

**BEFORE  
THE PUBLIC UTILITIES COMMISSION OF OHIO**

**In the Matter of the Application of the Ohio )  
Edison Company, the Cleveland Electric )  
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 )**

**Case No. 14-1297-EL-SSO**

**Rehearing Testimony of  
Tyler Comings**

*Redacted Version*

**On Behalf of  
Sierra Club**

**June 22, 2016**

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## List of Exhibits:

- Exhibit TFC-46:** Dominion Virginia Power's and Dominion North Carolina Power's Report of Its Integrated Resource Plan (Dominion IRP), Before the Virginia State Corporation Commission and North Carolina Utilities Commission, April 29, 2016, *available at* <https://www.dom.com/library/domcom/pdfs/electric-generation/2016-irp.pdf?la=en>.
- Exhibit TFC-47:** ICF, The Future of Fuel: Opportunities in an Evolving Global Market, March 25, 2016, *available at* <http://www.icfi.com/insights/white-papers/2016/the-future-of-fuel>.
- Exhibit TFC-48:** EIA, Annual Energy Outlook 2016 Early Release: Annotated Summary of Two Cases, May 17, 2016, *available at* [https://www.eia.gov/forecasts/aeo/er/pdf/0383er\(2016\).pdf](https://www.eia.gov/forecasts/aeo/er/pdf/0383er(2016).pdf).
- Exhibit TFC-49:** PJM Clean Power Plan Modeling: Preliminary Phase 1 Long-Term Economic Compliance Analysis Results, May 6, 2016, *available at* <http://www.pjm.com/~media/documents/reports/20160506-pjm-clean-power-plan.ashx>.
- Exhibit TFC-50:** PJM, 2019/2020 RPM Base Residual Auction Results, *available at* <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2019-2020-base-residual-auction-report.ashx>.

1 **I. INTRODUCTION AND PURPOSE OF TESTIMONY**

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

3 **A** My name is Tyler Comings. I am a Senior Associate with Synapse Energy  
4 Economics, Inc. (Synapse), which is located at 485 Massachusetts Avenue, Suite  
5 2, Cambridge, Massachusetts.

6 **Q Are you the same Tyler Comings who filed direct testimony in this matter on**  
7 **December 22, 2014, supplemental testimony on May 11, 2015, second**  
8 **supplemental testimony on October 13, 2015, and third supplemental**  
9 **testimony on December 30, 2015?**

10 **A** Yes.

11 **Q What is the purpose of your rehearing testimony?**

12 **A** My rehearing testimony addresses the Companies’ modified Rider RRS proposal  
13 (“the proposal”), which was filed on May 2, 2016. I show that this proposal will  
14 likely cost ratepayers substantially. The Companies’ original filing was almost  
15 two years ago and since then they have failed to update critical assumptions—  
16 including those produced by their own consultant.

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

18 **A** Yes. I am attaching Exhibits TFC-46 to -50.

19 **II. SUMMARY OF TESTIMONY**

20 **Q Please summarize your rehearing testimony.**

21 **A** My testimony shows the following key points:

- 22 1. This proposal is risky and will likely lead to higher costs for Ohio  
23 ratepayers. While the costs of the proposal are now fixed for the eight-year  
24 term, the revenues generated will vary with actual energy and capacity  
25 prices. If the uncertain revenue does not outweigh the guaranteed costs,  
26 then ratepayers lose. This scenario is highly likely given that the

1 Companies' two-year old energy and capacity price expectations are  
2 unreasonably high when compared to more recent price forecasts—  
3 including those from the Companies' own consultant.  
4

5 2. The Companies' natural gas price forecast is stale and inflated. The ICF  
6 forecast used in the filing predicted prices that are more than double the  
7 prices so far in 2016 (see CONFIDENTIAL Table 1). Since the filing, ICF  
8 has developed lower natural gas price forecasts. Yet, the Companies have  
9 failed to use this information. This omission significantly inflates the  
10 value of the proposal.  
11

12 3. Because energy prices are highly correlated with natural gas prices, the  
13 former are also stale and inflated. Using a recent PJM energy price  
14 forecast results in [REDACTED] (compared to the Companies'  
15 estimate of a \$260 million benefit).<sup>1</sup> This shows the substantial risk that  
16 ratepayers will be subjected to if, as PJM has recently forecast, energy  
17 prices are [REDACTED] than what the Companies assumed two years ago.  
18

19 4. The capacity prices assumed in the filing are also stale and inflated. Using  
20 actual prices through the 2019/2020 delivery year and the more recent ICF  
21 forecast for the later years reduces the projected benefit by [REDACTED]  
22 [REDACTED] (compared to the Companies' estimate of \$260 million).  
23 This shows the substantial risk that ratepayers will be subjected to if, as  
24 ICF forecast in fall of 2015, capacity prices are [REDACTED] than what the  
25 Companies assumed two years ago.  
26

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<sup>1</sup> In my testimony, reported "benefits" and "costs" of the proposal are in terms of net present value (NPV) over the eight-year term.

1           5. Combining the effects of up-to-date capacity and energy price forecasts  
2           leads to an almost \$1.6 billion NPV cost to ratepayers. The potential costs  
3           of the proposal are too large for the Companies to continually fail to  
4           update key assumptions.

5 **II. THE PROPOSAL STILL PASSES ON SUBSTANTIAL RISKS TO**  
6 **RATEPAYERS AND THEY WILL LIKELY LOSE IF IT IS APPROVED**

7 **Q     How will the value of the transaction be determined?**

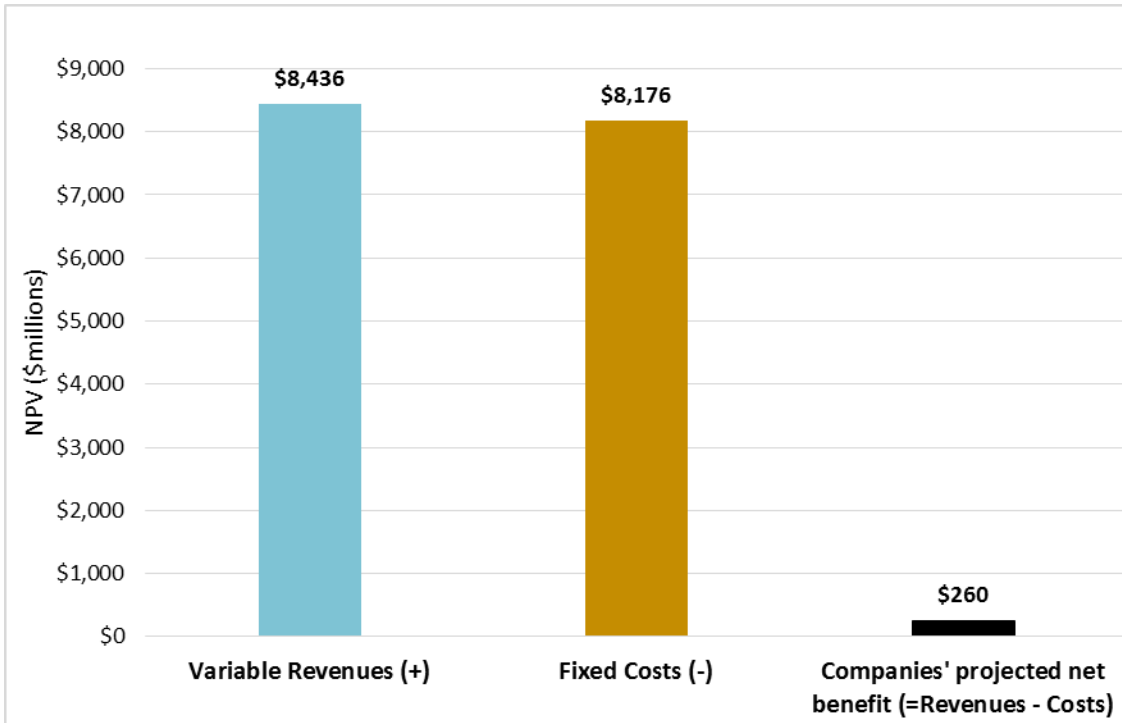
8 **A**     As with previous versions of the Rider RRS, ratepayers will receive a credit if the  
9           revenues outweigh the costs or they will get charged if the costs outweigh the  
10          revenues. However, under the new proposal, the projected levels of generation,  
11          capacity, and total costs are fixed for the eight-year term. Revenues will be  
12          calculated using the actual prices for energy and capacity.

13 **Q     What is the value of the proposal using the Companies' assumptions?**

14 **A**     The Companies' projected value of the transaction is \$260 million net present  
15          value (NPV). This value represents the difference between the Companies'  
16          projected revenues and costs, both of which are substantial amounts: \$8.4 billion  
17          in NPV revenues and \$8.2 billion in NPV costs (shown in Figure 1).<sup>2</sup> A \$260  
18          million net benefit represents only a 3 percent margin—i.e., estimated revenues  
19          are only 3 percent higher than costs. Therefore, even a slight overestimate of  
20          revenues would lead to net costs for ratepayers under this proposal.

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<sup>2</sup> These can be calculated using the values provided in SC Exhibit 89 by discounting each year's "Projected Market Revenue" and "Projected Costs" using the "WACC" (weighted average cost of capital) of 7.46 percent.



1

2 **Figure 1: Companies' Projected Revenues and Costs (\$NPV, billions)**

3 **Q Does the Companies' proposal still subject ratepayers to significant risks?**

4 **A** Yes. While the over \$8 billion NPV in costs that will be factored into the proposal  
 5 are guaranteed, the revenue that will be credited is highly uncertain. The  
 6 Companies' revenue estimates (shown above) are comprised of [redacted] NPV  
 7 in energy revenue and [redacted] NPV in capacity and ancillary services  
 8 revenue. The actual revenues collected, however, will vary with actual energy and  
 9 capacity prices—even though the levels of energy (MWh) and capacity (MW)  
 10 remain fixed. If the uncertain revenue credited to ratepayers does not outweigh  
 11 the guaranteed costs assumed in the transaction, then ratepayers lose. As I will  
 12 show, this is likely to happen. In fact, using a more recent energy price forecast  
 13 from PJM and a more recent capacity price forecast from ICF shows that  
 14 customers would lose money under Modified Rider RRS. Ratepayers are still  
 15 subject to a risky transaction and will likely face increased costs over the eight-  
 16 year term if the proposal is approved.



1 **Q Have the Companies updated their energy and capacity price assumptions**  
2 **since the filing from 2014?**

3 **A** No. As I have discussed in previous testimony, the original transaction transferred  
4 all of the costs of the plants and the market risks onto ratepayers. Because the  
5 costs of running the plants are fixed, the latest proposal removes risks that costs of  
6 running the plants will be higher than the Companies projected. However, the risk  
7 that higher energy and capacity prices will not materialize remains.

8 Both actual and forecasted energy and capacity prices are already lower than what  
9 the Companies' projection relies on. Also, forecasts of future natural gas prices,  
10 energy prices, and capacity prices continue to be lower than the forecasts relied  
11 upon by the Companies. This includes more up-to-date information provided by  
12 ICF—the Companies' consultant in this case.

13 **Q Would updating this information change the projected value of the proposed**  
14 **transaction?**

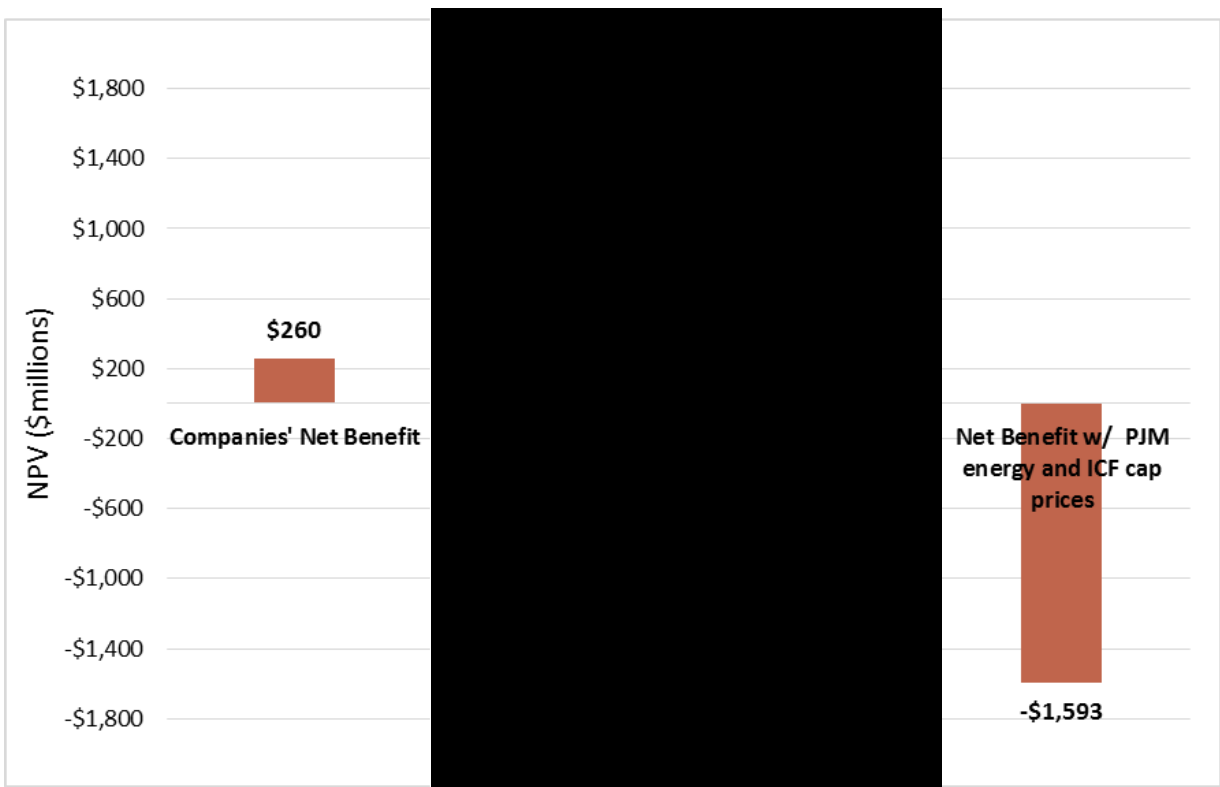
15 **A** Yes. As I will explain in further detail in my testimony, I have updated key  
16 assumptions and estimated the net benefit of the proposal under these  
17 assumptions. The summary of my findings compared to the \$260 million net  
18 benefit estimated by the Companies (shown in CONFIDENTIAL Figure 2)  
19 include:

- 20 • Using ICF's more recent capacity price forecast (and the actual prices through  
21 the 2019/2020 PJM auction) reduces the projected net benefit [REDACTED].  
22 Thus [REDACTED] of the proposal's net benefits are removed when updating  
23 capacity prices alone.<sup>3</sup>

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<sup>3</sup> The estimates also include the confidential results of the transitional auctions which the Companies provided on page 83 of their Post-hearing Reply Brief. My adjusted NPV estimates incorporate these results as well as the "risk-sharing" credit (when applicable) discussed in the Modified Rider RRS proposal.

- 1
- Using a recent PJM energy price forecast instead of the Companies' stale and
- 2 inflated forecast results in the proposal having a [REDACTED] to
- 3 ratepayers. This shows that the greatest risk of the proposal is that energy
- 4 prices will be lower than the two-year-old price forecast that the Companies
- 5 continue to rely on. Given recent data and more up-to-date forecasts, it is
- 6 likely that this risk will cost ratepayers substantially.
- 7
- Combining the more recent capacity and energy price forecasts leads to an
- 8 almost \$1.6 billion cost to ratepayers.



9

10 **CONFIDENTIAL Figure 2: Net Benefits (Costs) of the Proposal (NPV, millions)**

11

1 **A. UPDATED ENERGY PRICE EXPECTATIONS SHOW THAT RATEPAYERS**  
2 **LOSE SUBSTANTIALLY**

3 **Q Are natural gas prices an important determinant of the value of the**  
4 **transaction?**

5 **A** Yes. Natural gas prices are highly correlated with energy prices and, therefore,  
6 will play an important role in how much revenue the ratepayers would collect  
7 under Modified Rider RRS. The ICF natural gas price forecast used by the  
8 Companies is outdated and unreasonably high which, in turn, contributes to ICF  
9 projecting energy prices that are too high, as I will discuss later.

10 **Q How have natural gas prices changed since the Companies' valuation of the**  
11 **proposed transaction?**

12 **A** The average natural gas price was \$2.63 per MMBtu in 2015 and \$1.97 per  
13 MMBtu in 2016 (January through May). The ICF forecast used in the filing  
14 predicted prices that are more than double the year-to-date price through May  
15 2016 and almost [REDACTED] than the expected prices in 2017 (see  
16 CONFIDENTIAL Table 1). Futures contracts for natural gas show that the market  
17 expects prices to remain around \$3 per MMBtu through 2018, while the  
18 projection from mid-2014 that the Companies rely on has prices [REDACTED]  
19 [REDACTED] by 2018.

20

21

22

1 **CONFIDENTIAL Table 1: ICF Henry Hub Forecast Compared to 2015 and 2016**  
 2 **Actual Prices and 2017 and 2018 NYMEX Futures (\$/MMBtu)<sup>4</sup>**

	ICF forecast (used in filing)	Actual (2015-May 2016) and NYMEX (2017-2018)	ICF ██████████ (%)
2015	\$4.34	\$2.63	65%
2016	\$4.28	\$1.97	117%
██████████	██████████	\$3.07	██████████
██████████	██████████	\$3.00	██████████

3

4 **Q Has ICF produced a more recent forecast that more accurately reflects**  
 5 **natural gas price expectations?**

6 **A** Yes. They have produced several publicly available forecasts since the filing—all  
 7 of which are ██████████ than the 2014 forecast that the Companies  
 8 continue to rely on this proceeding. These forecasts provide further evidence that  
 9 the mid-2014 ICF forecast is outdated and should not be relied on in evaluating  
 10 the Modified Rider RRS in June 2016. These more up-to-date ICF forecasts  
 11 (shown in CONFIDENTIAL Figure 3) include:

- 12 • An **August 2015** forecast provided to DTE Electric in Michigan.<sup>5</sup> As  
 13 shown below, this forecast is ██████████ in every year than the ICF forecast  
 14 used in the Companies’ filing.
- 15 • A **Fall 2015** forecast used in Dominion Power’s 2016 Integrated Resource  
 16 Plan which lowered expected prices in 2016 and 2017--relative to the

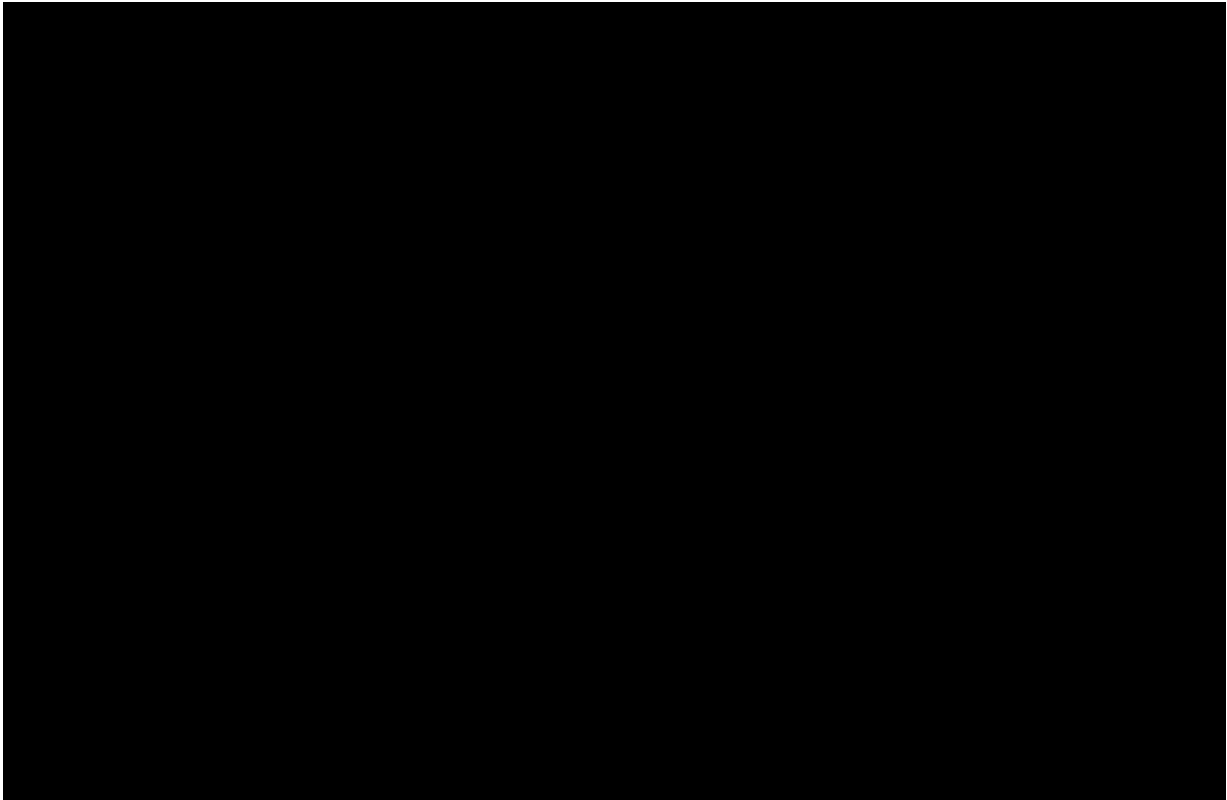
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<sup>4</sup> Natural gas prices in 2015 and 2016 are annual averages of Henry Hub monthly prices from January 2015 through May 2016 reported by EIA (available at: <https://www.eia.gov/dnav/ng/hist/rngwhhdm.htm>). NYMEX futures are from June 14, 2016 (downloaded from: [http://www.cmegroup.com/trading/energy/natural-gas/natural-gas\\_quotes\\_settlements\\_futures.html](http://www.cmegroup.com/trading/energy/natural-gas/natural-gas_quotes_settlements_futures.html)). ICF forecast prices are reported in the workpapers of Judah Rose.

<sup>5</sup> Exhibit A-25, Before the Michigan PSC, Case No.: U-17920, p.17, attached as Exhibit TFC-44 to my Third Supplemental Testimony. SC Ex. 95. Numbers adjusted to nominal dollars based on 2.1% annual inflation. This forecast assumed Clean Power Plan (CPP) compliance.

1 August 2015 forecast.<sup>6</sup> As shown below, this forecast is [REDACTED] than the  
2 ICF forecast used in the Companies' filing for every year through 2024.

- 3 • A **March 2016** forecast showed similar prices in 2016 and 2017 to the  
4 Fall 2015 forecast and lower prices through 2021.<sup>7</sup> As shown below, this  
5 forecast is [REDACTED] than the ICF forecast used in the Companies' filing.



6 **CONFIDENTIAL Figure 3: Comparison of Henry Hub Natural Gas Price**  
7 **Forecasts (\$/MMBtu)<sup>8</sup>**  
8

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<sup>6</sup> Dominion Virginia Power's and Dominion North Carolina Power's Report of Its Integrated Resource Plan (Dominion IRP), Before the Virginia State Corporation Commission and North Carolina Utilities Commission, April 29, 2016. Attached as Exhibit TFC-46. This refers to the ICF Reference Case. ICF conducted several scenarios in this IRP—including a CPP case which had lower prices than the Reference Case. The Reference Case methodology was similar to that used by Mr. Rose in the Companies' filing regarding carbon regulation. Available at: <https://www.dom.com/library/domcom/pdfs/electric-generation/2016-irp.pdf?la=en>

<sup>7</sup> ICF, Future of Fuel: Opportunities in an Evolving Global Market, March 25, 2016. Available at: <http://www.icfi.com/insights/white-papers/2016/the-future-of-fuel>. Attached as Exhibit TFC-47.

<sup>8</sup> *Supra* notes 5 through 7.

1 **Q How much [REDACTED] is the ICF forecast used in the Companies' filing compared**  
2 **to its more recent forecasts?**

3 **A** The mid-2014 ICF forecast being relied upon in this filing predicts prices that are  
4 71 percent higher than its March 2016 forecast of 2016 prices. Substituting in a  
5 more up-to-date and reasonable forecast would have a substantially negative  
6 impact on the proposed transaction. As I will show, such a substitution would  
7 actually lead to a substantial cost to ratepayers.

8 **CONFIDENTIAL Table 2: ICF Henry Hub Natural Gas Price Forecast Used in**  
9 **Filing Compared to ICF March 2016 Forecast (\$/MMBtu)<sup>9</sup>**

	<b>ICF forecast (used in filing)</b>	<b>ICF March 2016</b>	<b>ICF 2014 forecast [REDACTED] (%)</b>
2016	\$4.28	\$2.50	71%
2017	[REDACTED]	\$2.87	[REDACTED]
2018	[REDACTED]	\$2.98	[REDACTED]
2019	[REDACTED]	\$3.86	[REDACTED]
2020	[REDACTED]	\$4.67	[REDACTED]
2021	[REDACTED]	\$5.06	[REDACTED]

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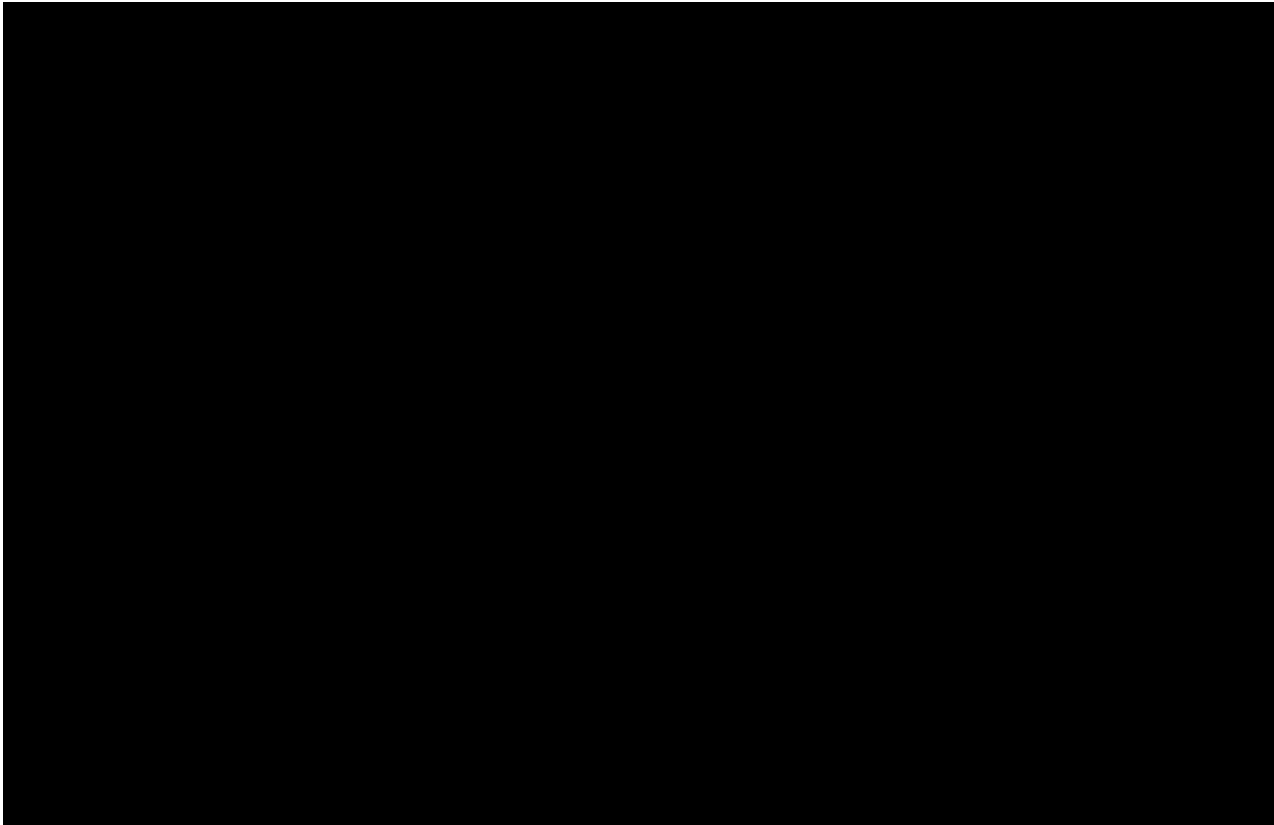
11 **Q Have other entities produced price forecasts that are similar to ICF's more**  
12 **recent work?**

13 **A** Yes. At least two other sources forecast prices that are similar to ICF's most  
14 recent forecasts. These are overlaid on the ICF forecasts in CONFIDENTIAL  
15 Figure 4, including: 1) a recent forecast from PJM and 2) the most recent forecast  
16 from the Energy Information Administration (EIA) in its 2016 Annual Energy  
17 Outlook (AEO) Early Release.<sup>10</sup> Compared to its 2015 projection, the EIA now  
18 projects lower prices throughout including "stable prices" in the long-term due to

<sup>9</sup> *Supra* note 5.

<sup>10</sup> PJM Transmission Expansion Advisory Committee (TEAC) Market Efficiency Update, June 9, 2016. Available at: <http://www.pjm.com/committees-and-groups/committees/teac.aspx>; EIA AEO 2016 Early Release. Available at: [http://www.eia.gov/forecasts/aeo/data/browser/#/?id=13-AEO2016&cases=ref2016~ref\\_no\\_cpp&sourcekey=0](http://www.eia.gov/forecasts/aeo/data/browser/#/?id=13-AEO2016&cases=ref2016~ref_no_cpp&sourcekey=0).

1 “technology improvements, which result in drilling cost declines and increased  
2 recovery rates, allow productive capacity to keep pace with demand.”<sup>11</sup> As with  
3 the more recent ICF work, the EIA and PJM both expect natural gas prices to be  
4 [REDACTED] than what is being used in the Companies’ filing.



5  
6 **CONFIDENTIAL Figure 4: Comparison of Natural Gas Price Forecasts**  
7 **(\$/MMBtu)<sup>12</sup>**  
8

9 **Q Have the 2014 ICF forecasts also overestimated actual energy prices?**

10 **A** Yes. The mid-2014 ICF energy prices forecast relied on in for the proposal in the  
11 Companies’ rehearing application also suffers from being out of date and  
12 [REDACTED] biased. This effect is seen when comparing ICF’s energy prices to

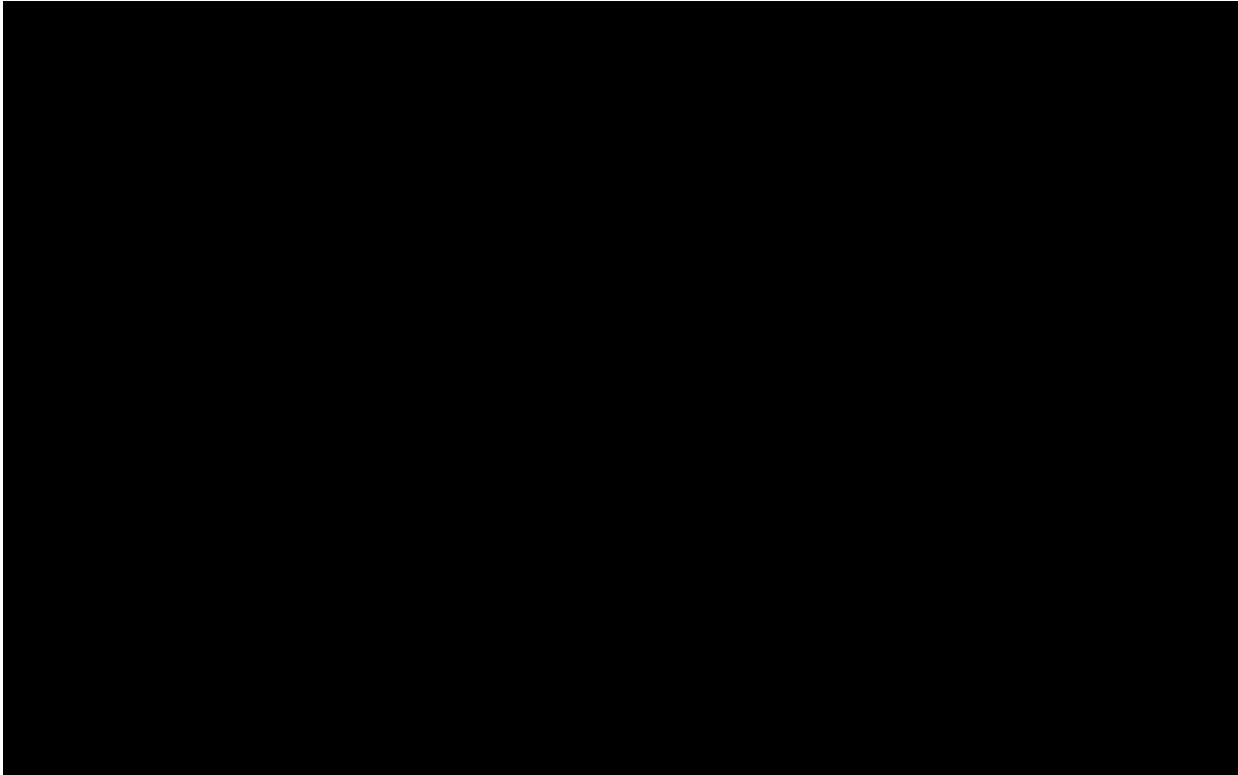
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<sup>11</sup> EIA. Annual Energy Outlook 2016 Early Release: Annotated Summary of Two Cases. Available at: [https://www.eia.gov/forecasts/aeo/er/pdf/0383er\(2016\).pdf](https://www.eia.gov/forecasts/aeo/er/pdf/0383er(2016).pdf). Attached as Exhibit TFC-48.

<sup>12</sup> *Id.*; *supra* notes 5 through 8.

1 actual prices. As shown in CONFIDENTIAL Figure 5, from January 2015  
2 through May 2016, ICF has [REDACTED] the energy price in every month but  
3 one. For 2015, ICF's 2014 forecast predicted prices that were [REDACTED]  
4 than actual AEP-Dayton prices. That old forecast's performance has only [REDACTED]  
5 [REDACTED] since then. So far in 2016, ICF's predictions are [REDACTED] than  
6 actual prices. This result is a reflection of using stale forecasts that have not been  
7 updated to reflect changes in natural gas prices and load growth, among other key  
8 factors used in developing energy prices. If Rider RRS (either the original or  
9 modified version) had been in effect in 2015 or in the beginning of this year,  
10 ratepayers would have [REDACTED] than what the Companies had  
11 projected for those periods.





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**CONFIDENTIAL Figure 5: Comparison of Energy Price Forecasts (\$/MWh, all-hours price)<sup>13</sup>**

**Q Are there more recent energy price forecasts that are publicly available?**

**A** Yes. In conducting an analysis of the Clean Power Plan (CPP), PJM released a region-wide energy price forecast. This energy forecast relates to the PJM natural gas price forecast I discussed previously (see CONFIDENTIAL Figure 4), which was similar to more recent ICF natural gas price forecasts and [REDACTED] than the one relied upon in this filing. The PJM forecast of energy prices is shown below in Table 3.

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<sup>13</sup> ICF forecast from Data Response to SC Set 1-RPD-28, Attachment 1 – Confidential, AEP Dayton Hub prices; Actual prices from PJM Day-ahead LMP’s for AEP Dayton Hub, available at: <http://www.pjm.com/markets-and-operations/energy/day-ahead/lmpda.aspx>. These are in nominal dollars.

1 **Table 3: PJM Energy Price Forecast (\$/MWh, load-weighted)<sup>14</sup>**  
2

	2018	2019	2020	2021	2022	2023	2024
PJM forecast	\$32	\$37	\$40	\$43	\$46	\$49	\$50

3

4 **Q Is this energy price forecast likely inflated relative to what will be used in the**  
5 **proposal?**

6 **A** Yes. The proposal will credit energy revenue using actual AEP-Dayton Hub  
7 prices.<sup>15</sup> The average energy revenue per MWh projected by the Companies is  
8 close to their projections of the all-hours energy price. As shown in Table 4, the  
9 load-weighted AEP-Dayton price is typically lower than the equivalent for PJM  
10 as a whole. These load-weighted prices are higher than the all-hours prices  
11 because the former adjusts for the fact that prices are higher in hours where load  
12 is higher. Thus the PJM-wide, load-weighted energy price is likely higher than the  
13 actual energy prices that will be applied to the proposal.

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<sup>14</sup> PJM Clean Power Plan Modeling: Preliminary Phase 1 Long-Term Economic Compliance Analysis Results, May 6, 2016. These are in nominal dollars. The scenario shown here is “Trade-Ready Mass” for CPP compliance (i.e. mass-based compliance with state trading); however, these prices are nearly identical to PJM’s “Reference” (i.e. no CPP) and “State Mass” (i.e. mass-based state compliance) cases through 2024. Available at: <http://www.pjm.com/~media/documents/reports/20160506-pjm-clean-power-plan.ashx>. Attached as Exhibit TFC-49.

<sup>15</sup> Mikkelsen Rehearing Testimony, p.7, line 21.

1  
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**Table 4: PJM Energy Prices (\$/MWh, load-weighted)<sup>16</sup>**

	LMP (\$/MWh)		Percent of PJM-wide load-weighted price	
	2014	2015	2014	2015
PJM, Load-weighted	\$53.62	\$36.73		
AEP-Dayton, Load-weighted	\$46.64	\$32.77	87%	89%
AEP-Dayton, All-hours average	\$44.08	\$31.48	82%	86%

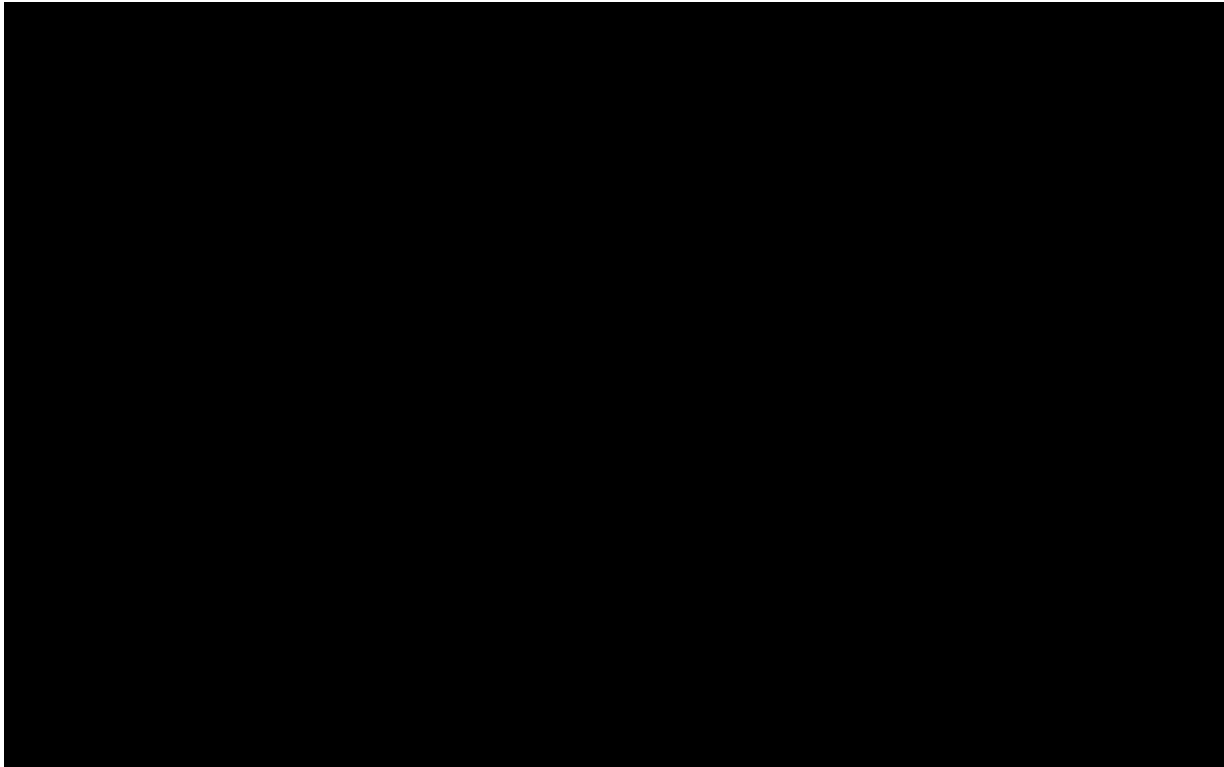
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**Q How does the value of the transaction change with the PJM energy price forecast?**

**A** The value of the proxy transaction is highly sensitive to energy prices, which means that ratepayers would still be subject to the substantial risk under Modified Rider RRS that energy prices will continue to be [REDACTED] than the mid-2014 forecast the Companies relied on. Using the PJM energy price forecast results in a [REDACTED] (compared to the Companies' estimate of a \$260 million benefit). Shown in CONFIDENTIAL Figure 6, I have substituted the PJM load-weighted price for the Companies' projections of average prices per MWh. This substitution shows the substantial costs that ratepayers will face if, as PJM forecasts, energy prices are [REDACTED] than what the Companies assumed two years ago. Also note that the PJM forecast begins in 2018. In performing this analysis, I have not adjusted the 2016 and 2017 energy prices relied on by the Companies to reflect more up-to-date forecasts for those time periods. If I did so, then my results would show [REDACTED] for ratepayers.

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<sup>16</sup>. Monitoring Analytics, LLC, State of the Market Report for PJM 2015 (Table 11-6), March 10, 2016. Both available at: [http://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2016.shtml](http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2016.shtml)



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**CONFIDENTIAL Figure 6: Net Benefits (Costs) of the Proposal Using PJM Energy Price Forecasts (NPV, millions)**

**Q** Could ratepayers still lose if actual energy prices increase from their current levels during the proposal’s term?

**A** Yes. Energy prices still increase from their current levels under the PJM forecast. As such, Ms. Mikkelsen is not correct when she says that “if power prices rise” from their “current low levels . . . customers will begin to see credits.”<sup>17</sup> Instead, ratepayers will only begin to see credits under the Modified Rider RRS if energy prices (and capacity prices) rise from their current lows to levels that are close to what ICF forecasted back in 2014. Given how [REDACTED] [REDACTED] actual energy prices (and capacity prices) have been compared to ICF’s forecast to date, and how inflated the ICF forecasts are to begin with, while energy prices may increase from their current levels, it is highly unlikely that they will reach the heights set

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<sup>17</sup> Mikkelsen Rehearing Testimony at 10.

1           forth in ICF’s 2014 forecast. And under Modified Rider RRS, it is ratepayers that  
2           bear the risk around such energy prices.

3   **B.    UPDATED CAPACITY PRICE EXPECTATIONS ALONE WOULD REMOVE**  
4   **MOST OF THE PROPOSAL’S PURPORTED BENEFITS**

5   **Q    Are ratepayers also subject to capacity price risk?**

6   **A**Yes. Under Modified Rider RRS, ratepayers would be credited capacity revenue  
7           based on the amount of capacity that the Companies projected would clear the  
8           capacity auction multiplied by actual capacity prices, rather than the prices  
9           forecasted by the Companies. As such, even under Modified Rider RRS  
10          ratepayers would still be subject to the risk that actual capacity prices will be  
11          considerably lower than what the Companies forecast.

12   **Q    Is the capacity price forecast used by the Companies unreasonable and stale?**

13   **A**Yes. The capacity revenue projection relied on by the Companies unreasonably  
14          assumes that capacity prices will [REDACTED].  
15          Continuing to use this capacity price forecast overvalues the proposal. As shown  
16          below in CONFIDENTIAL Figure 7, the actual capacity auction results for the  
17          2018/2019 delivery year were [REDACTED] than ICF anticipated: it projected [REDACTED]  
18          [REDACTED] whereas the actual price was \$165 per MW-day (such that ICF’s  
19          forecast was [REDACTED] higher than the actual result).<sup>18</sup> The ICF forecast price for  
20          the 2019/2020 delivery year was [REDACTED] the actual result: it projected  
21          [REDACTED] whereas the actual price was \$100 per MW-day.<sup>19</sup> While the  
22          Companies have provided actual capacity revenue through the 2018/2019 auction  
23          (which is included in my NPV estimates), they have not provided the 2019/2020  
24          results nor have they updated the price assumption for that year in their valuation.

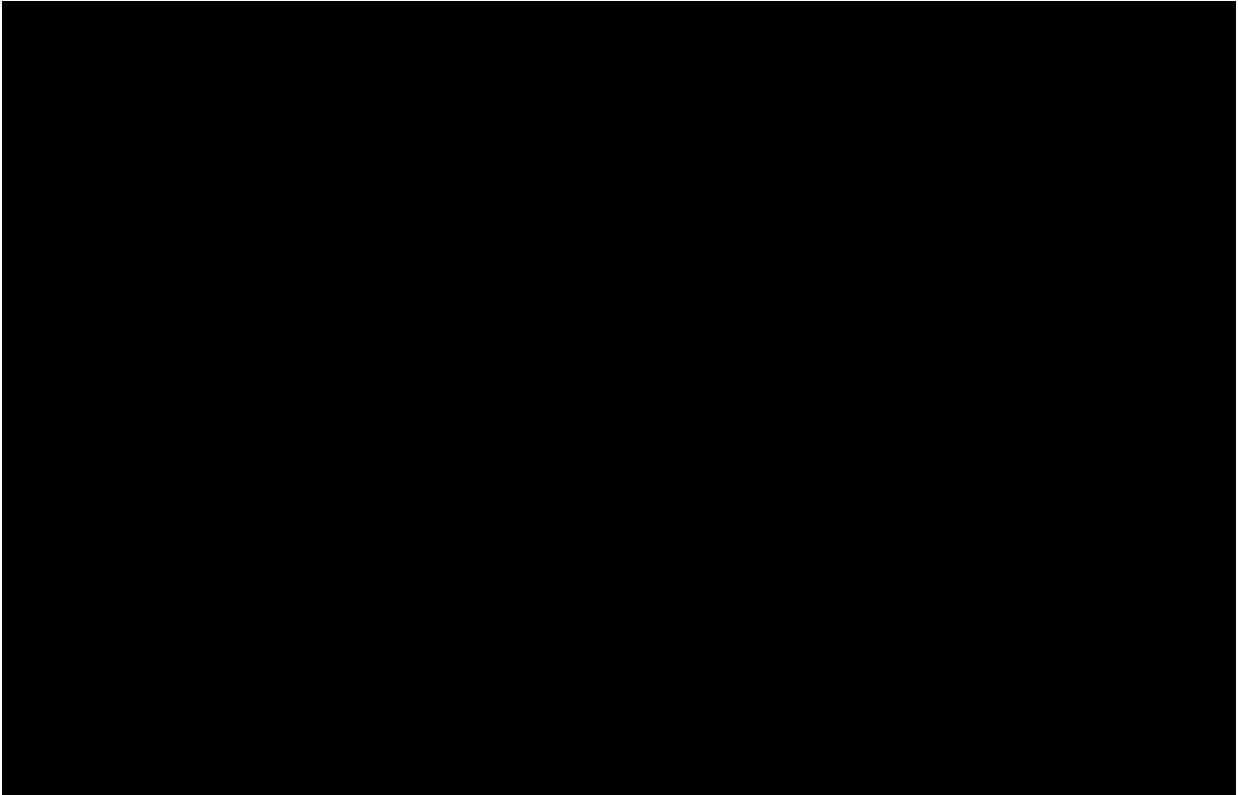
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<sup>18</sup> PJM BRA results (available at: <http://www.pjm.com/~media/markets-ops/rpm/rpm-auction-info/2019-2020-base-residual-auction-report.ashx>). The Companies’ capacity price projections are presented in the workpapers for Mr. Lisowski’s direct testimony. Attached as Exhibit TFC-50.

<sup>19</sup> *Id.*

1 **Q Has ICF produced a more recent forecast that more accurately reflects**  
2 **capacity price expectations?**

3 **A** Yes. ICF’s Fall 2015 forecast, which was publicly disclosed in Dominion  
4 Energy’s April 2016 Integrated Resource Plan, produced a capacity price forecast  
5 in addition to the aforementioned natural gas price forecast (see  
6 CONFIDENTIAL Figure 3). This more recent view from ICF (shown in  
7 CONFIDENTIAL Figure 7) shows a [REDACTED] in expected prices  
8 relative to what it expected in 2014. Unfortunately, the Companies continue to  
9 rely on the stale and inflated expectations from more than two years ago. They  
10 have failed to update their projections of capacity revenue from the proposal even  
11 though ICF’s outlook has obviously changed. In the results presented further in  
12 my testimony, I use the actual 2019/2020 price and the ICF Fall 2015 forecast for  
13 subsequent years.



1

2 **CONFIDENTIAL Figure 7: Companies' Projected Capacity Prices Compared to**  
3 **Actual Auction Results and ICF Fall 2015 Forecast (\$/MW-day)<sup>20</sup>**

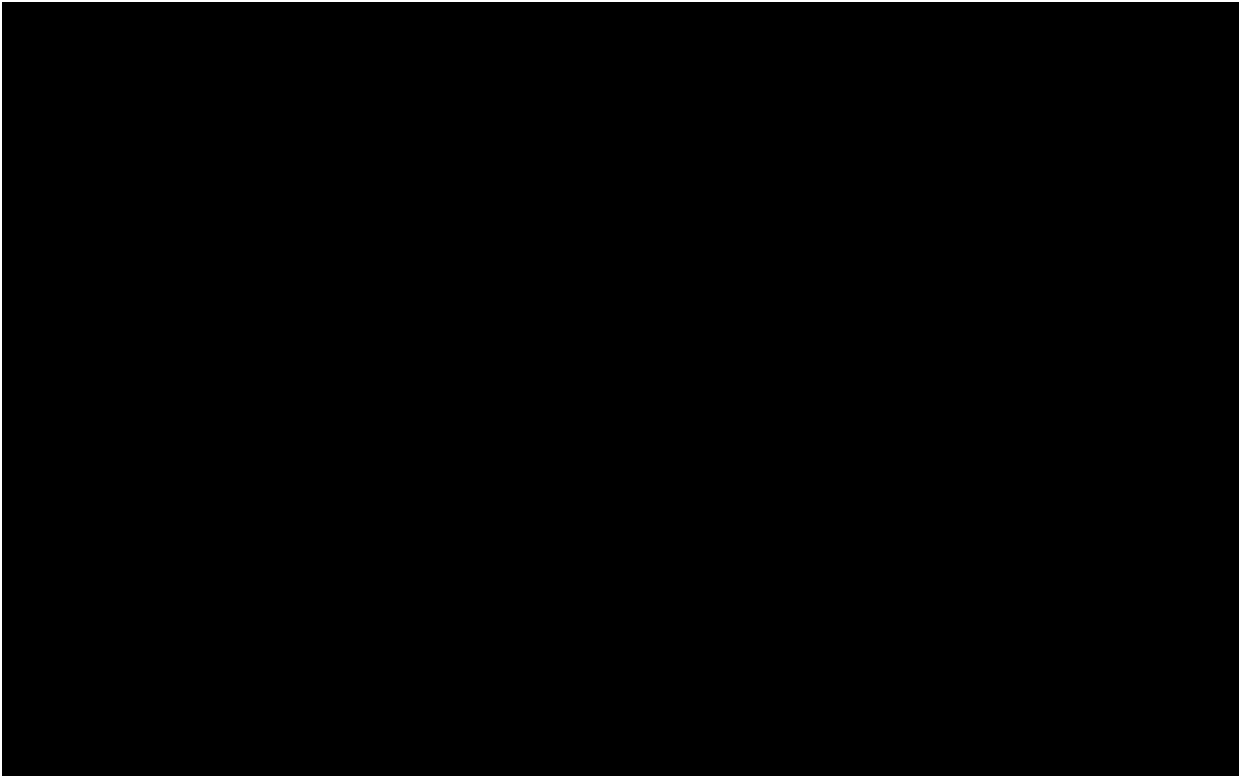
4 **Q How does the value of the transaction change with the updated ICF capacity**  
5 **price forecast?**

6 **A** Like generation levels, capacity levels are also fixed in the Companies' new  
7 proposal while energy and capacity prices are not. As I did with energy prices, I  
8 have provided an updated estimate of the net benefit of the proposal with updated  
9 capacity prices. Once again, the Companies ignored new information to their  
10 ratepayers' detriment. Shown in CONFIDENTIAL Figure 8, using the more  
11 recent ICF forecast reduces the projected benefit of Modified Rider RRS to [REDACTED]  
12 [REDACTED] (compared to the Companies' estimate of \$260 million)—a [REDACTED]  
13 reduction in value. This shows the substantial risk that ratepayers will be

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<sup>20</sup> *Id. Supra note 7.* This refers to the ICF Reference Case. Other scenarios in the IRP show lower capacity prices than the Reference Case shown here.

1           subjected to when capacity prices are [REDACTED] than what the Companies assumed  
2           two years ago—even without adjusting the Companies’ assumed energy prices.

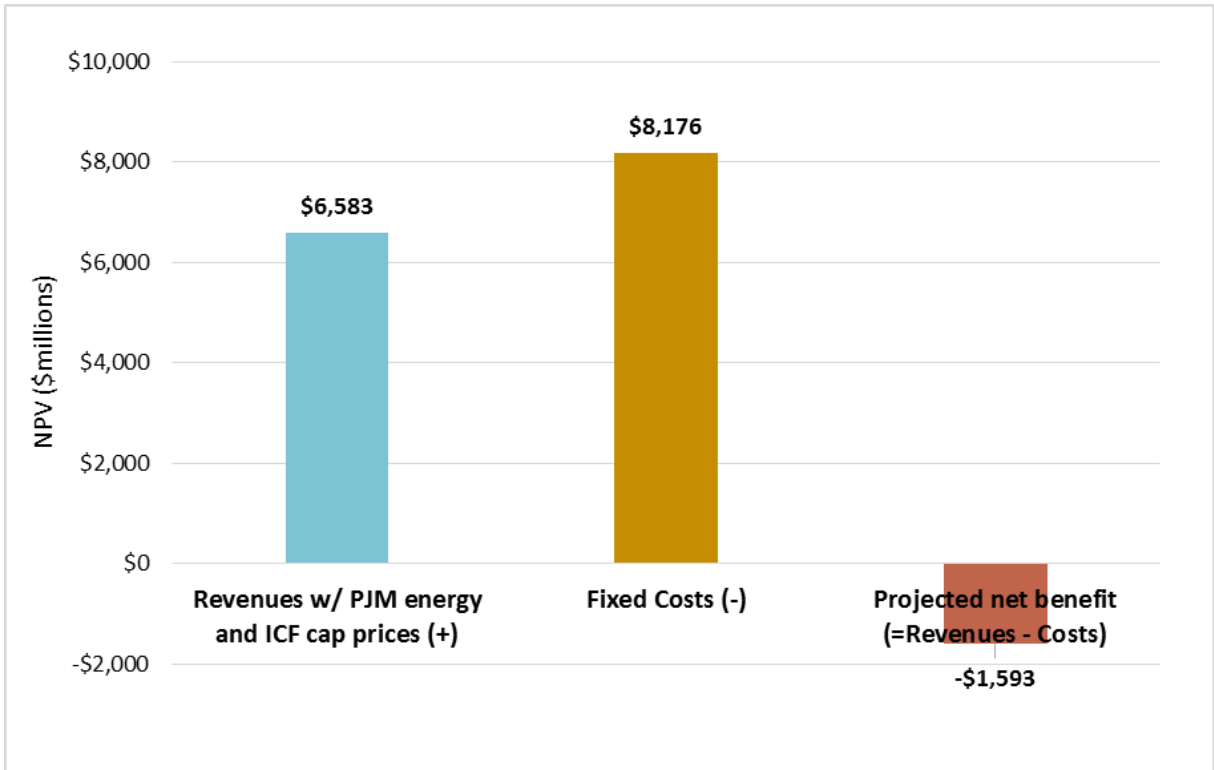


3  
4           **CONFIDENTIAL Figure 8: Net Benefits (Costs) of the Proposal Using ICF Fall**  
5           **2015 Capacity Prices (NPV, millions)**

6           **Q     Have you estimated the combined effects of using more up-to-date capacity**  
7           **and energy prices?**

8           **A     Yes. Shown in Figure 9, using ICF’s Fall 2015 capacity price forecast and the**  
9           **recent PJM energy price forecast leads to an almost \$1.6 billion NPV cost to**  
10           **ratepayers. The combined effects of updating capacity and energy prices show the**  
11           **cost that ratepayers will likely pay based on forecasts that are more current than**  
12           **the stale forecasts from 2014 that the Companies are continuing to use.**





1

2 **Figure 9: Net Benefits (Costs) of the Proposal Using Updated Energy and Capacity**  
 3 **Price Forecasts (NPV, millions)**

4 **Q Given the use of outdated forecasts, should the proposal be pursued at this**  
 5 **time?**

6 **A** No. Under the Companies’ proposal, \$8 billion NPV in costs would be passed  
 7 onto ratepayers. The proposal will only benefit ratepayers if they can more than  
 8 make up for these guaranteed costs with uncertain revenues, which will vary with  
 9 actual energy and capacity prices. Unfortunately, the Companies’ projections of  
 10 revenue credits to ratepayers are based on two-year old natural gas, energy, and  
 11 capacity prices. Even though actual market conditions to date have differed  
 12 widely from what ICF forecast, and the available evidence (including ICF’s own  
 13 updated forecasts) suggest that they will continue to do so, the Companies’  
 14 projection of charges and credits under the Modified Rider RRS proposal is based  
 15 on the outdated mid-2014 ICF forecasts. Such an approach is unreasonable.  
 16 Moreover, under the Companies’ Modified Rider RRS proposal, ratepayers would

1 still be subject to the significant risk that energy, capacity, and natural gas prices  
2 will [REDACTED] be significantly lower than ICF's [REDACTED] forecasts from 2014. Thus,  
3 the new proposal leaves ratepayers vulnerable to these market risks and, if  
4 approved, the proposal will likely cost them substantially.

5  
6 **IV. FINDINGS AND RECOMMENDATIONS**

7 **Q What are your findings?**

8 **A** My key findings are the following:

- 9 1. This proposal is risky and will likely lead to higher costs for Ohio  
10 ratepayers. While the costs of the proposal are now fixed for the eight-year  
11 term, the revenues generated will vary with actual energy and capacity  
12 prices. If the uncertain revenue does not outweigh the guaranteed costs,  
13 then ratepayers lose. This scenario is highly likely given that the  
14 Companies' two-year old energy and capacity price expectations are  
15 unreasonably high when compared to more recent price forecasts—  
16 including those from the Companies' own consultant.  
17
- 18 2. The Companies' natural gas price forecast is stale and inflated. The ICF  
19 forecast used in the filing predicted prices that are more than double the  
20 prices so far in 2016 (see CONFIDENTIAL Table 1). Since the filing, ICF  
21 has developed lower natural gas price forecasts. Yet, the Companies have  
22 failed to use this information. This omission significantly inflates the  
23 value of the proposal.  
24
- 25 3. Because energy prices are highly correlated with natural gas prices, the  
26 former are also stale and inflated. Using a recent PJM energy price  
27 forecast results in a [REDACTED] (compared to the Companies'  
28 estimate of a \$260 million benefit). This shows the substantial risk that

1 ratepayers will be subjected to if, as PJM has recently forecast, energy  
2 prices are [REDACTED] than what the Companies assumed two years ago.

3  
4 4. The capacity prices assumed in the filing are also stale and inflated. Using  
5 actual prices through the 2019/2020 delivery and the more recent ICF  
6 forecast for the later years reduces the projected benefit by [REDACTED], to  
7 [REDACTED] (compared to the Companies' estimate of \$260 million).  
8 This shows the substantial risk that ratepayers will be subjected to if, as  
9 ICF forecast in fall of 2015, capacity prices are [REDACTED] than what the  
10 Companies assumed two years ago.

11  
12 5. Combining the effects of up-to-date capacity and energy price forecasts  
13 leads to an almost \$1.6 billion NPV cost to ratepayers. The potential costs  
14 of the proposal are too large for the Companies to continually fail to  
15 update key assumptions.

16 **Q What are your recommendations?**

17 **A** For reasons discussed above, I recommend that the modified Rider RRS proposal  
18 be denied.

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

20 **A** Yes, it does. However, I reserve the right to update or supplement my testimony  
21 based on new information that may become available.

## CERTIFICATE OF SERVICE

I hereby certify that on this date a copy of the foregoing Redacted Version of the Rehearing Testimony of Tyler Comings was served upon the following parties via electronic mail.

Date: June 22, 2016

s/ Michael Soules

Michael Soules

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