Exhibit No.:	_____
Issue(s):	Purchased Power Expense
Witness/Type of Exhibit:	Mantle/Direct
Sponsoring Party:	Public Counsel
Case No.:	ER-2018-0145

DIRECT TESTIMONY

OF

LENA M. MANTLE

Submitted on Behalf of
the Office of the Public Counsel

KANSAS CITY POWER & LIGHT COMPANY

Case No. ER-2018-0145

** **

Denotes Confidential Information that has been redacted

June 19, 2018

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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 a General Rate Increase for Electric Service	))))	File No. ER-2018-0145
In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service	))))	File No. ER-2018-0146

AFFIDAVIT OF LENA M. MANTLE

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Lena M. Mantle, of lawful age and being first duly sworn, deposes and states:

1. My name is Lena M. Mantle. I am a Senior Analyst for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Lena M. Mantle
Senior Analyst

Subscribed and sworn to me this 19th day of June 2018.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

JERENE A. BUCKMAN
My Commission Expires
August 23, 2021
Cole County
Commission #13754037

Jerene A. Buckman
Notary Public

My Commission expires August 23, 2021.

TABLE OF CONTENTS

DIRECT TESTIMONY

OF

LENA M. MANTLE

KANSAS CITY POWER & LIGHT COMPANY
CASE NO. ER-2018-0145

KCP&L GREATER MISSOURI OPERATIONS COMPANY
CASE NO. ER-2018-0146

Q. Please state your name and business address.

A. My name is Lena M. Mantle and my business address is P.O. Box 2230, Jefferson City, Missouri 65102. I am a Senior Analyst for the Office of the Public Counsel ("OPC").

Q. Please briefly describe your experience and your qualifications.

A. I have been employed by the OPC in my current position since August 2014. In this position, I have provided testimony and support in electric, natural gas, and water cases for OPC. Prior to my employment at the OPC, I worked for the Staff of the Missouri Public Service Commission ("Staff") from August 1983 until I retired in December 2012. When I was employed at the Missouri Public Service Commission ("Commission"), I worked as an Economist, Engineer, Engineering Supervisor, and, ultimately, Manager of the Energy Department.

Attached as Schedule LMM-D-1 is a brief summary of my experience with OPC and Staff, along with a list of the Commission cases in which I filed testimony, Commission rulemakings in which I participated, and Commission reports to which I contributed. I am a Registered Professional Engineer in the State of Missouri.

Q. What is the purpose of your testimony?

A. The purpose of this testimony is to recommend that costs of $8,273,960 associated with a contract between Kansas City Power & Light Company ("KCPL") and the

Central Nebraska Public Power and Irrigation District ("CNPPID")[1] not be included in the revenue requirement used to set rates for KCPL's Missouri customers. KPCL did not enter into this contract to serve Missouri customers.

Missouri law allows for the recovery of "prudently incurred fuel and purchased-power costs, including transportation." Section 386.266.1.Utilities have seen falling coal prices, stable natural gas prices, lower market prices for purchased power, and stable or falling transportation costs. However, KCPL's and KCP&L Greater Missouri Operations Company's ("GMO") requests to increase the fuel adjustment clause ("FAC") base factors.[2] This testimony highlights these inconsistencies.

CNPPID Purchased Power Agreement (KCPL only)

Q. Why did KCPL enter into this purchased power agreement ("PPA")?

A. KCPL entered into this contract to meet the renewable energy standards ("RES") of Kansas.

Q. Would you please explain?

A. Beginning in 2011, the Kansas Renewable Energy Standards Act required Kansas electric public utilities to generate or purchase electricity generated from renewable energy resources, or purchase renewable energy credits.[3] The Kansas RES requirement was based on the average of the utility's peak demand over the previous three years and was to be met with generation *capacity* (mega-watts or "MW"), not energy (mega-watt hours or "MWh"). According to KCPL's response to OPC data request 8002 in this case, in 2010 KCPL estimated that "[u]sing banked capacity, along with existing capacity and capacity to be installed

[1] This contract was entered into on November 3, 2011, for delivery of energy beginning on January 1, 2014 through December 31, 2023.
[2] An FAC base factor refers to normalized FAC energy costs established in a general rate proceeding, that are used to set a base to which actual fuel costs are compared.
[3] This statute was repealed in 2015 making compliance with the standards voluntary.

at its Spearville wind facility, KCP&L expected to be in need of additional [Kansas] renewable capacity to meet its Kansas RES requirements." However, KCPL expected that it would be approximately ** ** short of meeting the Kansas RES requirement in 2011. KCPL's analysis at that time found that the ** ** hydro contract with CNPPID for the energy generated from ** ** hydro-electric plants in 2014 was more cost effective for meeting the Kansas RES than installing additional wind generation.

Q. If KCPL determined it was cost-effective to enter into the hydro PPA in 2014, then why should not KCPL's Missouri customers take advantage of this cost-effective resource?

A. It was cost-effective *to meet the Kansas RES requirement*, but it was not, and is not, a cost-effective source of electricity for serving KCPL's Missouri customers. Satisfying the Kansas RES requirement was the impetus for this contract. KCPL's resource planning process showed that KCPL had excess capacity and energy, and would continue to have excess capacity and energy during the time-period of this hydro contract.

This resource would only be cost-effective as a resource for serving Missouri ratepayers if the cost of the energy from it is less than the market price. The contract payment rate is ** ** the hydro facilities generate. CNPPID's compensation is ** **, even though KCPL entered into the contract to meet the Kansas RES capacity requirements. A review of the market prices KCPL used in its fuel model shows **

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Q. Is the energy generated from these hydro facilities eligible to meet Missouri RES standards?

A. No. The CNPPID hydro facilities have a capacity of greater than 10 MW at each facility and, unlike the Kansas RES statute, there is no hydro grandfather clause in Missouri's RES statute.

Q. Would you explain how you calculated the reduction in KCPL's revenue requirement of $8,273,960 you are recommending?

A. I calculated it from information on sheet "Monthly Summary" of KCPL witness Burton Crawford's workpaper "C-KCPL-2018-Direct-(12-15-17 Run).xls." It is the cost of the test-year hydro generation as modeled by KCPL, offset by a reduction in off-system sales revenue for off-systems sales of the same magnitude of the hydro generation MWh.

<u>Fuel Adjustment Clause</u> (KCPL and GMO)

Q. Do you have any recommendations regarding KCPL's and GMO's FACs?

A. Not at this time. However, OPC is investigating why KCPL and GMO FAC base rates continue to rise despite falling coal prices, stable natural gas prices, lower market prices for purchased power, and stable or falling transportation costs all of which are the components of the FAC that are specifically mentioned in the Missouri FAC statute (Section 386.266 RSMo.). In these rate cases, KCPL is asking the Commission to increase its FAC base by 6% from $0.01542[4] to

[4] KCPL witness Rush incorrectly states the current base rate as $0.01186 per kWh on Schedule TMR-1, page 2 of 7

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\$0.01635 per kilo-watt hour ("kWh") and GMO is asking the Commission to increase its FAC base by 20% from \$0.02055 to \$0.02465 per kWh.

Q. What could be causing the increase in FAC costs?

A. OPC is uncertain, but believes it to be intertwined with the change in how KCPL's and GMO's generation resources are identified and dispatched between when the FAC statute was passed and now. At the time the FAC statute passed in 2005, KCPL and GMO had generation resources, either owned or identified through bilateral purchased power contracts, that they dispatched to meet their customers' load requirements. If a utility had excess generation, it entered into contracts with other utilities to make off-system sales and generate revenue to offset costs incurred by the utility. It was easy to identify costs incurred by KCPL and GMO that correspond with the FAC statute. Off-system sales revenues were incorporated into GMO's FAC because the amount of revenue was very small.

The Southwest Power Pool ("SPP") began its energy markets in 2005. SPP began dispatching the generation resources bid into its markets to meet its members' load requirements. Utilities began using the words "purchased power cost" to refer to the payment they made to SPP for the energy SPP dispatched for their customers and "off-system sales revenue" to refer to the revenue SPP supplied to the utility for the utility's generation resources that it dispatched.

Q. What has been the result of these changes to how KCPL and GMO view their generating resources?

A. KCPL and GMO no longer consider their energy-generation resources as resources to meet their customers' energy needs. Instead, they are resources to generate revenue from SPP.

Q. How does treating energy-generation resources as a revenue opportunity rather than a service obligation impact the FACs?

A. KCPL and GMO are flowing through their FACs the revenues they receive from the SPP for their generating resources as "off-system sales revenues" and the charge from SPP for energy used by its customers as "purchased power costs." So under this different idea of the purpose for generation resources, the use of the resources that are being paid for by the customers is completely separate from the load requirements of those customers. Meanwhile customers are paying the capital costs of the resources and the fuel and operations and maintenance expenses for these resources.

If this is a more cost-effective and efficient use of resources, then with declining fuel costs and lower purchased power costs, the FAC costs should be declining. Instead, both KCPL and GMO is asking for an increase. This is counter-intuitive and KCPL and GMO should be required to explain why their FAC bases keep increasing.

Q. Are these new definitions of "off-system sales revenues" and purchased power costs" consistent with FERC's guidance on recording purchased power costs and off-system sales?

A. No. About the time that the Missouri FAC statute was being written in 2005, FERC was reviewing its accounting and financial reporting requirements to reflect the role of RTOs to provide more transparent and uniform accounting not previously addressed in its USOA and to establish uniform accounting requirements for the purchase and sale of energy in RTO markets to allow for a better comparability between public utilities. FERC concluded in its Docket No. RM04-12-000; Order No. 668 *Accounting and Financial Reporting for Public Utilities Including RTOs* issued on December 16, 2005:

> 80. Recording RTO energy market transactions on a net basis is appropriate as purchase and sale transactions taking place in the same reporting period to serve native load are done in

> contemplation of each other and should be combined. Netting accurately reflects what participants would be recording on their books and records in the absence of the use of an RTO market to serve their native load. Recording these transactions on a gross basis, in contrast, would give an inaccurate picture of a participant's size and revenue producing potential. The Commission will, therefore, adopt the proposed accounting for RTO energy market transactions with certain modifications and clarifications as discussed below. The Commission does expect public utilities, however, to maintain detailed records for auditing purposes of the gross sale and purchase transactions that support the net energy market amounts recorded on their books.
>
> 81. Additionally, we clarify that transactions are to be netted based on the RTO market reporting period in which the transaction takes place. For example, if the RTO market in which the transaction takes place uses an hourly period for determining energy market charges and credits, then non-RTO public utilities purchasing and selling energy in the market must net transactions on an hourly basis. Requiring participants to net transactions over the RTO market's reporting period leads to consistent and comparable energy market information for decision making purposes by the Commission and others.

Q. Why is this important?

A. As FERC stated in its Order 668, the gross reporting of costs and revenues do not provide sufficient detail about costs and revenues.[5] OPC believes this disconnect is what is driving the increase in KCPL's and GMO's FAC base costs. In KCPL's last rate case, the Commission saw the need for purchased power costs and off-system sales revenues be provided in accordance with FERC order 668 when it ordered, "Purchased power costs and off-system sales revenues provided in all FAC filings and report submissions shall be in accordance with FERC order 668

[5] Docket No. RM04-12-000; Order No. 668 *Accounting and Financial Reporting for Public Utilities Including RTOs,* page 3, issued on December 16, 2005.

and the Commission's definition of purchased power costs and off-system sales revenue."[6]

Q. Has KCPL complied with the Commission's order?

A. I believe so. However, the numbers provided in KCPL's FAC submissions are not of the same magnitude of those shown in KCPL's accounting schedules provided in Mr. Klote's testimony.

Q. How would you summarize OPC's position on the FAC?

A. Before making a determination as to whether or not KCPL and GMO should continue to have an FAC, they should provide information clarifying why their FAC costs are increasing in an environment with falling and/or stabilizing fuel and purchased power costs. Only after receiving this information and having time to review it can OPC take a position on the FAC.

Q. Does this conclude your direct testimony?

A. Yes, it does.

[6] ER-2016-0285, *Report and Order*, Page 32

Education and Work Experience Background of

Lena M. Mantle, P.E.

In my position as Senior Analyst for the Office of the Public Counsel ("OPC") I provide analytic and engineering support for the OPC in electric, gas, and water cases before the Commission. I have worked for the OPC since August, 2014.

I retired on December 31, 2012 from the Public Service Commission Staff as the Manager of the Energy Unit. As the Manager of the Energy Unit, I oversaw and coordinated the activities of five sections: Engineering Analysis, Electric and Gas Tariffs, Natural Gas Safety, Economic Analysis, and Energy Analysis sections. These sections were responsible for providing Staff positions before the Commission on all of the electric and gas cases filed at the Commission. This included reviews of fuel adjustment clause filings, resource planning compliance, gas safety reports, customer complaint reviews, territorial agreement reviews, electric safety incidents and the class cost-of-service and rate design for natural gas and electric utilities.

Prior to being the Manager of the Energy Unit, I was the Supervisor of the Engineering Analysis Section of the Energy Department from August, 2001 through June, 2005. In this position, I supervised engineers in a wide variety of engineering analysis including electric utility fuel and purchased power expense estimation for rate cases, generation plant construction audits, review of territorial agreements, and resolution of customer complaints all the while remaining the lead Staff conducting weather normalization in electric cases.

From the beginning of my employment with the Commission in the Research and Planning Department in August, 1983 through August, 2001, I worked in many areas of electric utility regulation. Initially I worked on electric utility class cost-of-service analysis, fuel modeling and what has since become known as demand-side management. As a member of the Research and Planning Department under the direct supervision of Dr. Michael Proctor, I participated in the development of a leading-edge methodology for weather normalizing hourly class energy for rate design cases. I took the lead in developing personal computer programming of this methodology and applying this methodology to weather-normalize electric usage in numerous electric rate cases. I was also a member of the team that assisted in the development of the Missouri Public Service Commission electronic filing and information system ("EFIS").

I received a Bachelor of Science Degree in Industrial Engineering from the University of Missouri, at Columbia, in May, 1983. I am a registered Professional Engineer in the State of Missouri.

Lists of the cases I have filed testimony as an OPC, the Missouri Public Service Commission rules in which I participated in the development of or revision to, the Missouri Public Service Commission Testimony Staff reports that I contributed to and the cases that I provided testimony in follow.

Office of Public Counsel Case Listing

Case	Filing Type	Issue
EO-2018-0092	Rebuttal, Surrebuttal	OPC Opposition of Request for Approval of Changes to Resource Plan
GR-2017-2015 & GR-2017-2016	Direct, Rebuttal, Surrebuttal	Energy Efficiency and Low-Income Programs
EO-2017-0065	Direct, Rebuttal, Surrebuttal	Fuel Adjustment Clause Prudence Review
ER-2016-0285	Direct, Rebuttal, Surrebuttal	Fuel Adjustment Clause
ER-2016-0156	Direct, Rebuttal, Surrebuttal	Fuel Adjustment Clause, Resource Planning
ER-2016-0023	Direct, Rebuttal, Surrebuttal	Fuel Adjustment Clause
WR-2015-0301	Direct, Rebuttal, Surrebuttal	Revenues, Environmental Cost Recovery Mechanism
ER-2014-0370	Direct, Rebuttal, Surrebuttal	Fuel Adjustment Clause
ER-2014-0351	Direct, Rebuttal, Surrebuttal	Fuel Adjustment Clause
ER-2014-0258	Direct, Rebuttal, Surrebuttal	Fuel Adjustment Clause
EC-2014-0224	Surrebuttal	Policy, Rate Design

Missouri Public Service Commission Rules

4 CSR 240-3.130	Filing Requirements and Schedule of Fees for Applications for Approval of Electric Service Territorial Agreements and Petitions for Designation of Electric Service Areas
4 CSR 240-3.135	Filing Requirements and Schedule of Fees Applicable to Applications for Post-Annexation Assignment of Exclusive Service Territories and Determination of Compensation
4 CSR 240-3.161	Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms Filing and Submission Requirements
4 CSR 240-3.162	Electric Utility Environmental Cost Recovery Mechanisms Filing and Submission Requirements
4 CSR 240-3.190	Reporting Requirements for Electric Utilities and Rural Electric Cooperatives
4 CSR 240-14	Utility Promotional Practices
4 CSR 240-18	Safety Standards
4 CSR 240-20.015	Affiliate Transactions
4 CSR 240-20.017	HVAC Services Affiliate Transactions
4 CSR 240-20.090	Electric Utility Fuel and Purchased Power Cost Recovery Mechanisms
4 CSR 240-20.091	Electric Utility Environmental Cost Recovery Mechanisms
4 CSR 240-22	Electric Utility Resource Planning
4 CSR 240-80.015	Affiliate Transactions
4 CSR 240-80.017	HVAC Services Affiliate Transactions

Staff Direct Testimony Reports

ER-2012-0175	Capacity Allocation, Capacity Planning
ER-2012-0166	Fuel Adjustment Clause
ER-2011-0028	Fuel Adjustment Clause
ER-2010-0356	Resource Planning Issues
ER-2010-0036	Environmental Cost Recovery Mechanism
HR-2009-0092	Fuel Adjustment Rider
ER-2009-0090	Fuel Adjustment Clause, Capacity Requirements
ER-2008-0318	Fuel Adjustment Clause
ER-2008-0093	Fuel Adjustment Clause, Experimental Low-Income Program
ER-2007-0291	DSM Cost Recovery

Missouri Public Service Commission Staff Testimony

Case No.	Filing Type	Issue
ER-2012-0175	Rebuttal, Surrebuttal	Resource Planning Capacity Allocation
ER-2012-0166	Rebuttal, Surrebuttal	Fuel Adjustment Clause
EO-2012-0074	Direct/Rebuttal	Fuel Adjustment Clause Prudence
EO-2011-0390	Rebuttal	Resource Planning Fuel Adjustment Clause
ER-2011-0028	Rebuttal, Surrebuttal	Fuel Adjustment Clause
EU-2012-0027	Rebuttal, Surrebuttal	Fuel Adjustment Clause
ER-2010-0356	Rebuttal, Surrebuttal	Resource Planning Allocation of Iatan 2
EO-2010-0255	Direct/Rebuttal	
ER-2010-0036	Supplemental Direct, Surrebuttal	Fuel Adjustment Clause
ER-2009-0090	Surrebuttal	Capacity Requirements
ER-2008-0318	Surrebuttal	Fuel Adjustment Clause
ER-2008-0093	Rebuttal, Surrebuttal	Fuel Adjustment Clause Low-Income Program
ER-2007-0004	Direct, Surrebuttal	Resource Planning
GR-2007-0003	Direct	Energy Efficiency Program Cost Recovery
ER-2007-0002	Direct	Demand-Side Program Cost Recovery
ER-2006-0315	Supplemental Direct, Rebuttal	Energy Forecast Demand-Side Programs Low-Income Programs
ER-2006-0314	Rebuttal	Jurisdictional Allocation Factor
EA-2006-0309	Rebuttal, Surrebuttal	Resource Planning
ER-2005-0436	Direct, Rebuttal, Surrebuttal	Low-Income Programs Energy Efficiency Programs Resource Planning
EO-2005-0329	Spontaneous	Demand-Side Programs Resource Planning

Missouri Public Service Commission Staff Case Listing (cont.)

EO-2005-0293	Spontaneous	Demand-Side Programs Resource Planning
ER-2004-0570	Direct, Rebuttal, Surrebuttal	Reliability Indices Energy Efficiency Programs Wind Research Program
EF-2003-0465	Rebuttal	Resource Planning
ER-2002-425	Direct	Derivation of Normal Weather
EC-2002-1	Direct, Rebuttal	Weather Normalization of Class Sales Weather Normalization of Net System
ER-2001-672	Direct, Rebuttal	Weather Normalization of Class Sales Weather Normalization of Net System
ER-2001-299	Direct	Weather Normalization of Class Sales Weather Normalization of Net System
EM-2000-369	Direct	Load Research
EM-2000-292	Direct	Load Research
EM-97-515	Direct	Normalization of Net System
ER-97-394, et. al.	Direct, Rebuttal, Surrebuttal	Weather Normalization of Class Sales Weather Normalization of Net System Energy Audit Tariff
EO-94-174	Direct	Weather Normalization of Class Sales Weather Normalization of Net System
ER-97-81	Direct	Weather Normalization of Class Sales Weather Normalization of Net System TES Tariff
ER-95-279	Direct	Normalization of Net System
ET-95-209	Rebuttal, Surrebuttal	New Construction Pilot Program
EO-94-199	Direct	Normalization of Net System
ER-94-163	Direct	Normalization of Net System
ER-93-37	Direct	Weather Normalization of Class Sales Weather Normalization of Net System
EO-91-74, et. al.	Direct	Weather Normalization of Class Sales Weather Normalization of Net System
EO-90-251	Rebuttal	Promotional Practices Variance
ER-90-138	Direct	Weather Normalization of Net System
ER-90-101	Direct, Rebuttal, Surrebuttal	Weather Normalization of Class Sales Weather Normalization of Net System
ER-85-128, et. al.	Direct	Demand-Side Update
ER-84-105	Direct	Demand-Side Update