

Exhibit No.:
Issue: SPP Transmission Fees
Witness: John R. Carlson
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2014-0370
Date Testimony Prepared: May 7, 2015

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2014-0370

REBUTTAL TESTIMONY

OF

JOHN R. CARLSON

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

**Kansas City, Missouri
May 2015**

“ [REDACTED] **” Designates “Highly Confidential” Information
Has Been Removed.**

REBUTTAL TESTIMONY

OF

JOHN R. CARLSON

Case No. ER-2014-0370

1 **Q: Please state your name and business address.**

2 A: My name is John R. Carlson. My business address is 1200 Main Street, Kansas City,
3 Missouri 64105.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Kansas City Power & Light Company (“KCP&L” or the “Company”)
6 as Originator, Supply Resources.

7 **Q: On whose behalf are you testifying?**

8 A: I am testifying on behalf of KCP&L.

9 **Q: What are your responsibilities?**

10 A: My primary responsibilities are to structure and market long-term power purchases and
11 sales to meet the operational and wholesale needs of the Company. I also develop and
12 manage the Company’s budget for Regional Transmission Organization (“RTO”) fees
13 and transmission charges.

14 **Q: Please describe your education, experience and employment history.**

15 A: I received a Bachelor of Science degree in Architectural Engineering from the University
16 of Kansas in 1997. In 2004, I received a Master of Business Administration from the
17 University of Chicago Booth School of Business. From 1997 to 2001, I worked for
18 Custom Energy and Enron Energy Services, companies focused on performance
19 contracting and other energy efficiency project financing structures. Beginning in 2002, I

1 worked in financial services focusing on asset management while at Commerce Bank and
2 risk management and insurance brokerage while at Marsh & McLennan Companies. I
3 joined KCP&L in 2006 as an Energy Consultant in the Delivery Division. My
4 responsibilities included managing all facets of the customer relationship for KCP&L's
5 large industrial customers and developing solutions that met the customer's needs, as
6 well as demand response and energy efficiency opportunities. In 2007, I became
7 Manager of Market Competitiveness where I was responsible for developing and
8 implementing non-regulated products and services for residential, commercial and
9 industrial customers. In 2010, I moved to the Supply Division at KCP&L and started
10 work as an Originator of wholesale power transactions. Since that time I have also been
11 assigned to develop and manage the Company's budget for RTO fees and transmission
12 charges.

13 **Q: Have you previously testified in a proceeding at the Missouri Public Service**
14 **Commission ("MPSC" or "Commission") or before any other utility regulatory**
15 **agency?**

16 A: Yes. I have testified before the MPSC.

17 **Q: On what subjects will you be testifying?**

18 A: My rebuttal testimony will address certain portions of the Staff Cost of Service Report
19 ("Staff Report") and the direct testimony of Midwest Energy Consumers Group
20 ("MECG") witness Michael Brosch regarding transmission fees KCP&L pays to the
21 Southwest Power Pool ("SPP"), the RTO of which the Company is a member. In
22 particular, I will address allegations that SPP transmission fees are (1) subject to
23 sufficient control by utility management that they should not be included in the fuel

1 adjustment clause (“FAC”) proposed by KCP&L, and (2) not sufficiently volatile to
2 warrant inclusion in the FAC proposed by KCP&L. (Staff Report, p. 195; Brosch Rate
3 Design Direct, pp. 17-20 and 25-27)

4 **Q: Please describe the SPP’s Schedule 11 transmission costs.**

5 A: In general, SPP’s Schedule 11 is for recovering the costs associated with transmission
6 system upgrades. These costs are allocated both zonally and regionally depending on the
7 voltage level of the transmission facility. This allocation methodology is known as the
8 Highway/Byway methodology and is structured in the following manner:

Voltage	Regional	Zonal
300 kV and above	100%	0%
Above 100 kV and below 300 kV	33%	67%
100 kV and below	0%	100%

9 Schedule 11 is charged to SPP’s Network and Point-to-Point Transmission Customers
10 based on the zonal and regional Annual Transmission Revenue Requirement (“ATRR”)
11 amounts approved by the FERC and the magnitude of load associated with each
12 customer’s transmission service. The total zonal rate, based on the zonal ATRR amounts
13 specific to the Zone of the load served by the transmission reservation, plus the total
14 regional rate, calculated on a regional load ratio share basis, equals the total rate for a
15 transmission customer under the SPP Tariff. KCP&L’s load ratio share is approximately
16 8.0 percent so it bears approximately 8.0 percent of regionally allocated costs in addition
17 to the zonally allocated costs of SPP-approved projects.

1 **Q: Addressing the management of transmission costs, does KCP&L actively participate**
2 **in SPP committees, working groups and task forces?**

3 A: Yes. KCP&L employees actively participate, and advocate for our positions, on
4 approximately 45 committees, working group and tasks forces (collectively the
5 “Groups”) at the SPP. Some participation occurs through attendance at meetings and
6 engagement in task force activities, while other activity involves monitoring of SPP
7 operations.

8 **Q: Considering its participation in these Groups, does KCP&L have the ability to**
9 **manage SPP transmission costs?**

10 A: No. The Group meetings are open for all interested stakeholders to participate, which
11 affords KCP&L the opportunity to voice its opinion during discussions. However,
12 KCP&L does not always have a voting member on each of the Groups, and when we do,
13 our vote carries no more weight than any other similarly situated voting members. These
14 Groups consist of many market participants (both transmission customers and
15 transmission owners) with differing agendas and areas of interest, some of which do not
16 align with the interests of KCP&L.

17 As an example, per Attachment O of the Tariff, SPP can perform studies to assess
18 the reliability and/or economic impacts of proposed changes in the transmission system.
19 These studies are at the request of stakeholders and each one is known as a High Priority
20 Incremental Load Study (“HPILS”). In response to concerns about oil and natural gas
21 shale developments, and other future load developments in the region that had not been
22 accounted for in previous planning efforts or in planning models being used at the time,
23 the SPP Board of Directors directed an HPILS be performed. The HPILS process was

1 driven by the HPILS Task Force, and while KCP&L did not have a voting member on the
2 HPILS Task Force, KCP&L actively participated. KCP&L was not the Transmission
3 Owner of any of the HPILS projects identified, and the HPILS projects would primarily
4 benefit customers in the southwestern portions of the SPP footprint. KCP&L strongly
5 advocated against the region-wide cost allocation of the HPILS projects. Ultimately,
6 however, the region-wide cost allocation of the HPILS projects was approved. The point
7 is that while KCP&L might oppose a particular issue or a particular group of projects, if
8 every other company voted for them it would not matter. Even though KCP&L has a say
9 in the process that does not mean KCP&L has the final say. Absent removing its load
10 from the SPP and ceasing to make off-system sales, KCP&L has no direct ability to
11 materially manage these costs.

12 This past year the SPP staff made a recommendation to the Finance Committee to
13 increase the SPP administration charge rate to an amount higher than \$0.39/MWh, the
14 current rate cap. The Finance Committee, after receiving input from the Market
15 Operations and Policy Committee (“MOPC”), voted against that option and instead
16 approved a rate of \$0.39/MWh. In this case, KCP&L’s interests (and vote on the MOPC)
17 aligned with those of other companies such that KCP&L was in the majority and our
18 concern was addressed in a manner consistent with our desires. That is not always the
19 case.

20 **Q: Are these SPP transmission costs volatile as well?**

21 A: Yes, they are. Merriam-Webster’s definition of volatile is: characterized by or subject to
22 rapid or unexpected change, or is variable or unsteady.¹ The chart in Schedule TMR-5 of
23

¹ Definition of volatile, <http://www.merriam-webster.com/dictionary/volatile>.

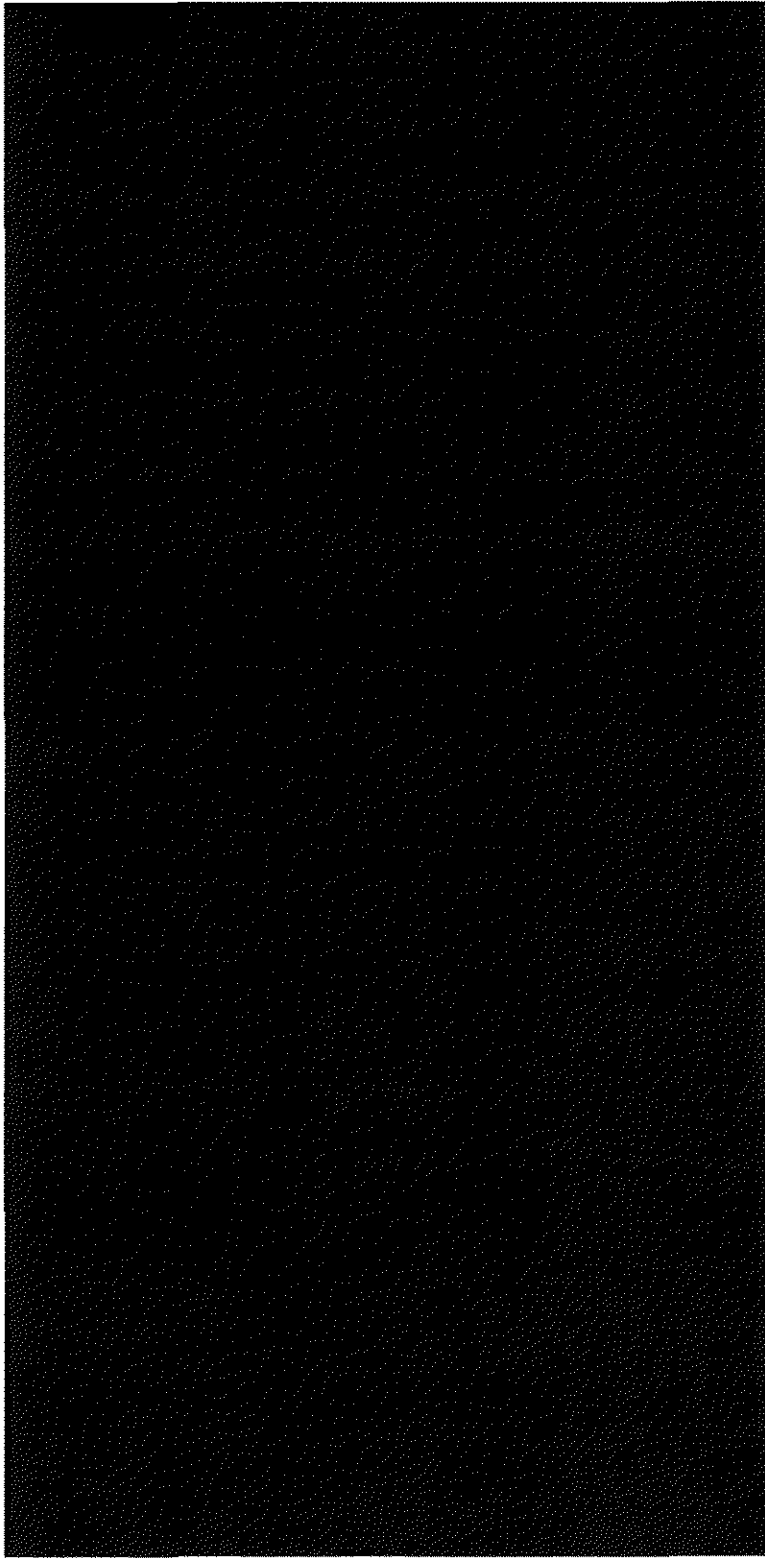
1 KCP&L witness Tim Rush's Direct Testimony shows this volatility and variability with
2 the projections made by the SPP. While the changes may not be unexpected, they will be
3 rapid because of the regional build out of the transmission system by SPP members in
4 furtherance of national energy policies being implemented by the Federal Energy
5 Regulatory Commission ("FERC"). The magnitudes of these changes are unknown and
6 both the expected and actual expenditures are variable and unsteady. For example, the
7 expectations for 2014 ranged from **■■■■** million to **■■■■** million yet the actual
8 cost was **■■■■** million which was 46% more than the actual cost for 2013.

9 Another way to analyze whether or not something is volatile is to look at the
10 coefficient of variation ("COV") of the variable, or in this case transmission expenses and
11 RTO fees. The COV is the ratio of the standard deviation to the mean, or a measure of
12 the variation of results in relation to the average of all results. It is a measure of volatility
13 around the mean and is sometimes expressed as a percentage. As outlined in KCP&L's
14 response to data request MEGC 14-11, the COV for base plan funding transmission
15 expenses (Schedule 11 charges) from 2007, when the SPP started invoicing KCP&L for
16 these charges, to 2014 was 120%. Over the same time period, the COV for SPP
17 administrative fees, namely Schedule 1-A and Schedule 12, was approximately 75%.
18 These are both strong indications of volatility in transmission expenses and
19 administrative fees.

20 **Q: Staff suggests in its Cost of Service Report (at p. 199) that "SPP's Transmission**
21 **Schedule 11 costs are known and measurable" and, thus, should not be included in**
22 **the FAC. What is your response?**

1 A: Staff pointed to the Direct Testimony of Tim M. Rush in which he provided a calculation
2 of the “projected” annualized increases in Schedule 11 charges for 2013-2022. Staff
3 somehow mischaracterized these “projected” Schedule 11 charges as known and
4 measurable. Such costs are more accurately described as “expected and projected”.
5 While SPP provides annual projections of base plan funding expenses, these are only
6 projections and have no bearing on actual expenses. The following chart shows how SPP
7 projections vary drastically from projection to projection. Projections for calendar year
8 2013 vary by approximately \$7.0 million when comparing the projection from July 10,
9 2012 to the projection from July 8, 2013. Similarly, projections for calendar year 2015
10 vary by approximately \$8.0 million dollars between the various projections.

**



**

1

HIGHLY CONFIDENTIAL

8

1 **Q: What are fuel and purchased power costs as defined in 4 CSR 240-20.090?**

2 A: As defined in 4 CSR240-20.090(1)(B), “Fuel and purchased power costs means prudently
3 incurred and used fuel and purchased power costs, including transportation costs.”

4 **Q: Please respond to MECG witness Brosch’s argument (on p. 44 of his Rate Design
5 Direct Testimony) that transmission costs are not a part of fuel, purchased power or
6 transportation costs, and therefore should not be included in the FAC.**

7 A: Now more than ever, with SPP’s Integrated Marketplace being fully operational,
8 transmission costs are inextricably tied to KCP&L’s ability to serve its load as well as
9 sell off-system power. On a daily basis, KCP&L sells all of the power it generates into
10 the SPP market and purchases from SPP 100% of the electricity it sells to its retail
11 customers. Our customers’ demand is no longer directly served by KCP&L’s generating
12 assets but rather by the larger system of assets operating within the SPP. As such,
13 KCP&L’s ability to serve its customers depends on the regional transmission system.
14 Rather than pay a direct rate for network transmission service, SPP network transmission
15 customers like KCP&L pay for the right to use that transmission through upkeep of and
16 upgrades to that same transmission system (through Schedule 11 charges).

17 Further, it is the SPP regional transmission system that allows KCP&L to gain
18 efficiencies from the market and to purchase the lowest cost energy at any given moment.
19 The benefits of this unprecedented expansion of the transmission system include reducing
20 congestion, lowering production costs, improving reliability and lowering reserve
21 margins. The SPP regional transmission system also enables generation assets to operate
22 more efficiently and allows for better utilization of renewable resources. Net savings for
23 the first 12 months of the SPP Integrated Marketplace, March 1, 2014 to February 28,

1 2015, were \$131 Million. On a rolling 12 month basis, April 1, 2014 to March 31, 2015,
2 net savings were \$210 Million.² These are all benefits that customers receive on a daily
3 basis when KCP&L purchases its load from the SPP market.

4 **Q: Are SPP administrative fees tied to serving KCP&L's load as well as selling power**
5 **off-system?**

6 A: Yes. SPP administrative fees are most definitely an element of costs incurred by KCP&L
7 to serve its load as well as sell power off-system. As mentioned previously, KCP&L
8 purchases 100% of the electricity used to serve its customers' load from the SPP on a
9 daily basis. The Schedule 1-A fees are for SPP expenses associated with administering
10 its Open Access Transmission Tariff (Tariff), expenses that cover regional scheduling,
11 planning and market-monitoring services provided to facilitate the transportation of
12 energy on the transmission system.

13 **Q: Do you agree with Mr. Brosch's assertion (at pp. 46 and 47 of his Rate Design Direct**
14 **Testimony) that Schedule 1-A fees for point-to-point ("PTP") transmission service**
15 **are not linked to purchased power?**

16 A: No. The Schedule 1-A rate charged for both PTP and network integration transmission
17 service ("Network Service") is \$0.39/MWh. For PTP transmission service this rate is
18 applied to every hour of the duration of the transmission reservation term for every MW
19 of the reservation. Absent pricing in this fashion those without off-system sales via PTP
20 transmission would be subsidizing those that did. Transmission customers that reserve
21 PTP transmission service are paying for the right to flow energy over that path when they
22 deem it most desirable, whether that be all the time or none of the time.

² SPP Regional State Committee Meeting, April 27, 2015, meeting materials available at <http://www.spp.org/publications/RSC%20Materials%2020150427.pdf>.

1 **Q: What does Mr. Brosch say about Schedule 1-A fees for Network Service?**

2 A: Mr. Brosch says that Schedule 1-A fees for Network Service are not energy-based
3 expenses.

4 **Q: Do you agree with Mr. Brosch?**

5 A: No. Mr. Brosch oversimplifies how the Schedule 1-A charges are calculated for Network
6 Service. In Mr. Brosch's Rate Design Direct Testimony at page 47 (lines 2-3), he states
7 that "the 12 month average of the Transmission Customer's coincident zonal demands"
8 are used in calculating the Schedule 1-A fee for Network Service and, therefore,
9 concludes that such charges are not energy-based. However, the U.S. Energy
10 Information Administration defines capacity as being the maximum level at which
11 electric power can be supplied at a point in time.³ Likewise, coincident zonal demand, is
12 an instantaneous energy reading at the time of the monthly peak demand. This
13 instantaneous energy reading is taken every month of the year. The 12 instantaneous
14 energy readings from the prior year are then averaged in order to get an average monthly
15 value which is then multiplied by the hours in a given month and the Schedule 1-A rate.
16 In summary, coincident zonal demands do not exist without the flow of energy, and the
17 Schedule 1-A rate is clearly based upon the transmission of electricity.

18 **Q: Do the calculation methodologies used for SPP's Schedule 11 and Schedule 1-A costs
19 change the purpose of these costs?**

20 A: No. Regardless of how the costs are calculated, these costs facilitate the transportation of
21 energy throughout the SPP system. The regional and zonal transmission upgrades that
22 feed into Schedule 11 costs and the administrative functions that drive Schedule 1-A fees

³ The U.S. Energy Information System, *Electricity Explained – Generation, Sales and Capacity*,
http://www.eia.gov/energyexplained/index.cfm?page=electricity_in_the_united_states#tab2.

1 help ensure enough transmission is in place to meet SPP members' requirements with
2 reduced congestion and from the most efficient resources available in the SPP footprint.

3 **Q: What does Mr. Brosch state with regard to transmission and transportation costs?**

4 A: Mr. Brosch testifies (at page 44, lines 16-18, of his Rate Design Direct Testimony) that
5 transmission costs are not transportation costs paid to have fuel delivered to KCP&L.

6 **Q: Do you agree that this should be a consideration for inclusion of SPP transmission
7 fees in the FAC?**

8 A: No. Mr. Brosch's interpretation of the Commission's rule on Fuel and Purchased Power
9 Cost Recovery Mechanisms is incorrect. The following is the section referenced by Mr.
10 Brosch on page 44, lines 14-16 of his Direct Testimony:

11 Fuel and purchased power costs means prudently incurred and used fuel
12 and purchased power costs, including transportation costs.

13 The phrase "transportation costs" applies to both fuel AND purchased power costs. Mr.
14 Brosch believes it only modifies the word "fuel". I am advised by counsel that the
15 Commission has already ruled that transmission constitutes transportation in connection
16 with electricity.⁴ I'm also advised by counsel that the courts have affirmed this
17 Commission ruling.⁵

18 **Q: How have KCP&L wholesale sales, purchased power and transmission costs
19 changed since the implementation of the SPP IM on March 1, 2014?**

20 A: Since the beginning of the SPP IM, KCP&L now sells all of its generation to the SPP at
21 the generator's location and then buys back all of the power needed to serve its native
22 load at the load location. KCP&L no longer operates a specific control area for its
23 service territory that is only served by its assets. Rather, the Company relies on the

⁴ Report and Order, p. 90, Case No. ER-2012-0166.

1 energy that is economically dispatched by the SPP from its consolidated balancing area
2 which covers the entire SPP footprint.

3 In effect, prior to the start of the SPP IM, the KCP&L control area was similar to
4 a small lake where all assets were owned and dispatched by KCP&L. However, since the
5 beginning of the SPP IM this small lake no longer has the boundaries of the KCP&L
6 system but is a part of the larger SPP footprint. In reality, under the SPP IM KCP&L is
7 now simply pouring (or selling) energy from its generating assets into the larger SPP lake
8 and removing (or purchasing) energy from the lake that it needs to serve its native load.
9 Due to the homogeneous nature of electricity, the actual origin of power removed from
10 the lake cannot be known. Because of this, the SPP assesses transmission fees and
11 charges related to these transactions. In essence, SPP transmission fees and charges are
12 required to be paid in the SPP IM to serve retail load as well as make off-system sales.

13 **Q: Since the start of the SPP IM, are you able to make a direct link between KCP&L**
14 **generating assets and KCP&L native load purchases?**

15 A: No. The goal of the SPP IM is to dispatch the lowest cost resources for the entire SPP
16 control area thus ensuring each load serving entity in the SPP IM receives the lowest cost
17 power to serve its load. For instance, the same amount of power is purchased from the
18 SPP to serve load regardless of whether or not a KCP&L generator is on a maintenance
19 outage or dispatched by the SPP control center. The origin of native load purchases is no
20 longer known by the purchaser as being off system or owned generation.

⁵ *In re Union Elec. Co.*, 422 S.W.3d 358 (Mo. App. W.D. 2013).

1 **Q: Earlier you stated that KCP&L buys from SPP 100% of the electricity that it sells to**
2 **its customers. What evidence do you have to support that statement?**

3 A: Looking at KCP&L's metered native load data and comparing to SPP purchased power
4 data, over a given month, provides this evidence. Schedule JRC-1 shows data for the
5 month of March 2015 for KCP&L's native load and for all KCP&L purchased power
6 from the SPP. Clearly, as represented by the blue metered native load line and the red
7 SPP purchased power line, all of our purchased power is for serving native load. The
8 difference between our metered load and the purchased power from the SPP is due to
9 losses and minor SPP resettlements that occur from month to month.

10 **Q: You also stated earlier that KCP&L sells all of the electricity it generates to SPP.**
11 **What evidence do you have to support this statement?**

12 A: Looking at KCP&L's metered generation and comparing to SPP sold power data, over a
13 given month, provides this evidence. Schedule JRC-2 shows data for the month of March
14 2015 for KCP&L's generation and for all KCP&L sold power to the SPP. Similar to
15 Schedule JRC-1, the blue metered generation line and the green SPP sold power line in
16 Schedule JRC-2 shows that all of our sold power is off our generating assets.

17 **Q: Does this mean that KCP&L must pay the SPP transmission fees it seeks to include**
18 **in the FAC in order to transact business in the SPP IM?**

19 A: Yes, Schedule JRC-3 shows all of the power KCP&L purchased from and sold to SPP
20 during March 2015. These transactions were necessary for KCP&L to serve its retail
21 load as well as make off-system sales and were made possible by KCP&L's participation
22 in the SPP IM which requires that KCP&L pay the SPP transmission fees in question.

1 **Q: Please summarize the Company's position regarding the inclusion of transmission**
2 **costs and administrative fees in an FAC.**

3 A: The Company should be granted an FAC that includes transmission costs and
4 administrative fees assessed by the SPP. The Company purchases 100% of its load from
5 the SPP market on a daily basis. The transportation vehicle for this purchased power
6 across the SPP is the transmission system, and the administrative function of scheduling,
7 planning and monitoring the system is essential to the flow of energy and purchased
8 power on the system. These transmission fees are a required cost in SPP IM to both serve
9 retail load as well as to sell power off-system. These transmission expenses and
10 administrative fees have a material impact on the Company's earnings, are outside of the
11 Company's control and are volatile.

12 **Q: Does that conclude your testimony?**

13 A: Yes, it does.

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Kansas City Power & Light)
Company's Request for Authority to Implement) Case No. ER-2014-0370
A General Rate Increase for Electric Service)

AFFIDAVIT OF JOHN R. CARLSON

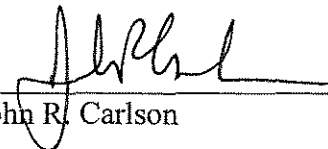
STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

John R. Carlson, being first duly sworn on his oath, states:

1. My name is John R. Carlson. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Originator, Supply Resources.

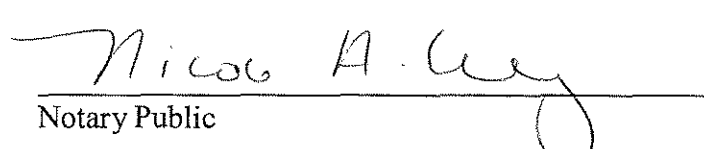
2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Kansas City Power & Light Company consisting of fifteen (15) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.



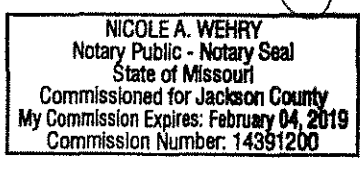
John R. Carlson

Subscribed and sworn before me this 7th day of May, 2015.

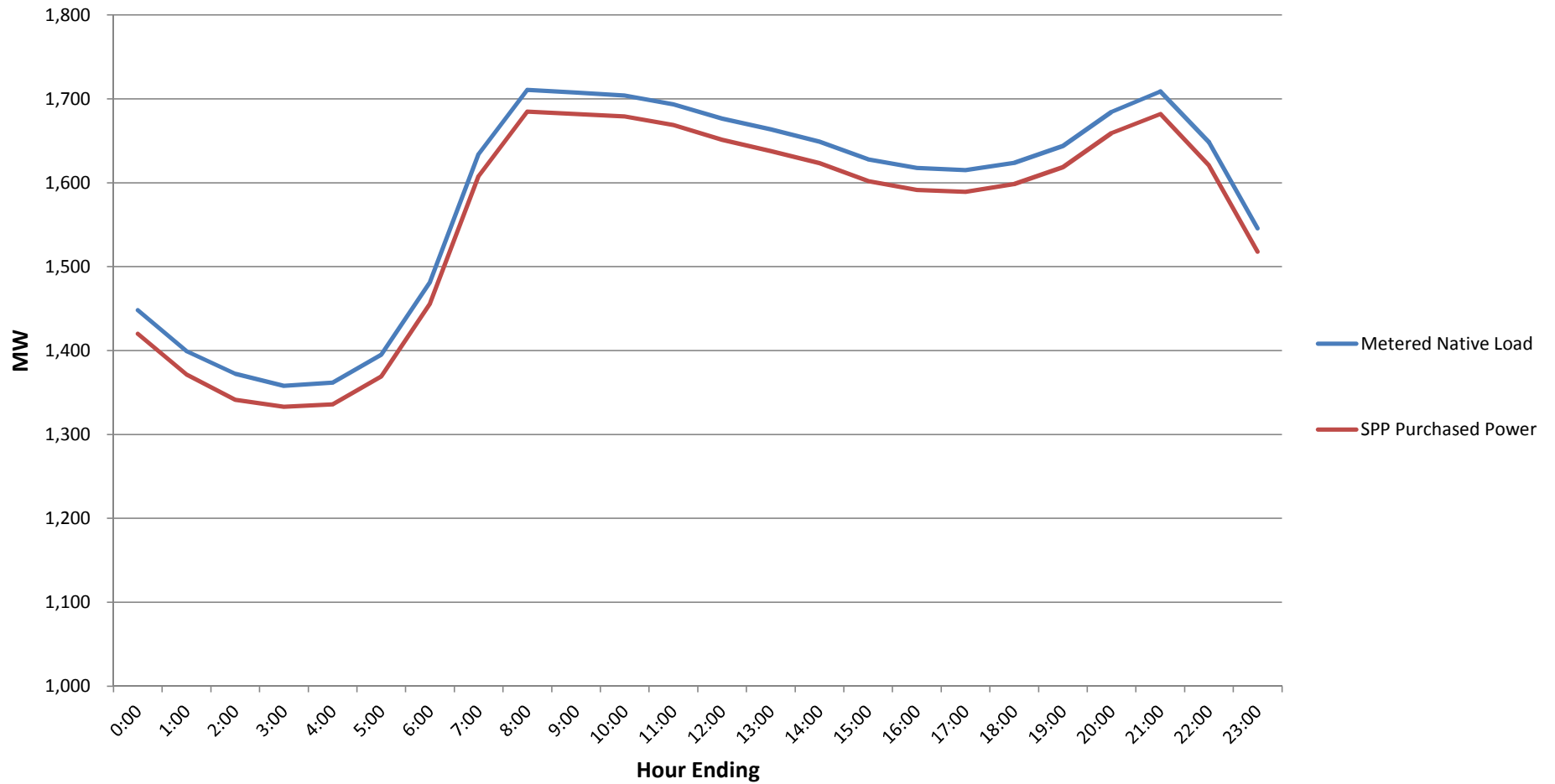


Notary Public

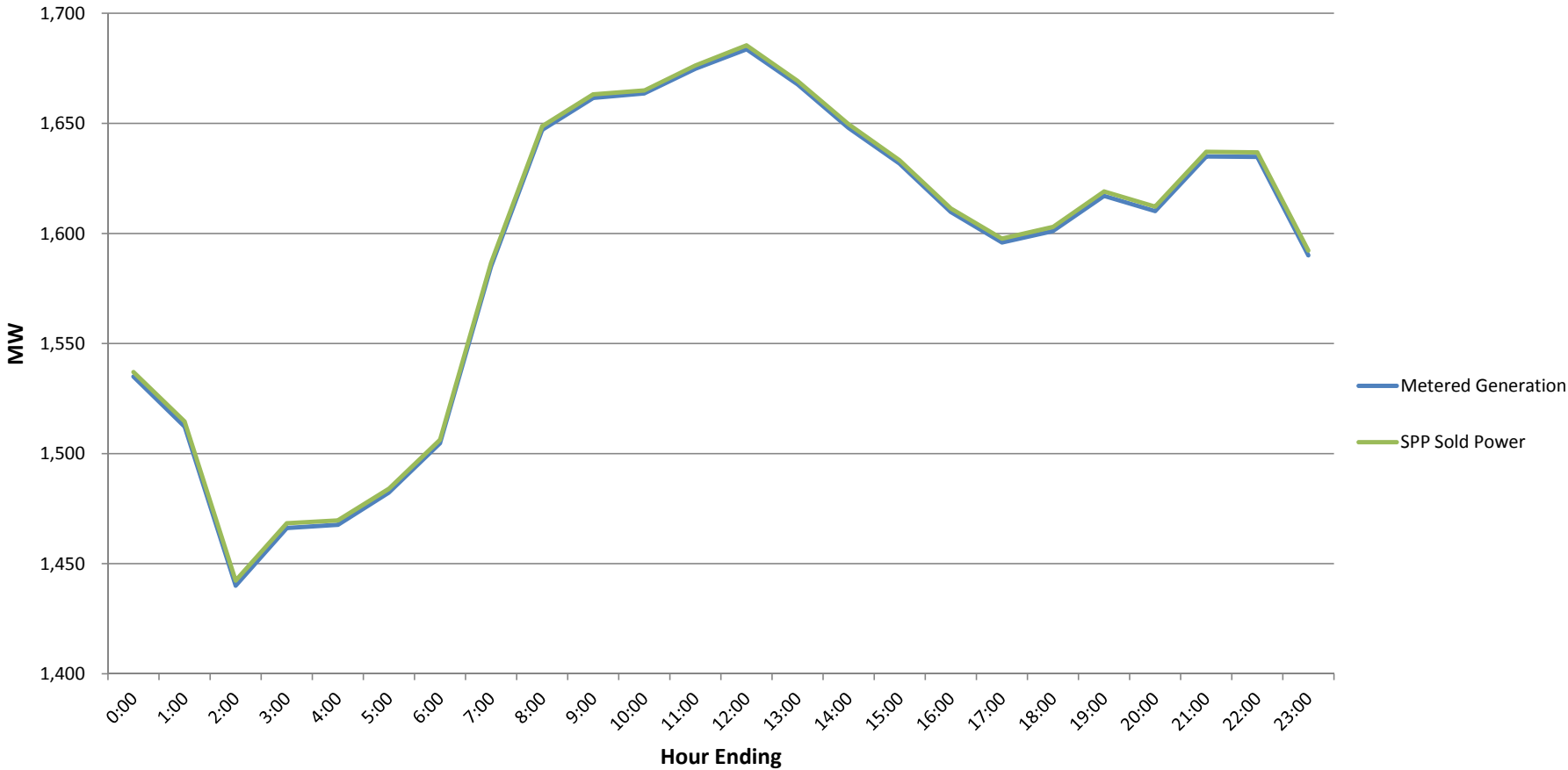
My commission expires: Feb. 4 2019



March 2015 Native Load and Purchased Power Data



March 2015 Metered Generation and Sold Power Data



March 2015 SPP Purchased and Sold Power

