

**BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

|  |   |                         |
|--|---|-------------------------|
| In the Matter of the Application of Ohio | ) |                         |
| Edison Company, The Cleveland Electric   | ) | Case No. 14-1297-EL-SSO |
| Illuminating Company and The Toledo      | ) |                         |
| Edison Company for Authority to Provide  | ) |                         |
| for a Standard Service Offer Pursuant to | ) |                         |
| R.C. 4928.143 in the Form of an Electric | ) |                         |
| Security Plan.                           | ) |                         |

**(Public Version)**

**SECOND SUPPLEMENTAL DIRECT TESTIMONY  
OF  
JAMES F. WILSON**

**On Behalf of**  
**The Office of the Ohio Consumers' Counsel**  
*10 West Broad Street, Suite 1800*  
*Columbus, Ohio 43215-3485*

**And**

**Northeast Ohio Public Energy Council**  
*31320 Solon Rd.*  
*Cleveland, Ohio 44139*

**December 30, 2015**

## **TABLE OF CONTENTS**

|   | <b>PAGE</b> |
|---|-------------|
| I. INTRODUCTION .....   | 1           |
| II. SUMMARY .....   | 3           |
| III. THE AFFILIATE PPA AS REVISED REMAINS VERY COSTLY TO THE<br>FE COMPANIES' CUSTOMERS ..... | 10          |
| IV. COMMENTS ON OTHER PROVISIONS OF THE STIPULATION .....                                     | 18          |

## **EXHIBITS**

Exhibits JFW-1 to JFW-2

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

**I. INTRODUCTION**

***Q1. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.***

***A1.*** My name is James F. Wilson. I am an economist and principal of Wilson Energy Economics. My business address is 4800 Hampden Lane Suite 200, Bethesda, MD 20814.

***Q2. HAVE YOU PREVIOUSLY TESTIFIED IN THIS PROCEEDING?***

***A2.*** Yes. I submitted direct testimony in this proceeding on behalf of the Office of the Ohio Consumers' Counsel ("OCC") and the Northeast Ohio Public Energy Council ("NOPEC") on December 22, 2014, and supplemental testimony on behalf of the same parties on May 11, 2015. My experience and qualifications were described in my direct testimony, which also included a list of past cases in which I testified before the Public Utilities Commission of Ohio ("PUCO"). My curriculum vitae, further describing my experience and qualifications and listing other past testimony, was attached to my direct testimony.

***Q3. ON WHOSE BEHALF ARE YOU NOW TESTIFYING IN THIS PROCEEDING?***

***A3.*** I am again testifying on behalf of OCC and NOPEC.

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*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

**Q4. WHAT IS THE PURPOSE AND SCOPE OF YOUR SECOND  
SUPPLEMENTAL TESTIMONY?**

**A4.** The applicants in this proceeding (Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company; “FE Companies”), and other parties filed a Third Supplemental Stipulation and Recommendation (“Stipulation”) on December 1, 2015, supported by the fifth supplemental testimony and work papers of Eileen M. Mikkelsen (“Mikkelsen testimony”). The Stipulation makes certain changes to the proposed power purchase agreement (“PPA”, “Affiliate PPA”) and associated Retail Rate Stability Rider (“Rider RRS”) covering the output of certain generating units (“PPA Units”). I had evaluated the PPA and Rider RRS in my direct testimony.

My assignment was to review the Stipulation, supporting testimony, work papers, and additional discovery, and to update my estimate of the cost to customers under the proposed PPA and Rider RSS as revised by the Stipulation. I will also respond to some of the rebuttal testimony of the FE Companies’ witness Judah Rose filed on October 20, 2015 with respect to my analysis. Finally, I was also asked to comment on the extent to which other changes under the Stipulation change the benefits and risks to customers under the PPA and Rider RRS.

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1   **II.     SUMMARY**

2

3   ***Q5.   PLEASE BRIEFLY SUMMARIZE YOUR EVALUATION AND MAIN***  
4   ***CONCLUSIONS FROM YOUR DIRECT AND FIRST SUPPLEMENTAL***  
5   ***TESTIMONY.***

6   ***A5.***   In my direct testimony, I evaluated the FE Companies' estimate of the potential  
7       future net costs to customers under the proposed PPA and associated Rider RRS.  
8       I concluded that the FE Companies' estimated cost was unreliable, primarily due  
9       to the speculative nature of the price assumptions used in the analysis, and that the  
10      net cost to customers of the proposed Rider RRS would likely be much greater. I  
11      prepared three alternative scenarios, where I changed only the assumed natural  
12      gas and corresponding electricity price assumptions. Under my second and third  
13      scenarios, which I consider much more likely to occur than the FE Companies'  
14      scenario, Rider RRS would cost customers \$3 billion or \$3.9 billion, respectively,  
15      over the 15 years of the rider and PPA as proposed at that time.

16

17      I also explained that because the proposed Rider RRS would simply pass the net  
18      cost of the PPA through to customers, the incentive to manage the costs, and to  
19      maximize revenues, would be eliminated. This would further expose customers  
20      to high costs, and allow generation that might prove to be uneconomic to continue  
21      in operation for many additional years at the customers' expense. I also found

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1       that any incremental price stability the arrangement might provide by serving as a  
2       type of hedge (which I considered doubtful), would be of little value compared to  
3       the expected net cost, and risk of even higher cost, to customers.

4  
5       In my first supplemental testimony, I rebutted assertions that there is inadequate  
6       revenue in the PJM markets to attract and retain sufficient generation to satisfy  
7       resource adequacy objectives (so-called “missing money”). I explained that, to  
8       the contrary, the PJM markets have had sufficient new entry and adequate total  
9       resources to consistently exceed applicable resource adequacy targets; and  
10      through PJM’s three-year-forward Reliability Pricing Model (“RPM”) capacity  
11      construct, capacity commitments are already in place through May 31, 2018,  
12      indicating there is no “missing money”. I also noted in my first supplemental  
13      testimony that there has been new generation built specifically in Ohio, and  
14      identified four new gas-fired power plants under construction or development in  
15      Ohio.

16  
17   ***Q6.   WHAT DID YOU RECOMMEND WITH REGARD TO THE PROPOSED***  
18   ***RIDER RRS AND PPA?***

19   ***A6.***   I recommended that the Rider RRS proposal be rejected, primarily because the  
20       proposal would shift the costs and risks associated with the Indicated Generation

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*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1 to customers, while eliminating the owners' incentives to manage the costs and  
2 risks of these plants.

3  
4 I also recommended that, should the PUCO choose to approve Rider RRS in some  
5 form, it be modified to reduce the cost and risk to customers and restore some  
6 incentive to the FE Companies to control costs and maximize operation and  
7 revenue. I described how such an incentive mechanism could be designed in the  
8 last section of my direct testimony.

9  
10 ***Q7. ARE THERE ANY NEW DEVELOPMENTS WITH RESPECT TO***  
11 ***RESOURCE ADEQUACY THAT YOU WOULD NOTE AT THIS TIME?***

12 ***A7.*** I will just note a few. Since my supplemental testimony was filed, an application  
13 has been filed for yet another new power plant for Ohio (South Field Energy, in  
14 Columbiana County; dual fuel combined cycle, 1,105 MW).<sup>1</sup> The fact that  
15 several new gas-fired power plants are coming to Ohio should be no surprise, as  
16 the nation's fastest-growing new source of low-cost natural gas is the Utica shale  
17 formation, located primarily in eastern Ohio.<sup>2</sup>

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<sup>1</sup> Case No. 15-1716-EL-BGN, *Application to the Ohio Power Siting Board for a Certificate of Environmental Compatibility and Public Need*, submitted by South Field Energy LLC, December 7, 2015.

<sup>2</sup> U.S. Energy Information Administration, *Drilling Productivity Report*, December 2015 (showing month over month growth in natural gas production of 197 Mcf/d in the Utica Region, compared to 128 Mcf/d in the Marcellus Region and lower values in all five other regions).

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

I also note that PJM has released its 2016 load forecast, which shows a steep reduction in forecast peak demand compared to earlier forecasts.<sup>3</sup> So the FE Companies' case for the PPA and Rider RRS is not supported by any looming shortage of generating capacity. According to a recent statement, PJM also believes its markets have "succeeded in providing reliable, competitively priced wholesale electricity" to Ohio.<sup>4</sup>

**Q8. HAVE YOU UPDATED YOUR ESTIMATE OF THE COST TO CUSTOMERS OF THE PROPOSED PPA AND RIDER RRS?**

**A8.** Yes. I updated my estimates (three scenarios) based on the provisions in the Stipulation, and current market conditions. Under the first alternative scenario, I assume natural gas prices will rise roughly as suggested by the U.S. Energy Information Administration ("EIA") Annual Energy Outlook ("AEO") 2015 "reference case" projection,<sup>5</sup> prepared in early 2015, and energy prices change in a corresponding manner. Under this scenario, which is no longer consistent with market conditions, customers would roughly break even (\$0.05 billion total

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<sup>3</sup> PJM, *PJM Load Forecast Report, January 2016* (showing a 3.5% decline for 2019 compared to the 2015 forecast); available at <http://www.pjm.com/~media/documents/reports/2016-load-report.ashx>

<sup>4</sup> PJM Interconnection LLC, *PJM Statement to the Markets and Reliability Committee on State Initiatives to Sponsor Particular Generation Types*, December 17, 2015, available at <http://www.pjm.com/~media/committees-groups/committees/mrc/20151217/20151217-pjm-statement-to-mrc-on-state-initiatives.ashx><http://www.pjm.com/~media/committees-groups/committees/mrc/20151217/20151217-pjm-statement-to-mrc-on-state-initiatives.ashx>

<sup>5</sup> U.S. Energy Information Administration, *Annual Energy Outlook 2015 with projections to 2040*, April, 2015, available at [http://www.eia.gov/forecasts/aeo/pdf/0383\(2015\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf).



*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1 credit) over the eight years of Rider RRS. This compares to Ms. Mikkelsen's  
2 estimate of a \$0.76 billion credit.

3  
4 Under my second alternative scenario, I assume natural gas prices follow the  
5 AEO 2015 "High Oil and Gas Resource" scenario. As I discussed in my direct  
6 testimony, these projections have been more accurate recently than the AEO  
7 reference projections. Under this scenario, Rider RRS would cost customers \$2.7  
8 billion over the eight years of the rider.

9  
10 Under my third alternative scenario, I assume natural gas prices follow the pattern  
11 reflected in recent forward prices, and rise by inflation in the out years. Under  
12 this scenario, the total cost to customers would be \$3.6 billion over the eight years  
13 of the rider. These results are shown in Table 1.

14  
15 I consider the second and third of these scenarios more likely than Mr. Rose's  
16 scenario of [REDACTED] natural gas and electricity prices, and also more likely  
17 than the now-outdated AEO 2015 reference case. Consequently, I conclude that  
18 the proposed Rider RRS is likely to be very expensive for customers.

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

| <b>Table 1: Summary of Updated Rider RRS Cost Estimates</b> |             |             |             |             |             |             |             |             |             |              |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>(\$ bil.)</b>  | <b>2016</b> | <b>2017</b> | <b>2018</b> | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>2024</b> | <b>Total</b> |
| <b>Scenario 1: AEO 2015 Reference Case</b>                  |             |             |             |             |             |             |             |             |             |              |
| Resulting RRS   | 0.206       | 0.286       | 0.146       | -.093       | -.077       | -0.122      | -0.102      | -0.157      | -0.036      | 0.050        |
| Risk-sharing credit   | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | 0.000        |
| RRS with risk-sharing credit                                | 0.206       | 0.286       | 0.146       | -.093       | -.077       | -0.122      | -0.102      | -0.157      | -0.036      | <b>0.050</b> |
| <b>Scenario 2: AEO 2015 High Oil and Gas Resource Case</b>  |             |             |             |             |             |             |             |             |             |              |
| Resulting RRS   | 0.270       | 0.379       | 0.375       | 0.256       | 0.345       | 0.313       | 0.362       | 0.338       | 0.175       | 2.813        |
| Risk-sharing credit   | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | -0.010      | -0.020      | -0.030      | -0.040      | -0.100       |
| RRS with risk-sharing credit                                | 0.270       | 0.379       | 0.375       | 0.256       | 0.345       | 0.303       | 0.342       | 0.308       | 0.135       | <b>2.713</b> |
| <b>Scenario 3: Based on Recent Forward Prices</b>           |             |             |             |             |             |             |             |             |             |              |
| Resulting RRS   | 0.424       | 0.587       | 0.509       | 0.356       | 0.414       | 0.395       | 0.429       | 0.402       | 0.200       | 3.714        |
| Risk-sharing credit   | 0.000       | 0.000       | 0.000       | 0.000       | 0.000       | -0.010      | -0.020      | -0.030      | -0.040      | -0.100       |
| RRS with risk-sharing credit                                | 0.424       | 0.587       | 0.509       | 0.356       | 0.414       | 0.385       | 0.409       | 0.372       | 0.160       | <b>3.614</b> |

1

2 ***Q9. THE STIPULATION CALLS FOR “CREDITS” OF UP TO \$100 MILLION***  
3 ***OVER THE LAST FOUR YEARS OF RIDER RRS. DID YOU REFLECT***  
4 ***SUCH CREDITS IN YOUR UPDATED ESTIMATE OF THE COST TO***  
5 ***CUSTOMERS?***

6 ***A9.*** Yes, this provision is shown in Table 1. It reduced my estimates of the total cost  
7 to customers by a total of \$100 million in the second and third scenarios.

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1    ***Q10. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING OTHER***  
2            ***PROVISIONS OF THE STIPULATION.***

3    ***A10.*** My direct testimony found that the PPA and Rider RRS resulted in no incentive  
4            for the FE Companies or affiliates to contain costs or maximize market revenues  
5            of the PPA Units, since net costs are simply passed through to customers. I also  
6            found that the PPA and Rider RRS contained no risk-sharing, which the PUCO  
7            had required. The Stipulation does not correct these flaws. A \$100 million  
8            “credit” offered by the Stipulation simply reduces the cost to customers, without  
9            changing the fact that marginal net cost is passed through to customers at 100%,  
10           so it has no impact on incentives. Nor do any other provisions of the Stipulation  
11           address these and other flaws, or improve Rider RRS as a hedge to benefit  
12           customers.

13

14    ***Q11. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?***

15    ***A11.*** The next section presents my updated analysis of the cost to customers. The final  
16           section discusses a few other provisions of the Stipulation.

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

**III. THE AFFILIATE PPA AS REVISED REMAINS VERY COSTLY TO THE  
FE COMPANIES' CUSTOMERS**

***Q12. DID THE FE COMPANIES PROVIDE AN UPDATED ESTIMATE OF THE  
DOLLAR AMOUNTS THAT WOULD BE COLLECTED FROM  
CUSTOMERS UNDER THE PROPOSED RIDER RRS, TO REFLECT THE  
PROVISIONS OF THE STIPULATION?***

***A12.*** Yes. However, the revised estimate reflects only the necessary changes for consistency with the Stipulation. The revised estimate is still based on Mr. Rose's price forecasts that I criticized in my direct testimony. The revised estimate, provided in Witness Mikkelsen's testimony and work papers, reflects only the following changes:<sup>6</sup>

- i. The time period of the PPA and RIDER RRS was updated to June 1, 2016 through May 31, 2024;
- ii. The projected fixed cost forecast was updated to reflect a revised Return on Equity ("ROE").

Under Ms. Mikkelsen's revised estimate, Rider RRS results in a credit of \$.56 billion.

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<sup>6</sup> Response to OCC Set 17-RPD-10 - Attachment 1, Mikkelsen work paper, Nov. 30, 2015.

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

***Q13. PLEASE DESCRIBE HOW YOU PREPARED YOUR UPDATED  
ESTIMATES OF THE POTENTIAL COST TO CUSTOMERS OF THE  
PROPOSED AFFILIATE PPA AND RIDER RRS.***

***A13.*** The estimates I presented in my direct testimony were based on analysis that changed only the natural gas prices, and resulting energy prices, from the FE Companies' Rider RRS analysis. For the revised estimates I am presenting in this supplemental testimony, I made only a few changes to reflect the Stipulation, and to update the price assumptions. Specifically, my updated analysis reflects the following changes:

- i. The time period of the PPA and Rider RRS was updated to June 1, 2016 through May 31, 2024, consistent with the Stipulation;
- ii. The projected fixed cost forecast was updated based on the values in Ms. Mikkelsen's work paper, that reflect a revised ROE;
- iii. The \$100 million credit commitment provided by the Stipulation for the last four years of the period was reflected;
- iv. I updated my analysis based on recent forward prices (accessed December 22, 2015).

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1    ***Q14. WHAT IS THE COST TO CUSTOMERS OF RIDER RRS BASED ON YOUR***  
2            ***ANALYSIS?***

3    ***A14.*** Under my first scenario based on the AEO 2015 reference case, Rider RRS would  
4            result in a small credit to customers (\$0.05 billion). I do not consider this  
5            scenario very likely, as this forecast is now out of date and out of line with market  
6            conditions.

7  
8            Using prices from the AEO 2015 High Oil and Gas Resource projection (my  
9            Scenario 2), the cost to customers is \$2.7 billion (\$1.9 billion net present value),  
10           including the \$100 million credit.

11  
12           Using recent forward prices for the analysis (Scenario 3), the cost to customers is  
13           \$3.6 billion (\$2.7 billion net present value).

14  
15           I consider Scenario 3 the most likely and reasonable estimate, as it is the only one  
16           (including the FE Companies' analysis) based on updated market conditions.

17  
18    ***Q15. WHAT WOULD BE THE COST UNDER RIDER RRS FOR A TYPICAL***  
19            ***RESIDENTIAL CUSTOMER?***

20    ***A15.*** Under my Scenario 3, a typical residential customer, assumed to consume 1,000  
21            KWh per month on average, would bear \$798 to \$836 in additional cost due to

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

Rider RRS (depending on which company serves the customer), and as much as \$130 per year, as shown in Table 2.

| Table 2: Rider RRS Cost for 1,000 KWh/month Residential Customer – Scenario 3 |         |          |          |         |         |         |         |         |         |          |
|---|---------|----------|----------|---------|---------|---------|---------|---------|---------|----------|
|   | 2016    | 2017     | 2018     | 2019    | 2020    | 2021    | 2022    | 2023    | 2024    | Total    |
| OE  | \$93.49 | \$129.57 | \$112.35 | \$78.53 | \$91.41 | \$84.90 | \$90.28 | \$82.04 | \$35.34 | \$797.91 |
| CEI   | \$96.45 | \$133.67 | \$115.90 | \$81.02 | \$94.31 | \$87.59 | \$93.14 | \$84.63 | \$36.46 | \$823.17 |
| TE  | \$97.97 | \$135.78 | \$117.73 | \$82.29 | \$95.79 | \$88.97 | \$94.60 | \$85.97 | \$37.03 | \$836.14 |

***Q16. IS YOUR UPDATED ESTIMATE A CONSERVATIVE ESTIMATE OF THE POTENTIAL COST?***

***A16.*** Yes. I consider my estimate conservative; the cost to customers could be much higher.

i. First, I used Mr. Rose's forecast of [REDACTED] capacity prices. The evidence has been that current capacity prices attract more than enough new entry.

ii. Second, I accepted the FE Companies' plant fixed cost assumptions, despite concerns that, under the proposed arrangement, the FE Companies and affiliates would have no incentive to control these costs.

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1    ***Q17. MR. ROSE DISAGREES THAT HIS FORECASTS OF ENERGY PRICES***  
2           ***ARE TOO HIGH, AND HE ASSERTS THAT YOU DID NOT PROVIDE ANY***  
3           ***FORWARD PRICES FOR ATSI OR AEP DAYTON HUB IN YOUR***  
4           ***TESTIMONY (P. 17). HOW DO MR. ROSE'S ENERGY PRICE***  
5           ***FORECASTS NOW COMPARE TO FORWARD PRICES?***

6    ***A17.*** Exhibit JFW-6 in my direct testimony showed Mr. Rose's electricity price  
7           forecasts, and compared them to forward prices at ATSI and AEP Dayton ("AD")  
8           Hub. Exhibit JFW-1 again compares the monthly averages of Mr. Rose's forecast  
9           hourly electricity prices to the forward prices for the ATSI and AD Hub points  
10          (data accessed on December 22, 2015). Mr. Rose's electricity price forecasts, that  
11          were used in the FE Companies' Rider RRS estimate, are now [REDACTED]  
12          forward prices.

13  
14   ***Q18. MR. ROSE CRITICIZES THE USE OF FORWARD PRICES IN YOUR***  
15           ***ANALYSIS (PP. 49-52) AND SUGGESTS THAT IT IS BETTER TO USE A***  
16           ***MODEL SUCH AS HE HAS DONE (P. 7). DOES BUILDING A MODEL***  
17           ***PROVIDE A BETTER PROJECTION OF FUTURE PRICES THAN DO***  
18           ***FORWARD PRICES?***

19   ***A18.*** No. Forward prices reflect the consensus of market participants who risk real  
20          financial gains and losses by buying or selling forward. Modelers, by contrast,  
21          adopt numerous numerical and structural assumptions to create their forecasts, of



*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1       which some are quite arbitrary and uncertain. The results tend to be highly  
2       sensitive to some of the various assumptions, which can be tuned to provide  
3       results that match the modeler's, or a client's, expectations or desires. Forward  
4       prices are a more grounded reflection of anticipated market conditions.

5

6       ***Q19. HAS MR. ROSE EVER TAKEN A DIFFERENT POSITION WITH RESPECT***  
7       ***TO THE RELATIVE ADVANTAGES OF FORWARD PRICES COMPARED***  
8       ***TO FORECASTING MODELS?***

9       ***A19.*** Yes he has. In testimony before this very commission in 2011, Mr. Rose  
10       provided an analysis that was based on forward prices for all years for which they  
11       were available (over four and a half years into the future), and he used a model  
12       only for later years for which forwards were not available.<sup>7</sup> In that proceeding,  
13       Mr. Rose primarily relied on forward prices, and testified that a model-based price  
14       forecast was needed because forward prices were only available through 2015:<sup>8</sup>

15

16       “Q. WHY IS A MODELING-BASED PRICE FORECAST NEEDED?

17       A. A forecast is needed because ICE and PJM forwards are not available  
18       after 2015.”

19

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<sup>7</sup> Direct Testimony of Judah L. Rose on Behalf of Duke Energy Ohio, Inc., June 20, 2011, PUCO Case No. 11-3549-EL-SSO (“Rose Duke Testimony”), p. 10 (stating that forwards were used through December 31, 2015, in testimony filed in June of 2011).

<sup>8</sup> *Id.*, p. 48 (p. 47 in redacted version).

*PUBLIC VERSION*  
*Second Supplemental Direct Testimony of James F. Wilson*  
*On Behalf of the Ohio Consumers' Counsel*  
*And the Northeast Ohio Public Energy Council*  
*PUCO Case No. 14-1297-EL-SSO*

1   ***Q20. MR. ROSE ALSO CRITICIZES YOUR ANALYSIS FOR HOLDING THE***  
2       ***IMPLIED HEAT RATES CONSTANT WHILE USING LOWER NATURAL***  
3       ***GAS PRICES (PP. 10-12). SHOULD YOU HAVE USED DIFFERENT HEAT***  
4       ***RATES?***

5   ***A20.*** No, Mr. Rose is wrong, and my analysis was sound. Mr. Rose suggests that at  
6       lower natural gas price levels, the heat rates could be higher. But this assertion is  
7       contradicted by his own data, which I illustrated in Exhibit JFW-2 to my direct  
8       testimony (included here again as Exhibit JFW-2).

9       As this exhibit based on discovery clearly illustrates, and as I explained in my  
10      direct testimony (p. 21), the relationship between natural gas and electric prices is  
11      very steady across the range of price levels reflected in the Rider RRS analysis.

12     Where the two lines in Exhibit JFW-2 meet exactly (for example, in 2016, when  
13     gas prices are about [REDACTED], in 2020 to 2024, when gas prices are around

14     [REDACTED], and in 2033, when they are close to [REDACTED] the implied heat

15     rate is [REDACTED] as a result of how I scaled the graph (gas prices

16     to [REDACTED], electric prices to [REDACTED]. When one or the other line is a bit

17     higher, the implied heat rate was slightly different (and in my analysis, I used the

18     implied heat rate for each year). Thus, Mr. Rose's theory that the implied heat

19     rates should vary is contradicted by the forecasts he provided, and that were used

20     in the Rider RRS analysis (and in my analysis), that show a very steady

21     relationship across different natural gas price levels.

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1 ***Q21. MR. ROSE PROFESSES A BELIEF THAT NATURAL GAS PRICES WILL***  
2 ***RISE, IN SUPPORT OF WHICH HE STATES THAT “SHALE GAS WELL***  
3 ***PRODUCTION HAS DECLINED DRAMATICALLY” (P. 6; CORRECTED***  
4 ***TO “INCREASED”, TRANSCRIPT P. 7196), AND HE ALSO NOTES “THE***  
5 ***MASSIVE DECLINES IN SHALE AND CONVENTIONAL WELL OUTPUT”***  
6 ***(P. 36). IS NATURAL GAS PRODUCTION DECLINING?***

7 ***A21.*** No, U.S. natural gas production is growing rapidly, and nowhere as fast as here in  
8 Ohio, with the relatively new Utica formation, as noted earlier in this testimony.  
9 Mr. Rose’s colleagues who specialize in the natural gas industry know this, and  
10 expect Marcellus and Utica production to continue to rise rapidly for many years -  
11 from 20 Bcf/day today, to 35 Bcf/day by 2025, and to more than 40 Bcf/day by  
12 2035.<sup>9</sup>

13  
14 ***Q22. MR. ROSE ALSO ASSERTS THAT YOUR ANALYSIS DID NOT***  
15 ***APPROPRIATELY ADDRESS THE RECENT DEVELOPMENTS IN PJM’S***  
16 ***CAPACITY MARKET (P. 13), AND HE CLAIMS YOU WERE “SILENT”***  
17 ***WITH REGARD TO PJM’S “CAPACITY PERFORMANCE” (“CP”) TARIFF***  
18 ***CHANGES (P. 14). DID YOU FAIL TO CONSIDER THE CHANGES IN***  
19 ***PJM’S CAPACITY MARKET?***

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<sup>9</sup> ICF International, Kevin Petak, Anath Chikkatur, and Julio Manik, *ICF Quick Take, Marcellus Juggernaut*, p. 1 (attached as Attachment JFW-1).

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1   **A22.** No, I follow the PJM capacity market closely, and my analysis fully reflects these  
2           developments. Contrary to Mr. Rose's assertion, I did discuss CP in my direct  
3           testimony (p. 42; pp. 53-54; footnote 18). While I consider Mr. Rose's capacity  
4           price forecast very optimistic, I retained it for my analysis, so I don't understand  
5           why he would criticize this aspect of my analysis.

6  
7   **IV.    COMMENTS ON OTHER PROVISIONS OF THE STIPULATION**

8  
9   ***Q23.   DO OTHER PROVISIONS OF THE STIPULATION AFFECT THE***  
10   ***POTENTIAL IMPACT ON CUSTOMERS OF THE PPA AND RIDER RRS?***

11   **A23.** No. In my direct testimony, I criticized the arrangement for the poor incentives it  
12           creates, and the lack of any risk-sharing provisions. These problems are not  
13           addressed by the Stipulation.

14  
15   ***Q24.   THE STIPULATION AND THE MIKKELSEN TESTIMONY (AT 3)***  
16   ***CHARACTERIZE THE CREDIT COMMITMENT AS "RISK-SHARING".***  
17   ***WILL THIS PROVISION RESULT IN RISK SHARING, OR ADDRESS THE***  
18   ***INCENTIVES ISSUES YOU HAVE RAISED?***

19   **A24.** No, this provision will not have that effect. Under my analysis, as shown in Table  
20           1, the cost to customers under Rider RRS is greater than the maximum credit  
21           amount each year, so the full credit is always applied. As long as it is clear that

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1 the cost to customers will be greater than the maximum credit amount, as I expect  
2 it will be, the credit will have no impact at all on the FE Companies' lack of  
3 incentive to manage the PPA Units effectively or to maximize market value. At  
4 the margin, the FE Companies will still pass all incremental costs, revenues and  
5 net costs through to customers.

6  
7 Only under circumstances where the net cost in a year could be less than the  
8 maximum credit would the credit provide any incentive to minimize cost and  
9 maximize revenue. I consider that unlikely to occur.

10  
11 ***Q25. IN YOUR DIRECT TESTIMONY YOU STATED THAT IF THE AFFILIATE***  
12 ***PPA AND RIDER RRS ARE APPROVED, AN ALTERNATIVE PLAN TO***  
13 ***ALLOCATE RISK, WHICH WAS REQUIRED BY PUCO ORDER, WOULD***  
14 ***BE CRUCIAL. DOES THE STIPULATION PROVIDE THE REQUIRED***  
15 ***RISK ALLOCATION?***

16 ***A25.*** No it does not. All costs of the PPA Units, net of market revenues, would be  
17 passed through to customers through Rider RRS, after the offered "credit". Thus,  
18 after the total credit amount, all risk is imposed on customers.

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*Second Supplemental Direct Testimony of James F. Wilson*  
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1   ***Q26. THE STIPULATION INCLUDES A SECTION ON “FEDERAL ADVOCACY”***  
2       ***THAT CALLS ON THE FE COMPANIES TO ADVOCATE FOR A***  
3       ***“LONGER-TERM CAPACITY PRODUCT.” WOULD A LONGER-TERM***  
4       ***CAPACITY PRODUCT BE A GOOD THING?***

5   ***A26.*** No. PJM stakeholders have at least four times over several years considered this  
6       idea, at the urging of one or another stakeholder, and have four times rejected it.  
7       RPM is fundamentally a short-term capacity construct. To acquire capacity  
8       through auctions, a standard capacity product must be defined. Numerous issues  
9       arise when a multi-year product is considered, such as the duration of the product;  
10      the fraction of the total capacity requirement to acquire under the long-term  
11      product; whether sellers are allowed to offer to provide both the long-term and/or  
12      short-term product; how to clear indivisible offers for the long-term product;  
13      whether the long-term product is available to all sellers or only to certain types of  
14      sellers, such as new entrants; how capacity cleared under the long-term product is  
15      represented in the capacity auctions in subsequent years; how to mitigate seller  
16      and buyer market power in offers for the long-term product; what happens if a  
17      seller is unable to perform; how non-price attributes, such as environmental  
18      characteristics or operating flexibility, can be reflected in the auction for a long-  
19      term capacity product; and the allocation of the capacity and its costs, to name a  
20      few of the issues. Long-term capacity commitments are more appropriately  
21      negotiated between willing buyers and sellers on a bilateral basis, and within such

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1 negotiations (in contrast to an auction), the many different attributes of the subject  
2 capacity can be considered and valued.

3

4 ***Q27. PLEASE SUMMARIZE YOUR COMMENTS ON THE STIPULATION.***

5 ***A27.*** The PPA and Rider RRS, as modified by the Stipulation, would be very costly to  
6 customers, and result in the FE Companies and the owners of the PPA Units  
7 having no incentive to manage costs or maximize revenues. Ohio is now at the  
8 center of the growing North American natural gas boom, which is presently  
9 centered on the Utica shale. Moreover, costs continue to decline for wind and  
10 solar resources, too. Ohio consumers should not be burdened with the PPA Units.

11

12 ***Q28. DOES THIS COMPLETE YOUR SUPPLEMENTAL TESTIMONY?***

13 ***A28.*** Yes it does. However, I understand that I may be asked to update or supplement  
14 my testimony based on new information that may become available.

## **CERTIFICATE OF SERVICE**

I hereby certify that a true copy of the foregoing *Second Supplemental Testimony of James F. Wilson, on Behalf of the Office of the Ohio Consumers' Counsel and Northeast Ohio Public Energy Council, Public Version*, was served via electronic transmission this 30th day of December, 2015 upon the parties below.

/s/ Larry S. Sauer

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