

Exhibit No.:  
Issue: Fuel Hedging - Implementation  
Witness: Aaron Doll  
Type of Exhibit: Rebuttal Testimony  
Sponsoring Party: Empire District Electric  
Case No. EO-2017-0065  
Date Testimony Prepared: June 2017

**Before the Public Service Commission  
of the State of Missouri**

**Rebuttal Testimony**

**of**

**Aaron Doll**

**June 2017**



**Empire District**<sup>™</sup>  
A Liberty Utilities Company

REBUTTAL TESTIMONY  
OF  
AARON DOLL  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. EO-2017-0065

1 **INTRODUCTION**

2 **Q. ARE YOU THE SAME AARON DOLL WHO PROVIDED DIRECT**  
3 **TESTIMONY IN THIS CASE ON BEHALF OF THE EMPIRE DISTRICT**  
4 **ELECTRIC COMPANY?**

5 A. Yes.

6 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**  
7 **CASE?**

8 A. My rebuttal testimony addresses inaccuracies in the Direct Testimony of Office of  
9 Public Counsel (“OPC”) witness John Riley and comments made by OPC witness  
10 Lena Mantle in her Direct Testimony with regard to FERC Order 668 and Empire’s  
11 netting procedures.

12 **Q. WHAT OTHER REBUTTAL TESTIMONIES WILL BE PROVIDED BY**  
13 **EMPIRE?**

14 A. Empire witness Blake Mertens will address the response to OPC direct testimonies  
15 related to hedge performance evaluation, and Robert Sager will discuss the structure  
16 and policy of risk management for Empire as it relates to hedging activities.

17 **Q. AS BACKGROUND FOR YOUR REBUTTAL TESTIMONY, PLEASE**  
18 **BRIEFLY EXPLAIN HOW EMPIRE HEDGES NATURAL GAS.**

1 A. Empire hedges its natural gas exposure using a ladder approach, referred to in its Risk  
2 Management Policy (“RMP”) as progressive dollar cost averaging, where it provides  
3 maximum level volumetric thresholds up to four years out with the ability to procure  
4 above the bands if desired. This structure allows for strategic input to vary the amount  
5 of natural gas hedged, while still requiring that some minimum level of hedging take  
6 place.

7 **Q. IN RELATION TO THE AUDIT PERIOD, WHEN WERE HEDGES**  
8 **EXECUTED?**

9 A. For the audit period of this prudency review, March 2015 through August 2016,  
10 hedges were placed at various times between 2010 and 2015 as is defined in the Risk  
11 Management Policy (“RMP”) discussed in Empire witness Sager’s rebuttal testimony.

12 **Q. WHAT INSTRUMENTS ARE USED IN EMPIRE’S NATURAL GAS**  
13 **HEDGING EFFORTS?**

14 A. Empire hedges using both futures and forwards. The financial contracts are generally  
15 procured from the New York Mercantile Exchange (“NYMEX”), which is the  
16 world’s largest commodity futures exchange. At times, Empire has secured futures  
17 from counterparties like Bank of America, but most futures are secured from the  
18 NYMEX. Empire will also procure physical forwards from counterparties with  
19 which it has a standard commodities contract (NAESB, ISDA, etc.) and an  
20 established counterparty credit limit.

21 **Q. WHAT IS EMPIRE’S POLICY FOR SECURING NATURAL GAS HEDGES?**

22 A. Please see the Rebuttal Testimony of Empire witness Robert Sager for the details  
23 surrounding Empire’s natural gas hedging parameters and policy.

24 **REBUTTAL OF OPC WITNESS RILEY’S DIRECT TESTIMONY**

1

2 **Q. WHAT ARE SOME INACCURACIES YOU WOULD LIKE TO CORRECT**  
3 **FROM MR. RILEY'S DIRECT TESTIMONY?**

4 A. On page 17, lines 14-16, of Mr. Riley's Direct Testimony, he states that "...in  
5 December 2011, Empire hedged over 1 million Dekathern (Dth) (11% of expected  
6 volume) to be delivered in 2015 at \$5.44/MMBTu. Mr. Riley goes on to state that in  
7 December 2011, natural gas was \$3.17.

8 **Q. HOW ARE THESE STATEMENTS INACCURATE?**

9 A. First of all, the position to which Mr. Riley was referring was from Empire's Natural  
10 Gas Position Report as of December 31, 2011. The 2015 hedged position was  
11 comprised of 5 transactions, none of which were procured in December 2011.  
12 Rather, 400,000 Dth were procured in October of 2010, 300,000 Dth were procured  
13 in June 2011, and 310,000 Dth were procured in October 2011. Below is Table AD-1  
14 of the NYMEX forward curves at the end of each month over the two year time frame  
15 that the hedges were secured. Additionally, I shaded the month end curves of the  
16 future periods leading up to the hedge transaction, to provide some context as to the  
17 prices that would have been seen at that time. As indicated in table, the four  
18 transactions that comprised the 1,000,000 Dth hedges referred to in Mr. Riley's  
19 testimony, were clearly "in the money" at the time of the transactions and  
20 "reasonable" as indicated by the forward curves in the timeframe leading up to the  
21 hedge transaction dates.

22 **Table AD-1**

AARON DOLL  
REBUTTAL TESTIMONY

1

2015 NYMEX Henry Hub Futures as of												
Dt	1/29/2010	2/26/2010	3/31/2010	4/30/2010	5/28/2010	6/30/2010	7/30/2010	8/27/2010	9/30/2010	10/29/2010	11/26/2010	12/31/2010
1/1/2015	7.405	7.200	7.060	7.094	6.972	6.739	6.264	6.376	5.929	5.933	6.122	5.983
2/1/2015	7.385	7.175	7.025	7.054	6.927	6.694	6.209	6.331	5.884	5.888	6.082	5.938
3/1/2015	7.170	6.955	6.825	6.854	6.727	6.494	6.029	6.156	5.709	5.713	5.912	5.760
4/1/2015	6.570	6.365	6.345	6.384	6.247	6.049	5.594	5.821	5.344	5.348	5.562	5.402
5/1/2015	6.525	6.320	6.305	6.349	6.212	6.019	5.569	5.806	5.334	5.333	5.549	5.390
6/1/2015	6.590	6.380	6.365	6.407	6.270	6.077	5.604	5.836	5.362	5.355	5.573	5.410
7/1/2015	6.665	6.455	6.440	6.479	6.340	6.147	5.656	5.881	5.404	5.390	5.613	5.452
8/1/2015	6.730	6.520	6.505	6.544	6.403	6.210	5.704	5.929	5.452	5.430	5.653	5.492
9/1/2015	6.765	6.555	6.540	6.577	6.436	6.243	5.729	5.954	5.477	5.450	5.673	5.512
10/1/2015	6.870	6.660	6.645	6.679	6.538	6.345	5.814	6.034	5.557	5.528	5.748	5.587
11/1/2015	7.125	6.910	6.895	6.929	6.776	6.580	6.014	6.224	5.742	5.708	5.926	5.757
12/1/2015	7.400	7.185	7.175	7.209	7.038	6.840	6.234	6.434	5.947	5.910	6.141	5.972

2015 NYMEX Henry Hub Futures as of												
Dt	1/28/2011	2/25/2011	3/31/2011	4/29/2011	5/27/2011	6/30/2011	7/29/2011	8/26/2011	9/30/2011	10/28/2011	11/25/2011	12/31/2011
1/1/2015	5.871	5.966	6.244	6.167	6.137	5.889	5.797	5.688	5.567	5.484	5.118	4.733
2/1/2015	5.838	5.936	6.224	6.142	6.117	5.855	5.765	5.653	5.532	5.450	5.083	4.705
3/1/2015	5.706	5.826	6.134	6.057	6.042	5.771	5.683	5.570	5.447	5.364	4.998	4.622
4/1/2015	5.431	5.576	5.864	5.757	5.757	5.486	5.423	5.311	5.217	5.154	4.775	4.444
5/1/2015	5.421	5.566	5.879	5.777	5.775	5.501	5.436	5.321	5.227	5.164	4.783	4.454
6/1/2015	5.441	5.586	5.909	5.807	5.815	5.536	5.469	5.349	5.255	5.192	4.811	4.481
7/1/2015	5.481	5.626	5.954	5.850	5.860	5.576	5.505	5.384	5.290	5.227	4.848	4.518
8/1/2015	5.514	5.661	5.994	5.882	5.897	5.609	5.535	5.408	5.312	5.249	4.870	4.538
9/1/2015	5.531	5.676	6.009	5.892	5.912	5.624	5.546	5.415	5.319	5.256	4.875	4.541
10/1/2015	5.601	5.746	6.069	5.944	5.962	5.672	5.588	5.445	5.349	5.286	4.905	4.576
11/1/2015	5.743	5.881	6.224	6.089	6.114	5.810	5.723	5.575	5.472	5.408	5.017	4.671
12/1/2015	5.948	6.091	6.464	6.329	6.364	6.042	5.957	5.798	5.697	5.635	5.244	4.881

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Secondly, the Henry Hub Spot Price chart referenced by Mr. Riley is based on the spot price of natural gas at Henry Hub rather than the futures price. The spot price, as defined on the EIA website<sup>1</sup> is “the price for a one-time open market transaction for immediate delivery of a specific quantity of product at a specific location where the commodity is purchased ‘on the spot’ at current market rates.” This is different than the futures price, which is a financial price which does not require delivery and expires three business days prior to the first calendar day of the month. This comparison by Mr. Riley is flawed, as Empire would not take physical positions at Henry Hub, as we have no fixed transportation contracts at that location. Rather, our fixed transportation contracts are sourced from production and market areas at the

<sup>1</sup> [https://www.eia.gov/dnav/ng/TblDefs/ng\\_pri\\_fut\\_tbldef2.asp](https://www.eia.gov/dnav/ng/TblDefs/ng_pri_fut_tbldef2.asp)

1 Southern Star Central Gas Pipeline (“SSCGP”). Furthermore, NYMEX futures are  
2 settled with the NYMEX futures Contract 1 price - and not the NYMEX spot price.

3 **Q. PLEASE CONTINUE.**

4 The third problem with the statements made by Mr. Riley on page 17, lines 14-16, of  
5 his Direct Testimony is that even if Mr. Riley had used the correct NYMEX figures in  
6 his comparison, the current spot price is not a reflection of what the cost of natural  
7 gas may be in the future. Mr. Riley mistakenly assumes that if spot natural gas is in  
8 the low \$3.00 range that it would inevitably stay in the low \$3.00 for the next four  
9 years. Table AD-2, from *www.future.tradingcharts.com* for the current Henry Hub  
10 futures as of June 19, 2017, shows current next month futures (July 2017) at  
11 \$3.037/Dth and July 2018 futures at \$2.904/Dth. July 2019 futures are \$2.739. The  
12 fact that futures in outer years are priced cheaper than historical year’s futures  
13 supports the fact that current spot prices are certainly not the best indicators for future  
14 prices. Furthermore, the phenomenon where outer year futures are priced lower than  
15 current years is referred to as backwardation. If anything, backwardation may  
16 prognosticate opportunities for hedgers to lock in low rates that may move adversely  
17 in the future (see *Natural Gas Backwardation Buying Opportunity* - Appendix AD-3).  
18 It is clear from his testimony that Mr. Riley is not making an apples to apples  
19 comparison and is making unbased and unrealistic inferences as to the movement of  
20 the natural gas market.

21 **Table AD-2**


1

Commodity Futures Price Quotes For

Natural Gas (NYMEX)

(Price quotes for NYMEX Natural Gas delayed at least 10 minutes as per exchange requirements)

Also available: [electronic Session Quotes](#)

 REFRESH DATA

Trade Natural Gas now with:

Click for Chart	Current Session								Prior Day		Opt's
	Open	High	Low	Last	Time	Set	Chg	Vol	Set	Op Int	
<a href="#">Jul'17</a>	-	3.082	3.021	3.037	18:01 Jun 16	3.037	-0.019	119322	3.056	141820	<a href="#">Call Put</a>
<a href="#">Aug'17</a>	-	3.102	3.042	3.060	18:01 Jun 16	3.060	-0.018	76977	3.078	227329	<a href="#">Call Put</a>
<a href="#">Sep'17</a>	-	3.087	3.034	3.047	18:01 Jun 16	3.047	-0.017	31022	3.064	181116	<a href="#">Call Put</a>
<a href="#">Oct'17</a>	-	3.108	3.057	3.070	18:01 Jun 16	3.070	-0.016	24075	3.086	177414	<a href="#">Call Put</a>
<a href="#">Nov'17</a>	-	3.172	3.124	3.136	18:01 Jun 16	3.136	-0.014	12159	3.150	72402	<a href="#">Call Put</a>
<a href="#">Dec'17</a>	-	3.304	3.263	3.272	18:01 Jun 16	3.272	-0.011	7801	3.283	65253	<a href="#">Call Put</a>
<a href="#">Jan'18</a>	-	3.387	3.349	3.356	18:01 Jun 16	3.356	-0.010	11994	3.366	108998	<a href="#">Call Put</a>
<a href="#">Feb'18</a>	-	3.367	3.327	3.337	18:01 Jun 16	3.337	-0.011	3699	3.348	45716	<a href="#">Call Put</a>
<a href="#">Mar'18</a>	-	3.308	3.266	3.275	18:01 Jun 16	3.275	-0.012	8748	3.287	76466	<a href="#">Call Put</a>
<a href="#">Apr'18</a>	-	2.904	2.878	2.882	18:01 Jun 16	2.882	-0.015	11441	2.897	84096	<a href="#">Call Put</a>
<a href="#">May'18</a>	-	2.869	2.844	2.847	18:01 Jun 16	2.847	-0.015	3557	2.862	34940	<a href="#">Call Put</a>
<a href="#">Jun'18</a>	-	2.896	2.872	2.876	18:01 Jun 16	2.876	-0.014	847	2.890	20420	<a href="#">Call Put</a>
<a href="#">Jul'18</a>	-	2.923	2.905	2.904	18:01 Jun 16	2.904	-0.013	2065	2.917	25336	<a href="#">Call Put</a>
<a href="#">Aug'18</a>	-	2.929	2.908	2.911	18:01 Jun 16	2.911	-0.014	1119	2.925	16999	<a href="#">Call Put</a>
<a href="#">Sep'18</a>	-	2.903	2.884	2.888	18:01 Jun 16	2.888	-0.015	1275	2.903	17061	<a href="#">Call Put</a>
<a href="#">Oct'18</a>	-	2.920	2.900	2.904	18:01 Jun 16	2.904	-0.016	2383	2.920	39682	<a href="#">Call Put</a>
<a href="#">Nov'18</a>	-	2.960	2.952	2.952	18:01 Jun 16	2.952	-0.017	1040	2.969	20479	<a href="#">Call Put</a>
<a href="#">Dec'18</a>	-	3.095	3.082	3.084	18:01 Jun 16	3.084	-0.015	983	3.099	21878	<a href="#">Call Put</a>
<a href="#">Jan'19</a>	-	3.182	3.172	3.170	18:01 Jun 16	3.170	-0.016	2021	3.186	11206	<a href="#">Call Put</a>
<a href="#">Feb'19</a>	-	3.163	3.154	3.146	18:01 Jun 16	3.146	-0.016	690	3.162	3505	<a href="#">Call Put</a>
<a href="#">Mar'19</a>	-	-	-	3.096	18:01 Jun 16	3.080	-0.016	820	3.096	4808	<a href="#">Call Put</a>
<a href="#">Apr'19</a>	2.720	2.720	2.720	2.726	18:01 Jun 16	2.726	-0.009	473	2.735	4655	<a href="#">Call Put</a>
<a href="#">May'19</a>	2.684	2.684	2.684	2.681	18:01 Jun 16	2.681	-0.009	18	2.690	1551	<a href="#">Call Put</a>
<a href="#">Jun'19</a>	-	-	-	2.716	18:01 Jun 16	2.709	-0.009	-	2.718	1406	<a href="#">Call Put</a>
<a href="#">Jul'19</a>	-	-	-	2.746	18:01 Jun 16	2.739	-0.009	-	2.748	1205	<a href="#">Call Put</a>
<a href="#">Aug'19</a>	-	-	-	2.760	18:01 Jun 16	2.753	-0.009	16	2.762	1160	<a href="#">Call Put</a>
<a href="#">Sep'19</a>	-	-	-	2.753	18:01 Jun 16	2.746	-0.009	-	2.755	1115	<a href="#">Call Put</a>
<a href="#">Oct'19</a>	-	-	-	2.778	18:01 Jun 16	2.771	-0.009	-	2.780	2149	<a href="#">Call Put</a>
<a href="#">Nov'19</a>	-	-	-	2.853	18:01 Jun 16	2.846	-0.009	-	2.855	1345	<a href="#">Call Put</a>
<a href="#">Dec'19</a>	-	-	-	3.001	18:01 Jun 16	2.991	-0.009	2	3.000	1350	<a href="#">Call Put</a>

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1    **Q.    ON PAGE 4 OF MR. RILEY’S DIRECT TESTIMONY, MR. RILEY**  
2       **ALLEGES THAT EIA FORECASTS DURING AN UNSPECIFIED**  
3       **TIMEFRAME PROVIDED LOWER NATURAL GAS FORECASTS THAN**  
4       **EMPIRE WAS HEDGING. IS THIS TRUE?**

5    A.   With the information provided, the accuracy of the statement cannot be confirmed,  
6       but we do know the statement is irrelevant to this proceeding. Since Mr. Riley does  
7       not specify a timeframe or a consultant’s forecast, the only evidence I can seek to  
8       corroborate this claim is the EIA Short Term Energy Outlook (“STEO”). Since Mr.  
9       Riley incorrectly identifies the transaction dates of the hedges, his statement  
10      regarding the December 2011 EIA STEO is irrelevant. Rather, if the October 2010  
11      STEO, June 2011 STEO, and October 2011 STEO are considered, all 3 cite an  
12      increase in natural gas prices in the next year. Mr. Riley does correctly identify that  
13      the December 2011 EIA STEO revised prices downward from earlier predictions;  
14      however, the hedges he attributed with ignoring this information were already in  
15      place at this time. Furthermore, Mr. Riley is continuing to improperly evaluate the  
16      prudence of the hedge by citing a single source that predicts only in the short term  
17      (typically the next year) as indicative of information available and ignored by Empire.  
18      It appears that Mr. Riley is selectively picking any sources he may find to fit his  
19      narrative, needing to mistakenly identify the transaction dates to support his case.

20   **Q.    IF THE PRUDENCE OF A HEDGE SHOULD NOT BE EVALUATED BY**  
21       **LOOKING TO A SINGLE SOURCE THAT PREDICTS ONLY IN THE**  
22       **SHORT TERM, WHAT SHOULD BE DONE?**

23   A.   A fair analysis regarding the prudence of hedging positions ought to look at the  
24       forward curves in the general time frames leading up to the transaction dates to



1 determine what the market is offering as fixed price hedges to lock in a price  
2 commensurate with all of the risk and volatility baked into the forward curves.

3 **Q. WHAT OTHER CONCERNS DO YOU HAVE WITH MR. RILEY’S DIRECT**  
4 **TESTIMONY IN THIS CASE?**

5 A. On page 5 of his Direct Testimony, he describes the “Polar Vortex” which occurred  
6 in February 2014 as the only month that natural gas spot prices rose above \$5/Dth  
7 from February 2010 through current day. However, Mr. Riley fails to acknowledge  
8 that no forecast predicted the Polar Vortex and daily spot prices rose above \$5 during  
9 the months of January, February, and March, reaching an apex of \$31.27/Dth for  
10 February 6, 2014 from SSCGP. Adverse price movement, as evident during the Polar  
11 Vortex, are generally not forecasted, and using the NYMEX spot curves is not an  
12 accurate reflection of the true cost of procuring natural gas.

13 **Q. PLEASE CONTINUE.**

14 A. On page 7 of his Direct Testimony, Mr. Riley points to natural gas storage levels as  
15 an indicator of future pricing. As Empire witness Blake. Mertens explains in his  
16 Rebuttal Testimony, natural gas storage levels is simply one metric that is correlated  
17 with present natural gas prices and provides no forecast to future natural gas prices.  
18 To put this in context with Mr. Riley’s comments surrounding the Polar Vortex,  
19 natural gas storage levels never predicted the price spikes seen as a result of the Polar  
20 Vortex nor did they do anything to suppress the price spike seen at the time. This  
21 example points to the difference between the powers of explanation and prediction.

22 **Q. DO YOU HAVE ANY OTHER CONCERNS?**

23 A. Yes. Another concern I have with the Direct Testimony of Mr. Riley, as well as the  
24 Direct Testimony of OPC witness Hyneman, involves a lack of deference given to

1 changes in demand that may cause adverse price movements. On page 8 of his Direct  
2 Testimony, Mr. Riley says more utilities "...have turned to natural gas generation  
3 plants to replace coal-fired systems," yet he fails to make the connection that as  
4 demand for natural gas increases, price movements are likely to occur. An EnerKnol  
5 article cited on page 4 of Mr. Riley's Direct Testimony, and included as Appendix  
6 AD-1 in this testimony, describes the numerous demand-side changes that may  
7 increase the price for natural gas, including: increased demand for electrical  
8 generation from natural gas sourced facilities, petrochemical production, increasing  
9 exports of liquefied natural gas, and increases in extreme weather.

10 **Q. ON PAGE 5 OF HIS DIRECT TESTIMONY, MR. RILEY STATES THAT AN**  
11 **ENVIRONMENT WITH STABLE OR DROPPING PRICES CREATES AN**  
12 **EXPENSIVE SETTING WITH LITTLE OR NO BENEFIT, THUS MAKING**  
13 **HEDGING IMPRUDENT. DO YOU AGREE WITH THIS STATEMENT?**

14 **A.** No. On the contrary, the current environment, as stated by both the EnerKnol article  
15 referenced by Mr. Riley and the Public Utilities Fortnightly article referenced by Mr.  
16 Hyneman, is an attractive environment that allows for utilities to lock in historically  
17 low natural gas hedges. Empire would have more concern with waiting until forward  
18 volatility reached a level deemed worthy of hedging by OPC and we were suddenly  
19 requested to take positions in which the forward curves reflected the increase in  
20 volatility thus creating high futures pricing in comparison to the current futures.

21 **Q. DO YOU CONCUR WITH MR. RILEY'S STATEMENT ON LINES 12-13 OF**  
22 **PAGE 9 OF HIS DIRECT TESTIMONY THAT EMPIRE'S HEDGING IS**  
23 **BASED ON "VOLUME NEED, NOT PRICE RISK"?**

1 A. No. I am a little confused by Mr. Riley's statement when he uses the phrase "volume  
2 need," since the majority of our natural gas hedged positions are fixed price futures in  
3 nature. If we were hedging purely for volume certainty and "not price risk" as Mr.  
4 Riley alleges, we would simply purchase physical forwards at an index, thus  
5 preserving our ability to procure the volume of gas needed while floating the price.

6 **Q. DOES MR. RILEY'S STATEMENT ON PAGE 20 LINE 19 OF HIS DIRECT**  
7 **TESTIMONY THAT EMPIRE HAS INCURRED HEDGING LOSSES WHICH**  
8 **REPRESENT 38.5% OF ACTUAL NATURAL GAS FUEL COSTS**  
9 **ACCURATELY REFLECT THE IMPACT OF EMPIRE'S HEDGING**  
10 **PROGRAM?**

11 A. No. First, Empire utilizes hedges to lock in prices. Prices may decline after a hedge  
12 has been executed. However, it should not be viewed as a loss simply due to the fact  
13 it could have been purchased for a lower price at a later time. The ability to  
14 consistently buy at the exact moment prices are at their lowest is not a reasonable  
15 expectation. In addition, the limited 18 month time frame of this audit period does not  
16 tell the entire story of Empire's hedging program. As is shown in Appendix AD-2, the  
17 net of Empire's financial hedging "gains and losses" over the life of the program is  
18 approximately \$3 million for the 15 year span, or on average approximately \$200,000  
19 or less than 1% per year.

20 **Q. PLEASE SUMMARIZE YOUR RESPONSE TO OPC'S CONCERNS**  
21 **REGARDING EMPIRE'S HEDGING PROGRAM.**

22 A. Empire's hedging policy has been strategic yet steady, and while historic lows have  
23 created some hedging losses in the audit period, a review of Appendix AD-2 to this  
24 testimony demonstrates that Empire's hedging program has provided value over the

1 course of its existence. OPC's supposed clairvoyance is without merit, insinuates that  
2 "beating the market" is the yard stick with which one should measure hedging  
3 effectiveness, and is blind to the dynamics of the natural gas market.

4 **REBUTTAL OF OPC WITNESS MANTLE'S DIRECT TESTIMONY**

5 **Q. DOES EMPIRE FOLLOW THE FERC ORDER 668 NETTING**  
6 **REQUIREMENT?**

7 A. Yes. Since Empire has been a market participant (March 1, 2014), Empire has  
8 reported its sales and revenues within the Southwest Power Pool ("SPP") Integrated  
9 Marketplace ("IM") as netted per FERC requirements.

10 **Q. HAS THE STAFF OF THE COMMISSION REVIEWED EMPIRE'S NETTED**  
11 **FIGURES?**

12 A. Yes. Although Empire's operational reports are reported gross to create an accurate  
13 portrait of unit performance and charges for procuring energy to serve its native load,  
14 all SPP IM charges reported in the general ledger ("GL") are netted. Staff, like OPC,  
15 has access to Empire's GL during rate cases and prudence reviews.

16 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

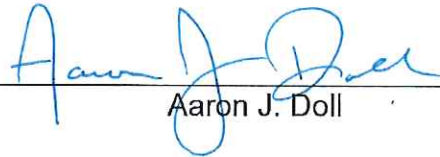
17 A. Yes it does.

18

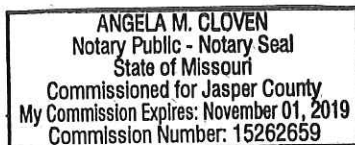
AFFIDAVIT OF AARON J. DOLL

STATE OF MISSOURI )  
 ) ss  
COUNTY OF JASPER )

On the 21st day of June, 2017, before me appeared Aaron J. Doll, to me personally known, who, being by me first duly sworn, states that he is the Director Electric Procurement of The Empire District Electric Company and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

  
\_\_\_\_\_  
Aaron J. Doll

Subscribed and sworn to before me this 21st day of June, 2017.



  
\_\_\_\_\_  
Notary Public

My commission expires: 11/01/2019.