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REBUTTAL TESTIMONY

OF

DAVID C. ROOS

EMPIRE DISTRICT ELECTRIC

CASE NO. EO-2017-0065

Jefferson City, Missouri
June 2017

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OF
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KANSAS CITY POWER & LIGHT COMPANY
CASE NO. ER-2016-0285

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1 REBUTTAL TESTIMONY

2 OF

3 DAVID C. ROOS

4 EMPIRE DISTRICT ELECTRIC

5 CASE NO. EO-2017-0065

6 Q. Please state your name and business address?

7 A. My name is David C. Roos and my business address is Missouri Public Service
8 Commission, P.O. Box 360, Jefferson City, MO 65102.

9 Q. What is your position at the Commission?

10 A. I am a Regulatory Economist III in the Commission Staff Division, Energy
11 Resources Department.

12 Q. Are you the same David C. Roos that contributed to Staff's Sixth Prudence
13 Review of Costs Related to the Fuel Adjustment Clause for the Electric Operations of The
14 Empire District Electric Company ("Prudence Review Report") filed on February 28, 2017?

15 A. Yes, I am.

16 Q. What is the purpose of your rebuttal testimony?

17 A. The purpose of my rebuttal testimony is to address Office of the Public
18 Council ("OPC") witness Ms. Lena M. Mantle's direct testimony concerning:

- 19 1. Interpretation of Commission Report and Orders,
20 2. The concept of "true" purchased power and off-system sales and how they are used
21 in Empire's fuel adjustment clause ("FAC"), and
22 3. The purported necessity for calculating purchased power and off-system sales as
23 specified in FERC Order 668.

INTERPRETATION OF COMMISSION REPORT AND ORDERS

Q. On page 5, lines 4 through 9, of her direct testimony, Ms. Mantle cites three Commission *Report and Orders* as a basis for: 1) defining “true” purchased power and off-system sales, and 2) reviewing “true” purchased power and off-system sales in general rate cases and FAC prudence reviews. Does Staff agree with Ms. Mantle “expectation” that Staff would review and report on the utility’s “true” purchased power and off-system sales in its FAC prudence reviews?

A. No. Ms. Mantle’s citation of these portions of the Commission’s *Report and Orders* is misleading and not relevant to this prudence review.

Q. Why?

A. Ms. Mantle cites one page in each of three Commission *Report and Orders*¹ as the basis for her “expectation” that Staff’s FAC prudence reviews would include a review and analysis of “true” purchased power and off-system sales. Staff examined the three *Report and Orders* cited by Ms. Mantle. Staff determined that the pages Ms. Mantle cites concern the same disputed issue regarding the FAC costs and revenues that were addressed by the Commission in each of three general rate cases, specifically:

- What transmission charges should be included in the FAC?²
- Should SPP Transmission Costs and Revenues be included? If so, what transmission costs and revenues should be included?³
- Should Southwest Power Pool (“SPP”) and other regional transmission organization/independent system operator transmission fees be included in the FAC, and at what level?⁴

¹ Mantle direct testimony at page 5 footnote 3: Report and Orders in Case No. ER-2014-0258 page 115, Case No. ER-2014-0351 page 28, and Case No. ER-2014-0370 page 35.

² Case No. ER-2014-0258, *Report and Order* pages 111 - 116.

³ Case No. ER-2014-0351, *Report and Order* pages 23 - 29.

1 The pages cited by Ms. Mantle are found under the *Report and Order* subsections
2 “Decisions” in Case Nos. ER-2014-0258 and ER-2014-0351 for Ameren Missouri and
3 Empire, respectively; and subsection “Conclusions of Law and Decision” in Case No. ER-
4 2014-0370 for KCPL. In each of the *Report and Orders*’ subsections, the relevant language
5 concerning “true” purchased power and “true” off-system sales is:

6 “Costs to transmit electric power it did not generate to its own load
7 (true purchased power)” and “Costs to transmit excess electric power it is
8 selling to third parties to locations outside of [MISO]⁵ [its RTO]⁶ [SPP]⁷
9 ([“true”]⁸ off-system sales)”.

10 This language appears nowhere else in any of the *Report and Orders* cited by Ms. Mantle.

11 The only disputed issue on each of the *Report and Orders* pages cited by Ms. Mantle
12 is the amount of total transmission costs to be included in the FAC.

13 Ms. Mantle’s citations are misleading and irrelevant because there are no disputed
14 issues or Commission orders on the pages cited by Ms. Mantle with regard to: 1) FAC
15 reporting requirements regarding “true” purchased power and “true” off-system sales, or
16 2) requirements that Staff review and analyze “true” purchased power and “true” off-system
17 sales during its FAC prudence reviews.

18 On the matter of how much transmission costs belong in the FAC, the Commission
19 defined two types of transactions and limited transmission costs to only those two transaction
20 types: 1) costs that serve “to transmit electric power it did not generate to its own load (true
21 purchased power)” and 2) costs that serve “to transmit excess electric power it is selling to
22 third parties to locations outside of its RTO [“true”] off-system sales)”. This language is

⁴ Case No. ER-2014-0370, *Report and Order* pages 32 – 35.

⁵ Case No. ER-2014-0258, *Report and Order* page 115.

⁶ Case No. ER-2014-0351, *Report and Order* page 28.

⁷ Case No. ER-2014-0370, *Report and Order* page 35.

⁸ For clarity, Staff has labeled this definition of off-system sales, “true” off-system sales.

1 aimed at resolving the FAC transmission costs issue and appears nowhere else in the
2 Commission *Report and Orders* cited by Ms. Mantle.

3 Further, Staff has reviewed all current FAC tariff sheets for all four electric utilities
4 with an FAC and the relevant parts of the most recent general rate case dockets concerning all
5 currently approved FACs. None of the Commission-approved FAC's have reporting
6 requirements related to "true" purchased power costs and/or "true" off-system sales revenue.

7 Regarding the three Commission *Report and Orders* cited by Ms. Mantle, the
8 Commission defined "true" purchased power and "true" off-system sales solely for the
9 purpose of determining a fixed percentage of total transmission costs which will be allowed to
10 flow through each utility's FAC. These two definitions - taken together - are necessary and
11 sufficient for determining the percentage of total transmission costs which is allowed to flow
12 through the FAC of each electric utility.

13 **THE APPLICATION OF REPORT AND ORDER IN CASE NO. ER-2014-0351**

14 Q. How are the Commission's definitions for "true" purchased power and "true"
15 off-system sales determined for Empire's Rider FAC?

16 A. In Empire's general rate cases, the output from Staff's fuel model is used to
17 calculate the energy (MWh) of "true" purchased power and "true" off-system sales as defined
18 by the Commission for the sole purpose of determining the percentage of total transmission
19 costs (\$) that is allowed to flow through the FAC. It is clear that the energy, expressed in
20 MWhs, of "true" purchased power and "true" off-system sales are to be used in the
21 transmission percentage calculation and not the costs (\$) of "true" purchased power and
22 "true" off-system sales. For Empire, this percentage is currently 34% which appears on
23 Empire's Rider FAC Sheet No. 17x and does not change between general rate cases. The

1 actual costs (\$) of “true” purchased power” and “true” off-system sales are not used in the
2 calculation. The actual costs (\$) of the components of “true” purchased power” and “true”
3 off-system sales are accounted for in Empire’s Rider FAC within purchased power costs
4 (“PP”) and off-system sales revenue (“OSSR”).

5 FERC ORDER 668

6 Q. On page 5 lines 4 – 6 of her direct testimony, Ms. Mantle states: “OPC had
7 raised concerns about the reporting of purchased power and off-system sales in recent rate
8 cases and the necessity of calculating them as specified in FERC Order 668.” With regard to
9 Commission-approved FACs, how is FERC Order 668 relevant?

10 A. The Final Rule on FERC Order No. 668: *Accounting and Financial Reporting*
11 *for Public Utilities Including RTOs* was issued on December 16, 2005. It wasn’t until the
12 Ameren Missouri’s 2014 general rate case, Case No. ER-2014-0258 that FERC Order 668
13 first became a consideration in FAC discussions in Missouri. Staff believes FERC Order 668
14 was first mentioned in the surrebuttal testimony of Missouri Industrial Energy Consumers’
15 witness James R. Dauphinais⁹ filed on February 6, 2015, under the heading “Inclusion of
16 Wholesale Transmission Expenses and Revenues in Ameren Missouri’s FAC.”¹⁰ The
17 Commission in Ameren Missouri’s 2014 general rate case cited FERC Order 668 in its
18 transmission costs finding of facts.¹¹ Concerning the general rate cases cited by Ms. Mantle,
19 it appears that FERC Order 668 was a factor considered by the Commission in only Ameren
20 Missouri’s 2014 general rate case and that consideration was limited to the discussion and
21 finding of facts for determining transmission costs in the FAC. There is no mention of FERC

⁹ Case No. ER-2014-0258, surrebuttal testimony of James R. Dauphinais, page 10 line 10.

¹⁰ Case No. ER-2014-0258, surrebuttal testimony of James R. Dauphinais, page 4 line 19 - 20.

¹¹ Case No. ER-2014-0258, *Report and Order* page 113 paragraph 7.

1 Order 668 with regard to reporting or reviewing requirements in Case No. ER-2014-0258.
2 The Commission does not cite FERC Order 668 in the other *Report and Orders* cited by Ms.
3 Mantle's direct testimony in this case. More importantly, the Commission did not cite FERC
4 Order 668 in its *Report and Order* in Empire's most recent general rate case, Case No. ER-
5 2016-0023.

6 Q. With regard to the Empire's Rider FAC, did OPC raise any concerns for
7 reporting "true" purchased power and off-system sales in Empire's most recent general rate
8 cases?

9 A. No, OPC did not raise this issue in Empire's most recent general rate cases,
10 Case Nos. ER-2014-0351 or ER-2016-0023, even though "true" purchased power (MWh) and
11 "true" off-system sales (MWh) were used to determine the fixed percentage of total
12 transmissions costs to flow through Empire's FAC.

13 Q. When did OPC first raise concerns about the reporting of purchased power and
14 off-system sales in recent rate cases and OPC's purported necessity of calculating them as
15 specified in FERC Order 668?

16 A. Staff's review¹² of the general rate case dockets shows that OPC first mentions
17 FERC Order 668 in GMO's last general rate case, Case No. ER-2016-0156. A reference to
18 FERC Order 668 first appears in Lena Mantle's rebuttal testimony filed on August 15, 2016¹³;
19 five days after the Commission's *Report and Order* issued on August 10, 2016, in Empire's
20 general rate case. FERC Order 668 is mentioned in the context of Ms. Mantle's changing
21 position from her direct testimony to allow for certain transmission costs to flow through the

¹² Staff reviewed Ms. Mantle's testimony from the perspective of the Commission's decisions in the seven most recent general rate cases.

¹³ Case No. ER-2016-0156, rebuttal testimony of Lena M. Mantle, page 1 line 21.

1 FAC.¹⁴ In a Stipulation and Agreement that settled the FAC issues in Case No. ER-2016-
2 0156, GMO agreed to perform FAC reporting in a format compatible with FERC Order 668.
3 Ms. Mantle did not mention FERC Order 668 or tying FAC reporting requirements to FERC
4 Order 668 in her Ameren Missouri general rate case testimony filed on December 9, 2016 and
5 January 20, 2017, which she filed after her August 15, 2016 filings in the GMO general rate
6 case. The Unanimous Stipulation and Agreement filed on February 23, 2017 which settled
7 the Ameren Missouri general rate case contains no mention or reference to FAC reporting
8 requirements in FERC Order 668 format. However, Ms. Mantle did mention FERC Order
9 668 reporting in her direct testimony, rebuttal testimony, and surrebuttal testimony for
10 KCPL's last general rate case, Case No. ER-2016-0285 (filed November 30, 2016, December
11 30, 2016 and January 27, 2017, respectively).

12 On May 3, 2017, the Commission issued its *Report and Order* in KCPL general rate
13 case, Case No. ER-2016-0285, 64 days after Staff filed its Empire FAC Prudence Review
14 Report on February 28, 2017. In the Commission's *Report and Order* in Case No. ER-2016-
15 0285, reporting consistent with FERC Order 668 is ordered, along with reporting information
16 consistent with KCPL's FAC tariff sheet.

17 Q. Is the Commission's May 2017 KCPL Report and Order relevant to Staff's
18 FAC prudence review of Empire?

19 A. No.

20 Q. Are the Commission's most recent Report and Orders in the Ameren and GMO
21 rate cases relevant to Staff's FAC prudence review of Empire?

22 A. No.

¹⁴ Case No. ER-2016-0156, rebuttal testimony of Lena M. Mantle page 1.

1 Q. Was OPC "expectation" that Staff would review "true" purchased power cost
2 (\$) a reasonable expectation?

3 A. No. First, "true" purchased power (MWh), per Commission *Report and Order*
4 is a calculated value from the output of Staff's fuel model used to determine the transmission
5 cost percentage for the FAC. This percentage does not change between general rate cases.
6 The actual "true" purchased power cost (\$), which is the issue raised by Ms. Mantle in her
7 direct testimony in this case, is not used in the calculation of the transmission cost percentage
8 for the FAC rendering irrelevant her proposal to make Empire FAC prudence review comport
9 to FERC Order 668. Second, the *Reports and Orders* from Empire's two most recent rate
10 cases show that reporting and reviewing "true" purchased power costs (\$) was never required
11 by the Commission. Third, the only decision ordered by the Commission relating to FERC
12 Order 668 reporting is in the KCPL *Report and Order* (issued 64 days after Staff's Prudence
13 Review Report of Empire's FAC was filed in this docket).

14 **NECESSITY FOR REVIEW OF "TRUE" PURCHASED POWER AND OFF-SYSTEM**
15 **SALES**

16 Q. On page 10, lines 21 through 25 of her direct testimony Ms. Mantle states: "It
17 is important to look at these [direct purchases through contracts with other generators and
18 power purchased from the Southwest Power Pool ("SPP") integrated market ("IM")]
19 separately since purchasing energy on the spot market increases risk of price and availability.
20 In addition, an increasing reliance on spot market purchases may indicate Empire's resources
21 are not the least cost method of meeting its customers' needs and, if market prices rise,
22 Empire's customers will be subject to fluctuations in market cost." What is Staff's response
23 to these statements?

1 A. The notion that purchasing energy in the Southwest Power Pool ("SPP")
2 integrated marketplace ("IM") increases the risk of energy price and the risk of energy
3 availability and the potential for "an increasing reliance on spot market purchases" are not
4 useful concepts in this FAC prudence review. Empire participates in the SPP. Empire's
5 continued participation in SPP was most recently reviewed in File No. EO-2012-0269 where
6 Empire, Staff, and Public Counsel requested that the Commission provide "interim and
7 conditional' approval of Empire's participation in SPP through August 1, 2022¹⁵. Empire's
8 "reliance" on the SPP IM to meet native load is a direct outcome of Empire's participation
9 in SPP.

10 As a member of SPP, Empire's generation becomes part of SPP's regional resources
11 for meeting the regional demand for energy. Empire's generation resources are now
12 dispatched by SPP when SPP decides it is cost effective to deploy them. This decision is
13 based on regional pricing and the regional demand for energy. One purpose of the SPP IM is
14 to reduce price risk and increase energy availability by economically dispatching the regional
15 generation resources to meet Empire's native load and the native load of other members of
16 SPP. Some of these regional generation resources are owned by Empire and some are not. If
17 the regional demand for energy increases and market prices rise, such that Empire's available
18 generation becomes cost effective, then SPP will dispatch Empire generation to serve the
19 regional increased demand for energy.

20 Q. On page 10 line 25 through page 11 line 1 of her direct testimony Ms. Mantle
21 states "Since the FAC protects the utility from price and availability risk and moves that risk

¹⁵ File No. EO-2012-0269 Joint Motion of the Empire District Electric Company, The Staff of the Missouri Public Service Commission, and the Office of the Public Counsel to Modify Stipulation and Agreement and Order Granting Motion for the Approval of Unanimous Stipulation and Agreement page 3.

1 to Empire's customers, it is important to audit the utility's purchase power practices to make
2 sure the utility is not becoming too reliant on spot market energy". What is Staff's response
3 to these statements?

4 A. Staff disagrees. Empire's generation resources are dispatched by SPP when
5 SPP decides it is cost effective to deploy Empire's generation. This SPP decision is based on
6 regional pricing and the regional demand for energy. Empire's SPP IM purchases power,
7 meaning the hourly netting of Empire's generation and native load, in those hours where
8 Empire's generation is less than native load, is a direct result of Empire participating in SPP's
9 IM. Empire's SPP IM purchases are made because it is more economical to draw on SPP
10 regional generation resources, those not owned by Empire, than to operate Empire's more
11 costly generation. Through the FAC, Empire's customers have received the benefit of this
12 lower cost SPP regional generation resource.

13 Q. On page 10 lines 1 through 3 of her direct testimony Ms. Mantle states
14 "However, it is prudent for Empire to take advantage of low spot market prices by purchasing
15 when spot market cost is less than its cost to generate." What is Staff's response to this
16 statement?

17 A. It can't be done. "To take advantage of low spot market prices" when "market
18 cost is less than its cost to generate" implies that Empire has the option of choosing its higher
19 cost, non-SPP-dispatched generation over the lower cost SPP IM to meet its native load. As a
20 member of SPP, Empire does not have this option. Empire must accept SPP's market price.
21 Within the SPP IM, SPP dispatches regional generation and operating reserves to meet the
22 demand for energy across the entire SPP footprint, including Empire's native load. Empire
23 does not reserve energy it generates from SPP to meet its native load.

1 REVIEWING "TRUE" PURCHASED POWER

2 Q. Did Ms. Mantle review "true" purchased power costs (\$) ? Please explain.

3 A. No. Ms. Mantle did not review "true" purchased power costs (\$). Ms. Mantle
4 reviewed "direct purchases" which she defines as long-term purchased power contract costs
5 (\$) combined with cost of short-term purchases (\$) from parties other than SPP; and,
6 separately reviewed SPP IM purchased power costs (\$) and SPP IM sales (\$). Ms. Mantle's
7 workpapers do not show a calculation for "true" purchased power costs (\$), do not reference
8 "true" purchased power costs (\$), and there is no "true" purchased power, either energy
9 (MWhs) or costs (\$) on the graph provided by Ms. Mantle as Schedule LMM-D-4

10 Q. Does it make sense to review "true" purchased power cost (\$) ? Please explain.

11 A. No. "True" purchase power cost (\$) is composed of two very different
12 components: long term multi-year contracts and short-term hourly purchases. Combining
13 these costs mixes the outcomes of decisions made from long-term planning with short-term
14 SPP IM hourly purchases; doing so only confuses the review process. It makes more sense to
15 review these components separately. This may be why Ms. Mantle did not review "true"
16 purchased power costs (\$) but reviewed and graphed the components of "true" purchased
17 power costs (\$) separately.

18 Q. Did Staff or OPC find evidence of imprudence in Empire's long-term contracts
19 or power purchased on the market?

20 A. No.

21 Q. What is Staff's position on reviewing "true" purchased power costs (\$) ?

22 A. Reviewing "true" purchased power costs (\$) is unnecessary. "True" purchased
23 power costs (\$) combines the costs of decisions made from long-term planning with short-

1 term SPP IM hourly purchases. Although it is appropriate to use "true" purchased power
2 energy (MWhs) to determine the percentage of total transmission costs in the FAC, the cost
3 (\$) of "true" purchased power is not a useful review metric. Staff resources are better used
4 reviewing the components of "true" purchased power costs (\$) and off-system sales, like Ms.
5 Mantle did. Staff reviewed the components of Empire's FAC in the context of Empire's FAC
6 Rider in effect during the review period and summarized its findings in Staff's Prudence
7 Review Report.

8 Q. Ms. Mantle recommends that the Commission "direct Staff in its FAC
9 prudence audits to include a review of "true" purchased power and off-system sales to
10 determine if there is any imprudence in regarding the electric utility's purchased power and
11 off-system sales practices"¹⁶ Should the Commission do this?

12 A. No. As previously discussed, the cost of "true" purchased power is not a
13 useful metric for a prudence review. Staff reviewed the components of Empire's FAC in the
14 context of Empire's FAC Rider in effect during the review period and summarized its
15 findings in Staff's Prudence Review Report.

16 Q. Does this conclude your testimony?


17 A. Yes.

¹⁶ EO-2017-0065 Direct Testimony of Lena M. Mantle page 9

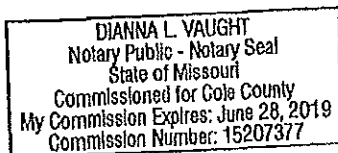
In the Matter of the Sixth Prudence Review of)
Costs Subject to the Commission-Approved) **Case No. EO-2017-0065**
Fuel Adjustment Clause of The Empire District)
Electric Company)

[illegible]

Further the Affiant sayeth not.


David C. Roos

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



Dianna L. Vaughn
Notary Public

David C. Roos

Present Position: I am a Regulatory Economist III in the Energy Resource Department, Commission Staff Division of the Missouri Public Service Commission.

Educational Background and Work Experience:

In May 1983, I graduated from the University of Notre Dame, Notre Dame, Indiana, with a Bachelor of Science Degree in Chemical Engineering. I also graduated from the University of Missouri in December 2005, with a Master of Arts in Economics. I have been employed at the Missouri Public Service Commission as a Regulatory Economist III since March 2006. I began my employment with the Commission in the Economics Analysis section where my responsibilities included class cost of service and rate design. In 2008, I moved to the Energy Resource Analysis section where my testimony and responsibility topics include energy efficiency, resource analysis, and fuel adjustment clauses. Prior to joining the Public Service Commission I taught introductory economics and conducted research as a graduate teaching assistant and graduate research assistant at the University of Missouri. Prior to the University of Missouri, I was employed by several private firms where I provided consulting, design, and construction oversight of environmental projects for private and public sector clients.

Previous Cases

<u>Company</u>	<u>Case No.</u>
Empire District Electric Company	ER-2006-0315
AmerenUE	ER-2007-0002
Aquila Inc.	ER-2007-0004
Kansas City Power and Light Company	ER-2007-0291
AmerenUE	EO-2007-0409
Empire District Electric Company	ER-2008-0093
Kansas City Power and Light Company	ER-2008-0034
Greater Missouri Operations	HR-2008-0340

Previous Cases

<u>Company</u>	<u>Case No.</u>
Greater Missouri Operations	ER-2009-0091
Greater Missouri Operations	EO-2009-0115
Greater Missouri Operations	EE-2009-0237
Greater Missouri Operations	EO-2009-0431
Empire District Electric Company	ER-2010-0105
Greater Missouri Operations	EO-2010-0002
AmerenUE	ER-2010-0036
AmerenUE	ER-2010-0044
Empire District Electric Company	EO-2010-0084
Empire District Electric Company	ER-2010-0105
AmerenUE	ER-2010-0165
Greater Missouri Operations	EO-2010-0167
AmerenUE	EO-2010-0255
Greater Missouri Operations (Aquila)	EO-2008-0216
Ameren Missouri	ER-2011-0028
Empire District Electric Company	EO-2011-0066
Empire District Electric Company	EO-2011-0285
Ameren Missouri	EO-2012-0074
Greater Missouri Operations	EO-2012-0009
Ameren Missouri	EO-2012-0142
Ameren Missouri	ER-2012-0166
Greater Missouri Operations	EO-2013-0325
Ameren Missouri	EO-2013-0407
Empire District Electric Company	EO-2014-0057
Greater Missouri Operations	EO-2014-0256
Empire District Electric Company	ER-2014-0351
Greater Missouri Operations	EO-2015-0252
Kansas City Power and Light Company	EO-2015-0254
Empire District Electric Company	ER-2015-0214
Greater Missouri Operations	EO-2016-0053
Empire District Electric Company	ER-2016-0023
KCP&L Greater Missouri Operations Company	ER-2016-0156
KCPL	ER-2016-0285