity share prices to find the
3 dividend yield, then converting the dividend yield to the expected
4 dividend yield by using the dividend growth rate to find the dividend
5 yield one year into the future.

6
7 **Q. Please state how you find the expected dividend yield.**

8 A. I calculate the current dividend yield using the annualized dividend yield,
9 then increase it by a growth rate equal to one-half times the dividend
10 growth-rate estimate.

11
12 **Q. What is the justification for using one-half the growth-rate estimate
13 to increase the dividend yield?**

14 A. Companies' dividends typically do not increase every quarter. The norm
15 is once a year. Therefore, to find the expected annual dividend paid in
16 the next year, I adopt a simplifying assumption commonly used in utility
17 rate regulation. This assumption is that one-half of companies will
18 increase their dividends in the first and second quarters of a year and one-
19 half will increase their dividends in the third and fourth quarters of a
20 year. Consequently, a good estimate of the total dividend a company will
21 pay in the next year is to assume its growth rate will be in effect half the
22 year.

23

1 **Q. What does Dr. Vilbert say about using quarterly growth rates instead**
2 **of annual growth rates in calculating a recommended ROE?**

3 A. The Companies' witness states that the dividend growth rate and the
4 expected dividend yield should be based on quarterly compounding of
5 the dividend growth rate. Dr. Vilbert asserts that this scheme provides a
6 more accurate estimate of the ROE than the method I use because stock
7 prices reflect the actual quarterly payment of dividends.

8
9 **Q. Do you agree with Dr. Vilbert?**

10 A. No. While I do agree that common equity stock prices are influenced by
11 dividends paid, I disagree with his assumption of quarterly compounding.
12 Dr. Vilbert's method assumes compounding for the dividends for all
13 companies for a complete year, contrary to what the widely accepted
14 method that I use assumes about once a year dividend increases. Dr.
15 Vilbert's method, therefore, overstates the expected sum of dividends
16 paid during a year.

17
18 **3. After-Tax Weighted Average Cost of Capital (ATWACC)**

19 **Q. Does Dr. Vilbert continue to argue for applying the ATWACC in**
20 **calculating the recommended ROE for the Companies?**

21 A. Yes. However, Dr. Vilbert's lengthy discussion of the ATWACC does
22 not change the fact that the different capital structures of companies
23 included in the Revised Comparison Group and in his proxy group are

1 not grounds for adjusting the ROE found using the DCF model. As I
2 noted in my Direct Testimony, investors are aware of the differences in
3 the leverage of companies when they purchase common equity shares,
4 and expert analysts are aware of the same differences when they issue
5 dividend growth-rate estimates. I will not repeat the details of those
6 discussions here, except to reiterate their validity. That is, the DCF
7 model already captures differences in capital structure, and thus leverage,
8 and as such, Dr. Vilbert's ATWACC adjustment artificially inflates his
9 ROE recommendations.

10
11 **Q. Dr. Vilbert asserts that ATWACC or similar methods are used in**
12 **foreign jurisdictions and that this is a basis for its adoption in**
13 **Pennsylvania. Do you agree?**

14 A. No. One of the screens that I use to exclude companies from inclusion in
15 my Comparison Group is that a company be based in the 48 continental
16 United States. I use this screen to assure similarity in regulatory regimes.
17 Other countries may use other regimes, all of the details of which are not
18 known to the Commission. For the Commission to depart from the well-
19 founded method it has used for decades is not sound policy. I also again
20 reiterate, as I stated in my Direct Testimony, Dr. Vilbert has presented
21 his ATWACC adjustment in numerous regulatory jurisdictions, and to
22 the best of my knowledge, it has been rejected in all U.S. regulatory
23 jurisdictions—in each and every case—in which Dr. Vilbert has

1 attempted to apply the adjustment.

2
3 **4. Exclusion of Duke Energy**

4 **Q. Is there any criticism made by Dr. Vilbert that you accept?**

5 A. Yes. Dr. Vilbert states that Duke Energy had transactions covering non-
6 regulated generating assets (sale) and regulated nuclear generating assets
7 (purchase) announced and pending at the time I selected members of the
8 Comparison Group. I excluded all other companies with such
9 transactions from the Comparison Group. I should have also excluded
10 Duke Energy. I do not know the magnitude of the effect this exclusion
11 would have had on my recommended ROE for the Companies (likely a
12 few basis points), but because Duke's ROE is less than the ROE I
13 recommended for the Companies, the movement would be downward.
14 See Griffing Direct Exhibit ____ (MFG-3) Schedule 1.

15
16 **III. SUMMARY**

17 **Q. What is your recommended return on equity and overall cost of**
18 **capital?**

19 A. In my Direct Testimony, I recommended an ROE of 9.27 percent and
20 RORs of 7.24 percent for Met Ed, 7.49 percent for Penelec, 7.69 percent
21 for Penn Power, and 7.33 percent for West Penn when this ROE is used
22 as an input for the weighted-average cost of capital for each Company.
23 My ROE recommendation is subject to a downward adjustment of 10 to

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25 basis points, as fully described in my Direct Testimony, due to concerns over reliability and customer service issues, as addressed by OCA witness Alexander in her Direct and Surrebuttal Testimonies.

Q. Have you changed your recommended ROE or RORs in this testimony?

A. I continue to recommend the above ROE and RORs

Q. Does this conclude your testimony?

A. Yes.

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PENNSYLVANIA PUBLIC UTILITY COMMISSION

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v. : Docket No. R-2014-2428743
Pennsylvania Electric Company :
:

VERIFICATION

I, Marlon Griffing, hereby state that the facts above set forth in my Surrebuttal Testimony, OCA Statement No. 2SR, are true and correct and that I expect to be able to prove the same at a hearing held in this matter. I understand that the statements herein are made subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Signature: Marlon Griffing
Marlon Griffing

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