COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF
KENTUCKY UTILITIES COMPANY FOR
AN ADJUSTMENT OF ITS ELECTRIC
RATES

CASE NO. 2018-00294

NOTICE OF FILING OF TESTIMONY OF
THE KROGER COMPANY AND WALMART, INC.

Pursuant to the requirements of the Kentucky Public Service Commission's (the "Commission") Orders entered on October 11, 2018 and November 9, 2018, the Kroger Company ("Kroger") and Walmart, Inc. ("Walmart"), by and through counsel, hereby submit the Direct Testimony and Exhibits of Gregory W. Tillman on behalf of Walmart, Inc. (Attachment A), and the Direct Testimony of Justin Bieber on behalf of The Kroger Company (Attachment B). Kroger concurs in and supports the Direct Testimony and Exhibits of Gregory W. Tillman, and Walmart concurs in and supports the Direct Testimony of Justin Bieber.

The submission of this direct testimony does not constitute a waiver by either Kroger or Walmart of the right to object to or appeal the Order entered by the Commission on November 9, 2018, granting full intervention to both parties on a joint basis rather than on an individual basis, and stating that Kroger and Walmart are to be considered one party rather than individual parties.

Respectfully submitted,

[Signature]

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COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF

ELECTRONIC APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC RATES

CASE NO. 2018-00294

DIRECT TESTIMONY AND EXHIBITS OF GREGORY W. TILLMAN ON BEHALF OF WALMART INC.

Filed: January 16, 2019
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Exhibits

Exhibit GWT-1 – Witness Qualifications Statement
Exhibit GWT-2 – Estimation of Annualized Bill Impact of the Termination of the TCJA Surcredit
Exhibit GWT-3 – Calculation of Revenue Requirement Impact of KU’s Proposed Increase in ROE
Exhibit GWT-4 – Calculation of Revenue Requirement Impact of Including CWIP in Rate Base
Exhibit GWT-5 – Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to Present
Exhibit GWT-6 – Class Relative Rates of Return
Introduction

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.
A. My name is Gregory W. Tillman. My business address is 2001 SE 10th St., Bentonville, AR 72716-5530. I am employed by Walmart Inc. as Senior Manager, Energy Regulatory Analysis.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?
A. I am testifying on behalf of Walmart Inc. ("Walmart").

Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.
A. I earned a Bachelor of Science in Electrical Engineering from the University of Tulsa in 1987. Prior to joining Walmart in 2015, I had over 22 years of experience in the regulated and deregulated energy industry including roles in regulatory, pricing, billing, and metering information. In 1990, after serving on active duty as a Signal Officer in the United States Army, I joined Public Service Company of Oklahoma ("PSO"). From 1990 through 1997, I was employed in various positions at PSO, including in the Information Services, Business Planning, Rates and Regulatory, and Ventures departments. During my tenure with the Rates and Regulatory Department, I served as the Supervisor of Power Billing and Data Collection. In this position, I managed the billing for large industrial and commercial customers and led the implementation of PSO's real-time pricing program. I also managed the implementation of real-time pricing for the three remaining utilities in the Central and South West Corporation – Southwestern Electric Power Company, Central Power and Light, and West Texas Utilities. In 1997, I joined the Retail Energy Department of the
Williams Energy Company as the Manager of Systems for the retail gas and electric data and billing. I also managed the customer billing function at Williams Thermogas as well as the billing and accounting systems support functions at Williams Communications. From 2000 to 2002, I served as the Vice President of Energy Solutions for Automated Energy. In 2008, following several assignments as a consultant and project manager in various industries, I joined Oklahoma Gas & Electric Company ("OG&E") as a Senior Pricing Analyst. I was promoted to Manager of Pricing in January 2010 and became the Product Development Pricing Leader in 2013. While at OG&E, I was instrumental in developing and managing OG&E's pricing strategy and products, including the design and implementation of OG&E's SmartHours™ rate. I have been in my current position with Walmart since November 2015. My Witness Qualification Statement is included herein as Exhibit GWT-1.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION ("KPSC" OR "THE COMMISSION")?


Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE OTHER STATE REGULATORY COMMISSIONS?

A. Yes. I have testified in thirty-one (31) other proceedings before the Arizona Corporation Commission, the Arkansas Public Service Commission, the Connecticut Public Utilities Regulatory Authority, the Indiana Utility Regulatory Commission, the
Iowa Utilities Board, the Michigan Public Service Commission, the Public Utility Commission of Nevada, the New Jersey Board of Public Utilities, the Oklahoma Corporation Commission, the Pennsylvania Public Utility Commission, the Rhode Island Public Utilities Commission, the South Carolina Public Service Commission, The Public Utilities Commission of Texas, the Commonwealth of Virginia State Corporation Commission, the Public Service Commission of West Virginia, and the Wisconsin Public Service Commission. My testimony addressed the topics of revenue requirement, rate design, revenue allocation, pricing, customer impacts, tariffs, and terms and conditions of service. See Exhibit GWT-1.

Q. ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?
A. Yes. I am sponsoring the exhibits listed in the Table of Contents.

Q. PLEASE BRIEFLY DESCRIBE WALMART’S OPERATIONS IN KENTUCKY.
A. As shown on Walmart's website, there are 102 retail units and two distribution centers, employing 30,171 associates in the Commonwealth of Kentucky. In fiscal year ending 2018, Walmart purchased $586.1 million worth of goods and services from 780 Kentucky-based suppliers, supporting an additional 40,624 supplier jobs.¹

¹ http://corporate.walmart.com/our-story/locations/united-states#/united-states/kentucky
Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN KENTUCKY UTILITIES COMPANY'S SERVICE TERRITORY.

Walmart has 32 retail units that take electric service from Kentucky Utilities Company ("KU" or "the Company"). Primarily, Walmart takes service under rate Time-of-Day Secondary Service ("TODS").

Purpose of Testimony

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony addresses aspects of KU's Application for Authority to Adjust Electric Rates ("Application"), specifically, the Company's requested rate increase, including the Return on Equity ("ROE") sought by KU, the Company's Cost of Service Study ("COSS"), and the proposed revenue allocation and rate design, and provides recommendations to assist the Commission in its consideration of the Application.

Summary of Recommendations

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE COMMISSION.

A. My recommendations to the Commission are as follows:

1) In evaluating the $112 million dollar revenue requirement increase proposed by the Company, the Commission should take into account the compounding effect this increase would have on the Company's ratepayers in light of:

   a. The increased revenue requirement of $51,583,240 awarded to the Company in June 2017 in the 2016 Base Rate Case; and
b. The expected annualized increase to rates associated with the expiration of
the TCJA Surcredit;

2) The Commission should reject KU's proposed inclusion of approximately $134.5
million of CWIP in rate base. If, however, the Commission determines that CWIP
should continue to be included in rate base, it should: (1) mitigate the growth in
CWIP from case-to-case; and (2) recognize the resulting shift in risk from the
Company's shareowners to its customers and reflect that shift in risk in the form of
a reduced authorized ROE.

3) In setting the appropriate ROE in these proceedings, the Commission should
consider the currently authorized ROE of 9.7 percent awarded to the Company and
whether the Company's financial situation has deteriorated since the 9.7 percent
was awarded. The Commission should also consider the nationwide trends on
ROEs as well as the decreased risk profile of the Company associated with the
favorable regulatory environment, which includes CWIP in rate base, the use of
forecasted test year, and a risk reducing capital structure. These factors all support
an ROE of no more than 9.7 percent.

4) For the purposes of this docket, Walmart does not oppose the Company's proposed
COSS. However, to the extent that alternative cost of service models or
modifications to the Company's model are proposed by other parties, Walmart
reserves the right to address any such changes.

5) At the proposed revenue requirement, Walmart does not oppose the Company's
revenue allocation.
6) If the Commission ultimately approves a revenue requirement less than that proposed by the Company, the reduction in the proposed revenue requirement should be used to: (1) further reduce the existing intra-class subsidy burden on the major classes; and (2) reduce the overall impact on all customer classes as outlined within my testimony.

7) Walmart does not oppose the change in billing determinants from kW units to kVA units for the TODS Rate.

Q. DOES THE FACT THAT YOU MAY NOT ADDRESS AN ISSUE OR POSITION ADVOCATED BY THE COMPANY INDICATE WALMART'S SUPPORT?

A. No. The fact that an issue is not addressed herein or in related filings should not be construed as an endorsement of any filed position.

KU Proposed Revenue Increase

Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED ELECTRIC REVENUE REQUIREMENT INCREASE?

A. KU seeks an increase in annual revenue of $112 million, or 6.9 percent. See Testimony of Robert M. Conroy, p. 5, line 21. This proposed increase is based on a fully forecasted test period ending April 30, 2020. See Application, p. 7 at ¶ 11.
Q. DOES THE PROPOSED INCREASE REFLECT THE TOTAL IMPACT ON KU'S CUSTOMERS?

A. No. The Tax Cuts and Jobs Act ("TCJA") Surcredit will terminate contemporaneously with the implementation of the base rates approved in this case, further compounding the increase to customer bills. *Id.* p. 4 at ¶ 7.

Q. HAVE YOU ESTIMATED THE ANNUALIZED IMPACT ON CUSTOMER BILLS OF THE TERMINATION OF THE TCJA SURCREDIT?

A. Yes. When the TCJA Surcredit expires, customers will see an additional annualized increase of $63 million dollars. *See* Exhibit GWT-2. When coupled with the rate increased sought here, customers could see a total bill increase of $175 million dollars. The Company estimates that a residential customer will see a bill increase of nearly $13.47, approximately 11.7 percent of the current, average customer bill. Application at ¶ 7.

Q. SHOULD THE COMMISSION CONSIDER THE COMBINED IMPACT OF THE PROPOSED RATE INCREASE AND TAX CREDIT EXPIRATION OF $175 MILLION ON CUSTOMERS IN SETTING THE REVENUE REQUIREMENT AND ROE FOR THE COMPANY?

A. Yes. The Commission should also consider the fact that the Company was granted a revenue requirement increase of $51,583,240 in June 2017 as part of its last base rate proceeding. *See* Case No. 2016-00370, Order dated June 29, 2017 (the "2016 Base Rate Case"). The TCJA Surcredit only resulted in a partial offset of the increases that
customers otherwise would have seen as a result of the rate increase in the 2016 Base Rate Case.

Electricity is a significant expense for all of the Company's customers. In Walmart and Kroger's cases, electricity represents a significant portion of a retailer's operating costs. The pace of the Company's rate increases in recent years is far outpacing the costs of inflation. This means that customers not only pay more for their electricity, but that what they pay represents an ever larger share of their total income. From a retailer's perspective, when electric rates increase, the increase in cost to retailers puts pressure on consumer prices and on the other expenses required by a business to operate.

The Commission should balance the interests of the Company with the interests of its customers. To that end, the Commission should thoroughly and carefully consider the financial impact of a rate increase on customers, both in terms of the overall revenue requirement and the ROE earned on that revenue, particularly in light of the fact the Company just received a rate increase in June 2017. Such consideration ensures that any increase in the Company's rates reflects the minimum amount necessary to compensate the Company for adequate and reliable service while continuing to provide KU the opportunity to earn a reasonable return, but without further burdening an already overburdened customer base.
Return on Equity

Q. WHAT IS THE COMPANY'S PROPOSED ROE IN THIS DOCKET?

A. KU witness McKenzie recommends an ROE of 10.42 percent. See Testimony of Adrien M. McKenzie, p. 6, line 22. This recommendation is based on a range of 9.92 percent to 10.92 percent estimated using the discounted cash flow, capital asset pricing model, empirical capital asset pricing model, and risk premium analyses. The proposed range includes a flotation cost adjustment of 12 basis points. See id., p. 7, lines 5-15. The requested ROE at the Company's proposed capital structure results in a proposed weighted cost of capital equal to 7.56 percent on the Company's capitalization. See Schedule J-1.1/J-1.2.

Q. ARE YOU CONCERNED THAT THE COMPANY'S PROPOSED ROE OF 10.42 PERCENT IS EXCESSIVE?

A. Yes. I am concerned that the Company's proposed ROE is excessive, especially in light of: (1) the customer impact of the resulting revenue requirement increase as discussed above; (2) the use of risk-reducing rate-making structures such as the forecast test-year, inclusion of CWIP in rate base, and the Company's proposed capital structure; and (3) recent rate case ROEs approved by commissions nationwide.

Q. IS THE COMPANY'S PROPOSED ROE HIGHER THAN ITS CURRENTLY AUTHORIZED ROE?

A. Yes. In the 2016 Base Rate Case, the Commission authorized an ROE of 9.7 percent. See 2016 Base Rate Case at Order at 18 (June 22, 2017). Interestingly, a Stipulation filed in the 2016 Base Rate Case proposed an ROE of 9.75 percent, but the Commission
rejected it in favor of the lower ROE of 9.70 percent. Id. The ROE proposed in this proceeding represents an increase of 72 basis points to the ROE authorized by the Commission in the 2016 Base Rate Case.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF THE COMPANY’S PROPOSED 72 BASIS POINT INCREASE IN THE ROE?

A. The impact of the ROE change is an increase to the revenue requirement of approximately $20.8 million as compared to that resulting from the 9.7 percent ROE approved in the most recent rate case. The requested increase due to the increased ROE constitutes approximately 18.5 percent of the base revenue increase requested by KU. See Exhibit GWT-3.

Q. GENERALLY, DOES THE USE OF A FORECAST TEST YEAR DECREASE THE COMPANY'S BUSINESS RISK?

A. Yes. The use of a forecast test year allows the Company to include the most current information in the rates being charged to customers at the time those rates will be in effect, which reduces the Company's exposure to regulatory lag in cost recovery when compared to the use of a historical test year in setting rates.

Q. WHAT IS THE COMPANY'S PROPOSED CAPITAL STRUCTURE IN THIS CASE?

A. The Company proposes a capital structure consisting of an equity portion of 52.84 percent, a long-term debt portion of 45.91 percent, and short-term debt portion of 1.25 percent. See Schedule J-1.1/J-1.2.
Q. DOES WALMART TAKE A POSITION ON THE CAPITAL STRUCTURE PROPOSED BY THE COMPANY?

A. No, however, the Commission should consider the impact of the proposed capital structure on the Company's equity risk in its determination of the appropriate ROE. As KU witness McKenzie explains, "[o]ther things equal, a higher debt ratio, or lower common equity ratio, translates into increased financial risk for all investors." See Testimony of Adrien M. McKenzie, p. 31, lines 15-16. It necessarily follows that the converse must also be true; a lower debt ratio, or higher common equity ratio, would translate into reduced financial risk, leading to a reduced cost of equity.

Q. WHAT IS YOUR UNDERSTANDING OF THE COMMISSION'S TRADITIONAL TREATMENT OF CWIP IN RATE BASE?

A. It is my understanding that the Commission has long allowed utilities to include CWIP in rate base.

Q. ARE YOU CONCERNED WITH THE INCLUSION OF CWIP IN RATE BASE?

A. Yes. Including CWIP in rate base results in charges to ratepayers for assets that are not yet "used and useful" in providing electric service. Under the Company's proposal, ratepayers will pay for assets prior to receiving any benefits from those assets. This violates the matching principle, namely that customers should bear costs at the time they are receiving the corresponding benefits. Changes in the number and mix of customers that occur during the construction process, i.e., before the asset becomes used and useful can often mean that some customers pay for an asset but do not benefit from it (or vice versa). For example, customers may pay for certain assets during the
construction phase, but leave the system before those assets become operational, and thus receive no benefit for their portion of the cost of the assets for which they paid.

Indeed, the pitfalls of allowing a utility to recover for an asset that is not yet used and useful was made painfully apparent in South Carolina when SCE&G abandoned their nuclear power plants after recovering billions from its customers as CWIP.

Q. ARE THERE OTHER CONCERNS WITH INCLUDING CWIP IN RATE BASE THAT THE COMMISSION SHOULD CONSIDER?

A. Yes. Including CWIP in rate base shifts risk onto ratepayers that traditionally is assumed by the utility's investors. Investors are already compensated for the risk they bear through the authorization of a return on the investment and the value of financing the construction once the asset is placed in service. Utility's customers who pay for construction costs receive no current benefit for the use of their money. Moreover, under this scenario, the party bearing the risk -- the utility's ratepayers -- have no recourse for recovering or mitigating the cost of financing the asset's construction in the event the Company encounters problems during the construction of the plant resulting in stoppage of the construction, non-completion of the project, and/or a substantial delay in the project's completion. When investors bear the risk of construction problems, investors are not only incentivized, but empowered, to rectify the delays and/or stoppages.
Q. HOW MUCH CWIP DOES THE COMPANY PROPOSE TO INCLUDE IN ITS RATE BASE?
A. KU proposes to include approximately $134.5 million of CWIP in its test year rate base. See Schedule B-4.

Q. AT THE COMPANY'S PROPOSED CWIP AMOUNT, HOW MUCH OF KU'S RATE BASE WOULD BE ASSOCIATED WITH CWIP?
A. As proposed, CWIP constitutes approximately 3.3 percent of the Company's rate base. See Exhibit GWT-4.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF INCLUDING CWIP IN RATE BASE?
A. The inclusion of CWIP in rate base results in a revenue requirement impact to customers of approximately $13.8 million on an annual basis. Id.

Q. HOW DO THESE VALUES COMPARE TO THE SAME VALUES INCLUDED IN THE COMPANY'S MOST RECENT RATE CASE FILINGS?
A. When compared to the 2014 and 2016 Base Rate Cases, the amount of CWIP in rate base has grown significantly.

Q. PLEASE ELABORATE.
A. CWIP included in rate base has steadily increased from a proposed $91.9 million in 2014, to $118.7 million in 2016, and to the Company's proposed $134.5 million in this case. These increases represent an increase in the percentage of CWIP of total rate base from 2.5 percent to 3.3 percent. The proposed revenue requirement related to CWIP has also increased from $10.8 million to the Company's proposed $13.8 million,

Q. **WHAT IS YOUR RECOMMENDATION TO THE COMMISSION REGARDING THE INCLUSION OF CWIP IN RATE BASE?**

A. The Commission should reject KU's proposed inclusion of approximately $134.5 million of CWIP in rate base. However, if the Commission determines that CWIP should continue to be included in rate base, it should: (1) mitigate the growth in CWIP from case-to-case; and (2) recognize the resulting shift in risk from the Company's shareowners to its customers in the form of a reduced authorized ROE.

*National Utility Industry ROE Trends*

Q. **IS THE COMPANY’S PROPOSED ROE CONSISTENT WITH ROEs APPROVED BY OTHER UTILITY REGULATORY COMMISSIONS?**

A. The ROE proposed by the Company is higher than the average ROE approved by other utility regulatory commissions nationwide in 2016, 2017, and 2018. *See Exhibit GWT-5.*
Q. WHAT IS YOUR UNDERSTANDING OF THE ROE AWARDED IN RECENT RATE CASES?

A. According to data from SNL Financial,¹ a financial news and reporting company, there have been 110 reported electric utility rate case ROEs authorized by state regulatory commissions for investor-owned electric utilities in 2016, 2017, and 2018. *Id.* The average of the reported ROEs in those cases is 9.61 percent. The range of reported authorized ROEs for the same period is 8.40 percent to 11.95 percent, and the median authorized ROE is 9.60 percent. *Id.*

Q. SEVERAL OF THE REPORTED AUTHORIZED ROES ARE FOR DISTRIBUTION-ONLY UTILITIES OR FOR ONLY A UTILITY’S DISTRIBUTION SERVICE RATES. WHAT IS THE AVERAGE AUTHORIZED ROE IN THE REPORTED GROUP FOR VERTICALLY INTEGRATED UTILITIES LIKE KU?

A. In the group reported by SNL Financial, the average ROE for vertically integrated utilities authorized from 2016 through present is 9.75 percent. *Id.* Nationally, ROE awards have remained substantially constant over this period. *Id.*

Q. PLEASE EXPLAIN.

A. The average authorized ROE for vertically integrated utilities in 2016 was 9.77 percent, in 2017 it was 9.80 percent, and in 2018 it was 9.68 percent. Additionally, over this period, 30 vertically integrated utilities have been authorized ROEs of 9.60 percent or

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¹ Regulatory Research Associates is part of SNL Financial.
As such, the Company's proposed 10.42 percent ROE is counter to broader electric industry trends.

Q. **IS WALMART RECOMMENDING THAT THE COMMISSION BE BOUND BY ROEs AUTHORIZED BY OTHER STATE REGULATORY AGENCIES?**

A. No. Decisions of other state regulatory commissions are not binding on the Commission. Additionally, each commission considers the specific circumstances in each case in its determination of the proper ROE. Walmart is providing this information to illustrate a national customer perspective on industry trends in authorized ROE. In addition to using recent authorized ROEs as a general gauge of reasonableness for the various cost of equity analyses presented in this case, the Commission should consider how its authorized ROE impacts existing and prospective customers relative to other jurisdictions.

**Conclusion**

Q. **GENERALLY, WHAT IS YOUR RECOMMENDATION TO THE COMMISSION REGARDING THE COMPANY'S PROPOSED REVENUE REQUIREMENT INCREASE?**

A. The Commission should exclude CWIP when calculating the Company's revenue requirement. The revenue requirement should be further decreased by adoption of a lower ROE as discussed herein. Further, in determining whether or not to further raise rates, the Commission should take into account the significant rate increases suffered by the Company's ratepayers in recent years, including the compounding effect associated with the TCJA Surcredit expiring.
Q. GENERALLY, WHAT IS YOUR RECOMMENDATION TO THE COMMISSION REGARDING THE COMPANY'S PROPOSED ROE?

A. The Commission should approve an ROE no higher than the Company's currently authorized 9.7 percent. Such an ROE is consistent with nationwide trends. Moreover, there is no evidence to suggest that the Company's financial situation has deteriorated since the 2016 Base Rate Case when the 9.7 percent ROE was awarded. Indeed, an ROE lower that 9.7 percent is appropriate because of the favorable regulatory environment, which includes the reduced risk associated with the Company's proposed capital structure that favors equity over debt, the inclusion of CWIP in rate base, and permits the use of a forecasted test year in base rate cases.

Cost of Service

Q. WHAT IS WALMART'S POSITION ON SETTING RATES BASED ON THE COST OF SERVICE?

A. Walmart advocates that rates be set by regulatory agencies based on the utility's cost of service for each rate class. A regulatory policy that supports the fair-cost-apportionment objective of rate-making ensures that rates reflect cost causation, which sends proper price signals to customers and minimizes price distortions.

Q. HOW IS COST CAUSATION DETERMINED IN THE RATE-MAKING PROCESS?

A. In cost of service regulation, the Commission must determine the revenue requirement that the Company is authorized to recover based on prudent costs including a reasonable return on the investment required to provide service. The utility's COSS is
an analytic tool commonly used to determine the total cost and equitable assignment of
cost responsibility to customers. This is accomplished by identifying, functionalizing,
classifying, and allocating the allowable costs to customer classes in the manner that
customers cause those costs to be incurred.

Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED
   PRODUCTION COST ALLOCATION METHODOLOGY?

A. My understanding is that the Company proposes to allocate the production cost using
   a loss of load probability ("LOLP") methodology. LOLP is an hourly determination of
   the probability that a utility generating capacity will be insufficient to meet the demand
   for electricity. Production plant costs are allocated to various classes based on each
   class' contribution to the LOLP over a specified period. Specifically, the Company
   based the allocation used in its COSS over the fully forecasted test year.

Q. IS THE LOLP METHODOLOGY THE SAME METHODOLOGY USED IN
   THE LAST RATE CASE?

A. Yes.

Q. DOES WALMART OPPOSE THE COMPANY'S PROPOSED COST OF
   SERVICE STUDY?

A. For the purposes of this docket, Walmart does not oppose the Company's proposed
   COSS. However, to the extent that alternative cost of service models or modifications
   to the Company's model are proposed by other parties, Walmart reserves the right to
   address any such changes.
Revenue Allocation

Q. WHAT IS REVENUE ALLOCATION?

A. Revenue allocation, sometimes referred to as rate spread, is the assignment of the revenue responsibility to each customer class. A revenue allocation that assigns revenue to each class at its cost of service is free of inter-class subsidies. In contrast, where revenue is allocated to a class at a level above its cost of service, that rate class is subsidizing any rate class that is allocated revenue below its cost of service.

Q. ARE THERE INSTANCES IN WHICH THE COMMISSION WOULD ASSIGN DIFFERENT REVENUE TO INDIVIDUAL CLASSES THAN IS CALLED FOR WITHIN THE COSS, RESULTING IN INTER-CLASS SUBSIDIES?

A. Yes. At times, the regulator may find it necessary to approve a level of revenue requirement to a particular class which differs from the cost responsibility amount determined in the COSS. This is often driven by the need to ensure that customers are not seriously adversely impacted by major changes to the level of rates. Other reasons can include perceived differences in COSS results and reality, relative risks assigned to classes, social goals associated with the role of the prices in a particular jurisdiction, and response to the state of the economy within or external to the regulatory jurisdiction. The Commission may exercise its discretion based on one or more of these concerns to adjust revenue allocation to support policy or advance the public interest. However, these adjustments often result in rates that are not cost-based and, as a result, not just, reasonable, and equitable.
Q. WHAT IS THE ULTIMATE GOAL WHEN ALLOCATING REVENUE?

A. To the extent possible, inter-class subsidies should be eliminated through a revenue allocation that reflects the cost of service. If this is not possible in the immediate case, the Commission should establish a clear path to the elimination or reduction of undesired subsidies, continually moving each class closer to their respective cost of service until undesired subsidies are eliminated and price signals are improved. Where proper price signals in the form of cost-based rates are in place, it generates overall system efficiencies since customers understand the actual costs of the energy they use.

Q. WHAT IS YOUR UNDERSTANDING OF THE PROCESS USED TO ARRIVE AT THE COMPANY'S PROPOSED REVENUE ALLOCATION?

A. It is my understanding that the Company, in general, is proposing a higher rate increase to rate classes that have a lower than average rate of return and a lower rate increase to rate classes that have a higher than average rate of return. See Testimony of Robert M. Conroy, p. 13, lines 16-18.

Q. HOW DOES THE COMPANY REPRESENT THE ACCURACY OF THE PROPOSED CLASS REVENUES IN THEIR REFLECTION OF THE UNDERLYING COSTS OF EACH CLASS?

A. The Company represents this relationship in their cost of service results through the use of class-specific rates of return. This can be converted into a class relative rate of return ("RROR"), which describes the relationship between each class-specific rate of return and the total system rate of return. A RROR greater than 100 percent means that the rate class is paying rates in excess of the costs incurred to serve that class, and a
RROR less than 100 percent means that the rate class is paying rates less than the costs incurred to serve that class. As such, when rates are set such that a class does not have a RROR equal to 100 percent there are inter-class subsidies, as those rate classes with a RROR greater than 100 percent shoulder some of the revenue responsibility burden for the classes with a RROR less than 100 percent.

Q. WHAT IS THE CURRENT AND PROPOSED RROR FOR EACH CLASS IN KU'S PROPOSED REVENUE ALLOCATION?

A. These are shown in Table 1. See Exhibit GWT-6.

<table>
<thead>
<tr>
<th>Customer Class</th>
<th>Present Rate of Return</th>
<th>Present Relative Rate of Return</th>
<th>Proposed Rate of Return</th>
<th>Proposed Relative Rate of Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential - Rate RS, RTOD, VFD</td>
<td>3.03%</td>
<td>54%</td>
<td>4.99%</td>
<td>65%</td>
</tr>
<tr>
<td>General Service</td>
<td>11.31%</td>
<td>203%</td>
<td>13.80%</td>
<td>180%</td>
</tr>
<tr>
<td>All Electric Schools</td>
<td>6.70%</td>
<td>120%</td>
<td>8.94%</td>
<td>117%</td>
</tr>
<tr>
<td>Power Service Secondary</td>
<td>11.18%</td>
<td>200%</td>
<td>13.59%</td>
<td>177%</td>
</tr>
<tr>
<td>Power Service Primary</td>
<td>15.22%</td>
<td>273%</td>
<td>18.05%</td>
<td>236%</td>
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<td>Time of Day Secondary</td>
<td>6.15%</td>
<td>110%</td>
<td>8.20%</td>
<td>107%</td>
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<tr>
<td>Time of Day Primary</td>
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<td>81%</td>
<td>6.10%</td>
<td>80%</td>
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<tr>
<td>Retail Transmission Service</td>
<td>5.77%</td>
<td>103%</td>
<td>8.00%</td>
<td>104%</td>
</tr>
<tr>
<td>Fluctuating Load Service</td>
<td>1.24%</td>
<td>22%</td>
<td>6.95%</td>
<td>91%</td>
</tr>
<tr>
<td>Lighting Energy Service</td>
<td>21.30%</td>
<td>382%</td>
<td>21.30%</td>
<td>278%</td>
</tr>
<tr>
<td>Traffic Energy Service</td>
<td>16.53%</td>
<td>296%</td>
<td>16.30%</td>
<td>213%</td>
</tr>
<tr>
<td>Lighting and Restricted Lighting</td>
<td>10.48%</td>
<td>188%</td>
<td>12.11%</td>
<td>158%</td>
</tr>
<tr>
<td>Outdoor Sports Lighting</td>
<td>9.47%</td>
<td>170%</td>
<td>11.32%</td>
<td>148%</td>
</tr>
<tr>
<td>Total Jurisdiction</td>
<td>5.58%</td>
<td>100%</td>
<td>7.66%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Testimony of Robert M. Conroy, Table 1.
Q. DOES THE COMPANY'S PROPOSED REVENUE ALLOCATION MOVE RATE CLASSES CLOSER TO THEIR RESPECTIVE COSTS OF SERVICE?

A. Except for the Time of Day Primary ("TODP") and Retail Transmission Service ("RTS") classes, all classes are moved toward their cost of service, though in several cases that movement is slight. The change in the RRORs of the TODP and RTR classes indicate a very slight movement away from their respective cost of service.

Q. AT THE COMPANY'S PROPOSED INCREASE, IS WALMART OPPOSED TO THE COMPANY'S REVENUE ALLOCATION?

A. No. At the proposed revenue requirement, Walmart does not oppose the Company's revenue allocation.

Q. IF THE COMMISSION ULTIMATELY APPROVES A REVENUE REQUIREMENT LESS THAN THAT PROPOSED BY THE COMPANY, WHAT IS WALMART'S RECOMMENDATION TO THE COMMISSION FOR APPLYING THE REDUCTION TO THE COMPANY'S PROPOSED REVENUE ALLOCATION?

A. If the Commission ultimately approves a revenue requirement less than that proposed by the Company, the reduction in the proposed revenue requirement should be used to: (1) further reduce existing intra-class subsidy burdens on the major classes; and (2) reduce the overall impact on all customer classes. To accomplish both purposes, one-quarter (1/4) of the reduction in the revenue requirement increase should be applied to proportionately reduce the Company's proposed increase on the non-lighting classes with a current RROR greater than 100 percent. The remaining three-quarters (3/4) of
the reduction should be used to proportionately reduce the Company's proposed increase to all classes.

TODS Rate Design

Q. BRIEFLY DESCRIBE THE TODS RATE?
A. The TODS Rate is a multi-part rate including a Basic Service Charge, an Energy Charge, a Peak Demand Charge, an Intermediate Demand Charge, and a Base Demand Charge. The Peak Demand Charge applies to billing demands that occur during the weekday hours ("Peak Demand Period") from 1:00 PM to 7:00 PM during the summer months of May through September ("Summer Peak Months") and during the weekday hours from 6:00 AM to 12:00 PM during the winter months of October through April ("Winter Peak Months"). The Intermediate Demand Charge applies to billing demands that occur during the weekday hours ("Intermediate Demand Period") from 10:00 AM to 10:00 PM during the Summer Peak Months and from 6:00 AM to 10:00 PM during the Winter Peak Months. The Base Demand Charge applies to the billing demands that occur at any time during the month.

Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED CHANGES TO THE RATE?
A. The Company proposes to modify the billing determinants for the demand portions of the rate to replace the kW billing demand charges with kVA billing demand charges.
Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S REASON FOR
THE PROPOSED CHANGE TO THE BILLING DETERMINANTS FOR
DEMAND CHARGES FOR RATE TODS?
A. I understand the Company is proposing this change to complete the transition of
demand billing from kW units to KVA units for the large customer rate schedules. See
Direct Testimony of William Steven Seelye, p. 34, lines 4-10.

Q. IS WALMART OPPOSED TO THE PROPOSED MODIFICATION TO THE
BILLING DETERMINANTS USED FOR DEMAND CHARGES FROM A KW
CHARGE TO THE KVA CHARGE?
A. No. Walmart does not oppose the change in billing determinants from kW units to kVA
units for the TODS Rate.

Q. HAVE YOU REVIEWED THE DIRECT TESTIMONY OF JUSTIN BIEBER
ON BEHALF OF THE KROGER CO.?
A. Yes.

Q. DO YOU HAVE ANY COMMENTS ON THAT TESTIMONY?
A. Yes, Walmart concurs in and supports the Direct Testimony of Justin Bieber and the
downward adjustment to the Company's revenue requirement that he has proposed.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?
A. Yes.
VERIFICATION

STATE OF ARKANSAS
COUNTY OF BENTON

) ) SS:

) )

The undersigned, Gregory W. Tillman, being duly sworn, deposes and says that he is Senior Manager, Energy Regulatory Analysis for Walmart Inc., and that he has personal knowledge of the matters set forth in the foregoing testimony, and that the answers contained herein are true and correct to the best of his information, knowledge and belief.

Gregory W. Tillman

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 14th day of January 2019.

Notary Public

My Commission Expires: 5/27/2020

Sheri Friel-Torbett
County Of Washington
Notary Public - Arkansas
My Registration Exp: 06/27/2020
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES CASE NO. 2018-00295

EXHIBITS OF

GREGORY W. TILLMAN

ON BEHALF OF

WALMART INC.
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF )
) CASE NO. 2018-00295
ELECTRONIC APPLICATION OF )
LOUISVILLE GAS AND ELECTRIC )
COMPANY FOR AN ADJUSTMENT )
OF ITS ELECTRIC AND GAS RATES )

EXHIBIT GWT-1

GREGORY W. TILLMAN

ON BEHALF OF

WALMART INC.
Gregory W. Tillman
Senior Manager, Energy Regulatory Analysis
Walmart Inc.
Business Address: 2001 SE 10th Street, Bentonville, AR, 72716-5530
Business Phone: (479) 204-7993

EXPERIENCE

November 2015 – Present
Walmart Inc., Bentonville, AR
Senior Manager, Energy Regulatory Analysis

November 2008 – November 2015
Oklahoma Gas & Electric, Oklahoma City, OK
Product Development Pricing Leader
Manager, Pricing
Senior Pricing Analyst

May 2006 – November 2008
LSG Solutions, Oklahoma City, OK
Project Manager, International Registration Plan/Interstate Fuel Tax Agreement Systems Development

August 2002 – May 2006
OnPeak Utility Solutions, Oklahoma City, OK
Owner/Consultant

May 2000 – August 2002
Automated Energy, Inc., Oklahoma City, OK
Vice President, Utility Solutions

November 1997 – May 2000
Williams Energy, Tulsa, OK
Sr. Manager Accounting Services
Process Manager, Customer Billing and Accounting
Retail Systems Manager, Billing and Electricity

May 1990 – November 1997
Public Service Company of Oklahoma, Tulsa, OK
Manager, Software Development and Support
Supervisor, Data Translation and Power Billing
Administrator, Disaster Recovery and Research and Development
Programmer/Analyst

June 1987 – May 1990
United States Army, Signal Command, Ft. Monmouth, NJ
Project Officer, Joint Tactical Information Distribution System
EDUCATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Institution</th>
<th>Degree/Coursework</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>The University of Tulsa</td>
<td>B.S., Electrical Engineering</td>
</tr>
<tr>
<td>1991-94</td>
<td>The University of Tulsa</td>
<td>Graduate Coursework, M.B.A.</td>
</tr>
</tbody>
</table>

TESTIMONY BEFORE REGULATORY COMMISSIONS

2019

2018
Michigan Public Service Commission Case No. U-20162. In the matter of the Application of DTE ELECTRIC COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.

Public Service Commission of West Virginia Case No. 18-0646-E-42T. Appalachian Power Company and Wheeling Power Company, Rule 42T Application to increase electric rates and charges.

Michigan Public Service Commission Case No. U-20134. In the matter of the Application of CONSUMERS ENERGY COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.


Public Utility Commission of Nevada, Docket No. 18-02010 Application of Nevada Power Company D/B/A Nv Energy Filed Under Advice Letter No. 485 To Revise Tariff No. 1-B To Establish The 2017 Tax Rate Reduction Rider; Docket No. 18-02011 Application of Application Of Sierra Pacific Power Company D/B/A Nv Energy Filed Under Advice Letter No. 605-E To Revise Electric Tariff No. 1 To Establish The 2017 Tax Rate Reduction Rider; and, Docket No. 18-02012 Application Of Sierra Pacific Power Company D/B/A Nv Energy Filed Under Advice Letter No. 326-G To Revise Gas Tariff No. 1 To Establish The 2017 Tax Rate Reduction Rider.

Oklahoma Corporation Commission Cause No. PUD 201700496: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma

Public Utility Commission of Texas Docket No. 47527, in the matter of the Application of Southwestern Public Service for Authority to Change Rates.


2017
Indiana Utility Regulatory Commission Cause No. 44967-NONE: Petition of Indiana Michigan Power Company, an Indiana corporation, for (1) authority to increase its rates and charges for electric utility service through a phase in rate adjustment; (2) approval of: revised depreciation rates; accounting relief; inclusion in basic rates and charges of qualified pollution control property, clean energy projects and cost of bringing I&M's system to its present state of efficiency; rate adjustment mechanism proposals; cost deferrals; major storm damage restoration reserve and distribution vegetation management program reserve; and amortizations; and (3) for approval of new schedules of rates, rules and regulations.

Public Service Commission of Wisconsin Docket No. 4220-UR-123: Application of Northern States Power Company, a Wisconsin Corporation for Authority to Adjust Electric and Natural Gas Rates

Michigan Public Service Commission Case No. U-18255. In the matter of the Application of DTE ELECTRIC COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.

Michigan Public Service Commission Case No. U-18322. In the matter of the Application of CONSUMERS ENERGY COMPANY for authority to increase its rates for its rate schedules and rules governing the generation and distribution of electricity and for other relief.


Public Service Commission of Kentucky Case No. 2016-00370: In the Matter of the Electronic Application of Kentucky Utilities Company for an Adjustment of Its Electric Rates and for Certificates of Public Convenience and Necessity.


2016

Arizona Corporation Commission Docket No. E-01345A-16-0036: In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return.


Public Utility Commission of Texas Docket No. 45524, in the matter of the Application of Southwestern Public Service for Authority to Change Rates

Public Service Commission of Wisconsin Docket No. 4220-UR-122: Application of Northern States Power Company, a Wisconsin Corporation for Authority to Adjust Electric and Natural Gas Rates

Michigan Public Service Commission Case No. U-18014. In the matter of the Application of DTE ELECTRIC COMPANY for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority.


2015

2012

2011
Oklahoma Corporation Commission Cause No. PUD 201100087: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Authorizing Applicant to Modify its Rates, Charges, and Tariffs for Retail Electric Service in Oklahoma

2010
Arkansas Public Service Commission Docket No. 10-067-U: In the Matter of the Application of Oklahoma Gas and Electric Company for Approval of a General Change in Rates and Tariffs
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES

CASE NO. 2018-00295

EXHIBIT GWT-2

GREGORY W. TILLMAN

ON BEHALF OF

WALMART INC.
Estimation of Annualized Bill Impact of the Termination of the TCJA Surcredit

<table>
<thead>
<tr>
<th>Class</th>
<th>Annual kWh</th>
<th>TCJA SurCredit Rate</th>
<th>Annualized TCJA Surcredit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential Rate RS</td>
<td>4,077,649,481</td>
<td>$(0.00570)$</td>
<td>$23,242,602.04$</td>
</tr>
<tr>
<td>General Service Rate GS</td>
<td>1,279,758,520</td>
<td>$(0.00437)$</td>
<td>$5,592,544.73$</td>
</tr>
<tr>
<td>Power Service Primary</td>
<td>106,576,756</td>
<td>$(0.00437)$</td>
<td>$465,740.42$</td>
</tr>
<tr>
<td>Power Service Secondary</td>
<td>1,738,411,680</td>
<td>$(0.00437)$</td>
<td>$7,596,859.04$</td>
</tr>
<tr>
<td>TOD Primary</td>
<td>2,040,264,401</td>
<td>$(0.00437)$</td>
<td>$8,915,955.43$</td>
</tr>
<tr>
<td>TOD Secondary</td>
<td>1,188,694,214</td>
<td>$(0.00437)$</td>
<td>$5,194,593.72$</td>
</tr>
<tr>
<td>Retail Transmission Service</td>
<td>1,056,222,221</td>
<td>$(0.00437)$</td>
<td>$4,615,691.11$</td>
</tr>
<tr>
<td>Special Contract</td>
<td>56,985,483</td>
<td>$(0.00437)$</td>
<td>$249,026.56$</td>
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<tr>
<td>Street Lighting Rate (RLS &amp; LS)</td>
<td>101,326,373</td>
<td>$(0.00437)$</td>
<td>$442,796.25$</td>
</tr>
<tr>
<td>Lighting Energy Rate LE</td>
<td>4,055,711</td>
<td>$(0.00437)$</td>
<td>$17,723.46$</td>
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<tr>
<td>Traffic Energy Rate TLE</td>
<td>3,222,969</td>
<td>$(0.00437)$</td>
<td>$14,084.37$</td>
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<tr>
<td>Outdoor School Lighting</td>
<td>24,000</td>
<td>$(0.00437)$</td>
<td>$104.88$</td>
</tr>
<tr>
<td><strong>Total Jurisdiction</strong></td>
<td><strong>11,653,191,809</strong></td>
<td></td>
<td><strong>56,347,722.02</strong></td>
</tr>
</tbody>
</table>
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF

ELECTRONIC APPLICATION OF
LOUISVILLE GAS AND ELECTRIC
COMPANY FOR AN ADJUSTMENT
OF ITS ELECTRIC AND GAS RATES

CASE NO. 2018-00295

EXHIBIT GWT-3

GREGORY W. TILLMAN
ON BEHALF OF
WALMART INC.
### Calculation of Revenue Requirement Impact of LG&E’s Proposed Increase in ROE

1) Calculate Rate of Return Using the Current ROE (ROE = 9.7%)

<table>
<thead>
<tr>
<th>Capital Component</th>
<th>Percent of Total</th>
<th>Percent of Total Capital</th>
<th>Cost</th>
<th>Weighted Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term Debt</td>
<td>1.25%</td>
<td>1.89%</td>
<td>3.23%</td>
<td>0.06%</td>
</tr>
<tr>
<td>Long-term Debt</td>
<td>45.91%</td>
<td>45.27%</td>
<td>4.38%</td>
<td>1.98%</td>
</tr>
<tr>
<td>Common Equity</td>
<td>52.84%</td>
<td>52.84%</td>
<td>9.70%</td>
<td>5.13%</td>
</tr>
</tbody>
</table>

Rate of Return (ROE = 9.7%) = 7.17%

2) Calculate Revenue Requirement Impact at the Propose ROE

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capitalization ($000)</td>
<td>$2,593,435</td>
</tr>
<tr>
<td>Rate of Return (ROE = 9.7%)</td>
<td>7.17%</td>
</tr>
<tr>
<td>Adjusted Income Requirement (ROE = 9.7%)</td>
<td>$185,932</td>
</tr>
<tr>
<td>LG&amp;E Proposed Income Requirement ($000)</td>
<td>$197,498</td>
</tr>
<tr>
<td>Difference in Income Requirement ($000)</td>
<td>$11,566</td>
</tr>
<tr>
<td>Conversion Factor</td>
<td>1.3376</td>
</tr>
<tr>
<td>Difference in Revenue Requirement ($000)</td>
<td>$15,470</td>
</tr>
<tr>
<td>Requested Revenue Requirement Increase ($000)</td>
<td>$34,978</td>
</tr>
<tr>
<td>Percent of Increase from ROE Increase</td>
<td>44.23%</td>
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</tbody>
</table>
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF

ELECTRONIC APPLICATION OF
LOUISVILLE GAS AND ELECTRIC
COMPANY FOR AN ADJUSTMENT
OF ITS ELECTRIC AND GAS RATES

CASE NO. 2018-00295

EXHIBIT GWT-4

GREGORY W. TILLMAN

ON BEHALF OF

WALMART INC.
### Calculation of Revenue Requirement Impact of Including CWIP in Rate Base

<table>
<thead>
<tr>
<th>Line No.</th>
<th>Units</th>
<th>Description</th>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>($000)</td>
<td>Proposed CWIP Included in Rate Base</td>
<td>Schedule B-4</td>
<td>$42,299</td>
</tr>
<tr>
<td>(2)</td>
<td>($000)</td>
<td>Proposed Total Rate Base</td>
<td>Schedule B-1</td>
<td>$2,548,077</td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td>CWIP Percentage of Rate Base</td>
<td>(1) / (2)</td>
<td>1.66%</td>
</tr>
<tr>
<td>(4)</td>
<td></td>
<td>Proposed Rate of Return on Rate Base</td>
<td>Schedule C-1</td>
<td>7.75%</td>
</tr>
<tr>
<td>(5)</td>
<td></td>
<td>Gross Revenue Adjustment Factor</td>
<td>Schedule H-1</td>
<td>1.3376</td>
</tr>
<tr>
<td>(6)</td>
<td>($000)</td>
<td>Revenue Requirement from CWIP</td>
<td>(1) x (4) x (5)</td>
<td>$4,385</td>
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</tbody>
</table>
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES

CASE NO. 2018-00295

EXHIBIT GWT-5

GREGORY W. TILLMAN

ON BEHALF OF

WALMART INC.
<table>
<thead>
<tr>
<th>State</th>
<th>Utility</th>
<th>Docket</th>
<th>Decision Date</th>
<th>Vertically Integrated (V)/Distribution (D)</th>
<th>Return on Equity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
<td>Avista Corp.</td>
<td>UE-150204</td>
<td>1/6/2016</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>Entergy Arkansas Inc.</td>
<td>15-015-U</td>
<td>2/13/2016</td>
<td>V</td>
<td>9.75%</td>
</tr>
<tr>
<td>Indiana</td>
<td>Indianapolis Power &amp; Light Co.</td>
<td>44576</td>
<td>3/16/2016</td>
<td>V</td>
<td>9.85%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Fitchburg Gas &amp; Electric Light</td>
<td>15-80</td>
<td>4/29/2016</td>
<td>D</td>
<td>9.80%</td>
</tr>
<tr>
<td>Maryland</td>
<td>Baltimore Gas and Electric Co.</td>
<td>9406</td>
<td>6/3/2016</td>
<td>D</td>
<td>9.75%</td>
</tr>
<tr>
<td>New York</td>
<td>NY State Electric &amp; Gas Corp.</td>
<td>15-E-0283</td>
<td>6/15/2016</td>
<td>D</td>
<td>9.00%</td>
</tr>
<tr>
<td>New York</td>
<td>Rochester Gas &amp; Electric Corp.</td>
<td>15-E-0285</td>
<td>6/15/2016</td>
<td>D</td>
<td>9.00%</td>
</tr>
<tr>
<td>Indiana</td>
<td>Northern Indiana Public Service Co.</td>
<td>44688</td>
<td>7/18/2016</td>
<td>V</td>
<td>9.98%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Kingsport Power Company</td>
<td>16-00001</td>
<td>8/9/2016</td>
<td>V</td>
<td>9.85%</td>
</tr>
<tr>
<td>Arizona</td>
<td>UNS Electric Inc.</td>
<td>E-04204A-15-0142</td>
<td>8/18/2016</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Atlantic City Electric Co.</td>
<td>ER-16030252</td>
<td>8/24/2016</td>
<td>D</td>
<td>9.75%</td>
</tr>
<tr>
<td>Washington</td>
<td>PacifiCorp</td>
<td>UE-152525</td>
<td>9/1/2016</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Michigan</td>
<td>Upper Peninsula Power Co.</td>
<td>U-17895</td>
<td>9/8/2016</td>
<td>V</td>
<td>10.00%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Public Service Co. of NM</td>
<td>15-00127-UT</td>
<td>9/28/2016</td>
<td>V</td>
<td>9.58%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Massachusetts Electric Co.</td>
<td>15-155</td>
<td>9/30/2016</td>
<td>D</td>
<td>9.90%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Madison Gas and Electric Co.</td>
<td>3270-UR-121</td>
<td>10/2/2016</td>
<td>V</td>
<td>8.30%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Public Service Company of OK</td>
<td>PUD 201500208</td>
<td>10/10/2016</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Maryland</td>
<td>Potomac Electric Co.</td>
<td>9418</td>
<td>11/15/2016</td>
<td>D</td>
<td>9.55%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Wisconsin Power and Light Co.</td>
<td>6680-UR-120</td>
<td>11/18/2016</td>
<td>V</td>
<td>10.00%</td>
</tr>
<tr>
<td>Florida</td>
<td>Florida Power &amp; Light Co.</td>
<td>160021-EI</td>
<td>11/29/2016</td>
<td>V</td>
<td>10.55%</td>
</tr>
<tr>
<td>California</td>
<td>Liberty Utilities CalPeco</td>
<td>A15-05-008</td>
<td>12/1/2016</td>
<td>V</td>
<td>10.00%</td>
</tr>
<tr>
<td>Illinois</td>
<td>Ameren Illinois</td>
<td>16-0262</td>
<td>12/6/2016</td>
<td>D</td>
<td>8.64%</td>
</tr>
<tr>
<td>Illinois</td>
<td>Commonwealth Edison Co.</td>
<td>16-0259</td>
<td>12/6/2016</td>
<td>D</td>
<td>8.64%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Duke Energy Progress Inc.</td>
<td>2016-227-E</td>
<td>12/7/2016</td>
<td>V</td>
<td>10.10%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Jersey Central Power &amp; Light Co.</td>
<td>ER-16040383</td>
<td>12/12/2016</td>
<td>D</td>
<td>9.60%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>United Illuminating Co.</td>
<td>16-06-04</td>
<td>12/14/2016</td>
<td>D</td>
<td>9.10%</td>
</tr>
<tr>
<td>Colorado</td>
<td>Black Hills Colorado Electric</td>
<td>16AL-0326E</td>
<td>12/19/2016</td>
<td>V</td>
<td>9.37%</td>
</tr>
<tr>
<td>Maine</td>
<td>Emera Maine</td>
<td>2015-00360</td>
<td>12/19/2016</td>
<td>D</td>
<td>9.00%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>Virginia Electric &amp; Power Co.</td>
<td>E-22 Sub 532</td>
<td>12/22/2016</td>
<td>V</td>
<td>9.90%</td>
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<tr>
<td>Nevada</td>
<td>Sierra Pacific Power Co.</td>
<td>16-06006</td>
<td>12/22/2016</td>
<td>V</td>
<td>9.60%</td>
</tr>
<tr>
<td>Idaho</td>
<td>Avista Corp.</td>
<td>AVU-E-16-03</td>
<td>12/28/2016</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>MDU Resources Group Inc.</td>
<td>2004-117-ER-16</td>
<td>1/18/2017</td>
<td>V</td>
<td>9.45%</td>
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<tr>
<td>New York</td>
<td>Consolidated Edison Co. of NY</td>
<td>16-E-0060</td>
<td>1/24/2017</td>
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<tr>
<td>Michigan</td>
<td>DTE Electric Co.</td>
<td>U-18014</td>
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<td>Maryland</td>
<td>Delmarva Power &amp; Light Co.</td>
<td>9424</td>
<td>2/15/2017</td>
<td>D</td>
<td>9.60%</td>
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<tr>
<td>New Jersey</td>
<td>Rockland Electric Company</td>
<td>ER-16050428</td>
<td>2/22/2017</td>
<td>D</td>
<td>9.60%</td>
</tr>
<tr>
<td>Michigan</td>
<td>Consumers Energy Co.</td>
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<td>Minnesota</td>
<td>Otter Tail Power Co.</td>
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<td>Oklahoma</td>
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<td>3/30/2017</td>
<td>V</td>
<td>9.50%</td>
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<tr>
<td>Florida</td>
<td>Gulf Power Co.</td>
<td>160186-EI</td>
<td>4/4/2017</td>
<td>V</td>
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<td>New Hampshire</td>
<td>Liberty Utilities Granite St</td>
<td>DE-16-383</td>
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<td>Unitil Energy Systems Inc.</td>
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<td>Missouri</td>
<td>Kansas City Power &amp; Light</td>
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<td>5/3/2017</td>
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<td>Oklahoma Gas &amp; Electric Co.</td>
<td>16-052-U</td>
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<td>Delmarva Power &amp; Light Co.</td>
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<td>9.70%</td>
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<td>North Dakota</td>
<td>MDU Resources Group Inc.</td>
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<td>Kentucky Utilities Co.</td>
<td>2016-00370</td>
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<td>Louisville Gas &amp; Electric Co.</td>
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<td>District of Columbia</td>
<td>Potomac Electric Power Co.</td>
<td>FC-1139</td>
<td>7/24/2017</td>
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<td>Arizona</td>
<td>Arizona Public Service Co.</td>
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<td>V</td>
<td>10.00%</td>
</tr>
<tr>
<td>State</td>
<td>Utility</td>
<td>Docket</td>
<td>Decision Date</td>
<td>Vertically Integrated (V)/Distribution (D)</td>
<td>Return on Equity (%)</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------</td>
<td>----------------------</td>
<td>---------------</td>
<td>--------------------------------------------</td>
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<tr>
<td>New Jersey</td>
<td>Atlantic City Electric Co.</td>
<td>D-ER-17030308</td>
<td>9/22/2017</td>
<td>D</td>
<td>9.60%</td>
</tr>
<tr>
<td>Texas</td>
<td>Oncor Electric Delivery Co.</td>
<td>45957</td>
<td>9/28/2017</td>
<td>D</td>
<td>9.80%</td>
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<tr>
<td>Maryland</td>
<td>Potomac Electric Power Co.</td>
<td>9443</td>
<td>10/20/2017</td>
<td>D</td>
<td>9.50%</td>
</tr>
<tr>
<td>California</td>
<td>Pacific Gas &amp; Electric Co.</td>
<td>Advice No. 5148-E</td>
<td>10/26/2017</td>
<td>V</td>
<td>10.25%</td>
</tr>
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<td>California</td>
<td>San Diego Gas &amp; Electric Co.</td>
<td>Advice No. 3120-E</td>
<td>10/26/2017</td>
<td>V</td>
<td>10.20%</td>
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<td>California</td>
<td>Southern California Edison Co.</td>
<td>Advice No. 3665-E</td>
<td>10/26/2017</td>
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</tr>
<tr>
<td>Florida</td>
<td>Tampa Electric Co.</td>
<td>20170210-E</td>
<td>11/6/2017</td>
<td>V</td>
<td>10.25%</td>
</tr>
<tr>
<td>Alaska</td>
<td>Alaska Electric Light Power</td>
<td>U-16-086</td>
<td>11/15/2017</td>
<td>V</td>
<td>11.95%</td>
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<tr>
<td>Massachusetts</td>
<td>NSTAR Electric Co.</td>
<td>17-05</td>
<td>11/30/2017</td>
<td>D</td>
<td>10.00%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Western Massachusetts Electric</td>
<td>17-05</td>
<td>11/30/2017</td>
<td>D</td>
<td>10.00%</td>
</tr>
<tr>
<td>Washington</td>
<td>Puget Sound Energy Inc.</td>
<td>UE-170033</td>
<td>12/5/2017</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Illinois</td>
<td>Ameren Illinois</td>
<td>17-0197</td>
<td>12/6/2017</td>
<td>V</td>
<td>8.40%</td>
</tr>
<tr>
<td>Illinois</td>
<td>Commonwealth Edison Co.</td>
<td>17-0196</td>
<td>12/6/2017</td>
<td>V</td>
<td>8.40%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Northern States Power Co. - WI</td>
<td>D-4220-UR-123</td>
<td>12/7/2017</td>
<td>V</td>
<td>9.80%</td>
</tr>
<tr>
<td>Texas</td>
<td>El Paso Electric Co.</td>
<td>46831</td>
<td>12/14/2017</td>
<td>V</td>
<td>9.65%</td>
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<tr>
<td>Texas</td>
<td>Southwestern Electric Power Co.</td>
<td>46449</td>
<td>12/14/2017</td>
<td>V</td>
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</tr>
<tr>
<td>Oregon</td>
<td>Portland General Electric Co.</td>
<td>UE 319</td>
<td>12/18/2017</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Public Service Co. of NM</td>
<td>16-00276-UT</td>
<td>12/20/2017</td>
<td>V</td>
<td>9.58%</td>
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<tr>
<td>Idaho</td>
<td>Avista Corp.</td>
<td>AVU-E-17-01</td>
<td>12/28/2017</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Nevada</td>
<td>Nevada Power Co.</td>
<td>17-06003</td>
<td>12/29/2017</td>
<td>V</td>
<td>9.40%</td>
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<tr>
<td>Vermont</td>
<td>Green Mountain Power Corp</td>
<td>17-3112-NIV</td>
<td>12/21/2017</td>
<td>V</td>
<td>9.10%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>Kentucky Power Co.</td>
<td>C-2017-00179</td>
<td>1/18/2018</td>
<td>V</td>
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<tr>
<td>Oklahoma</td>
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<tr>
<td>Minnesota</td>
<td>ALLETE (Minnesota Power)</td>
<td>D-E-015/GR-16-664</td>
<td>3/12/2018</td>
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<tr>
<td>New York</td>
<td>Niagara Mohawk Power Corp.</td>
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<td>3/15/2018</td>
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<tr>
<td>Michigan</td>
<td>Consumers Energy Co.</td>
<td>C-U-18322</td>
<td>3/29/2018</td>
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<tr>
<td>Michigan</td>
<td>DTE Electric Co.</td>
<td>C-U-18255</td>
<td>4/18/2018</td>
<td>V</td>
<td>10.00%</td>
</tr>
<tr>
<td>Washington</td>
<td>Avista Corp.</td>
<td>D-UE-170485</td>
<td>4/26/2018</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Indiana</td>
<td>Indiana Michigan Power Co.</td>
<td>Ca-44967</td>
<td>5/30/2018</td>
<td>V</td>
<td>9.95%</td>
</tr>
<tr>
<td>Maryland</td>
<td>Potomac Electric Power Co.</td>
<td>C-9472</td>
<td>5/31/2018</td>
<td>D</td>
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</tr>
<tr>
<td>New York</td>
<td>Central Hudson Gas &amp; Electric</td>
<td>C-17-E-0459</td>
<td>6/14/2018</td>
<td>D</td>
<td>8.80%</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>Potomac Electric Power Co.</td>
<td>FC-1150</td>
<td>8/8/2018</td>
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<td>9.53%</td>
</tr>
<tr>
<td>Delaware</td>
<td>Delmarva Power &amp; Light Co.</td>
<td>D-17-0977</td>
<td>8/21/2018</td>
<td>D</td>
<td>9.70%</td>
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<tr>
<td>Rhode Island</td>
<td>Narragansett Electric Co.</td>
<td>D-4770 (electric)</td>
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<tr>
<td>New Mexico</td>
<td>Southwestern Public Service Co</td>
<td>C-17-00255-UT</td>
<td>9/5/2018</td>
<td>V</td>
<td>9.10%</td>
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<td>Wisconsin</td>
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<tr>
<td>Wisconsin</td>
<td>Madison Gas and Electric Co.</td>
<td>D-3270-UR-122 (Elc)</td>
<td>9/20/2018</td>
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</tr>
<tr>
<td>North Dakota</td>
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<td>Ohio</td>
<td>Dayton Power and Light Co.</td>
<td>C-15-1830-EL-AIR</td>
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<td>9.999% *</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Public Service Electric Gas</td>
<td>D-ER18010029</td>
<td>10/29/2018</td>
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<tr>
<td>Illinois</td>
<td>Commonwealth Edison Co.</td>
<td>D-18-0808</td>
<td>11/1/2018</td>
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</table>
Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2015 to Present

<table>
<thead>
<tr>
<th>State</th>
<th>Utility</th>
<th>Docket</th>
<th>Decision Date</th>
<th>Vertically Integrated (V)/Distribution (D)</th>
<th>Return on Equity (%)</th>
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</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>Kansas City Power &amp; Light</td>
<td>D-18-KCPE-480-RTS</td>
<td>12/13/2018</td>
<td>V</td>
<td>9.30%</td>
</tr>
<tr>
<td>Oregon</td>
<td>Portland General Electric Co.</td>
<td>D-UE-335</td>
<td>12/14/2018</td>
<td>V</td>
<td>9.50%</td>
</tr>
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<td>Ohio</td>
<td>Duke Energy Ohio Inc.</td>
<td>C-17-0032-EL-AIR</td>
<td>12/19/2018</td>
<td>D</td>
<td>9.84%</td>
</tr>
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<td>Texas</td>
<td>Texas-New Mexico Power Co.</td>
<td>D-48401</td>
<td>12/20/2018</td>
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<td>12/20/2018</td>
<td>V</td>
<td>9.80%</td>
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<tr>
<td>Vermont</td>
<td>Green Mountain Power Corp.</td>
<td>C-18-0974-TF</td>
<td>12/21/2018</td>
<td>D</td>
<td>9.30%</td>
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**Entire Period**

<table>
<thead>
<tr>
<th># of Decisions</th>
<th>Average (All Utilities)</th>
<th>Average (Distribution Only)</th>
<th>Average (Vertically Integrated Only)</th>
<th>Median</th>
<th>Minimum</th>
<th>Maximum</th>
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<td>110</td>
<td>9.61%</td>
<td>9.38%</td>
<td>9.75%</td>
<td>9.60%</td>
<td>8.40%</td>
<td>11.95%</td>
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**2016**

<table>
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<th>Average (All Utilities)</th>
<th>Average (Distribution Only)</th>
<th>Average (Distribution Only, exc. IL FRP)</th>
<th>Average (Vertically Integrated Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>9.60%</td>
<td>9.31%</td>
<td>9.45%</td>
<td>9.77%</td>
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**2017**

<table>
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<th># of Decisions</th>
<th>Average (All Utilities)</th>
<th>Average (Distribution Only)</th>
<th>Average (Distribution Only, exc. IL FRP)</th>
<th>Average (Vertically Integrated Only)</th>
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</thead>
<tbody>
<tr>
<td>42</td>
<td>9.68%</td>
<td>9.43%</td>
<td>9.61%</td>
<td>9.80%</td>
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</table>

**2018**

<table>
<thead>
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<th># of Decisions</th>
<th>Average (All Utilities)</th>
<th>Average (Distribution Only)</th>
<th>Average (Distribution Only, exc. IL FRP)</th>
<th>Average (Vertically Integrated Only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>9.54%</td>
<td>9.38%</td>
<td>9.47%</td>
<td>9.68%</td>
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</tbody>
</table>

Source: SNL Financial LC, January 3, 2019
* Due to Rounding, the ROE Award is reported as 10.00 on the SNL Website.
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES

CASE NO. 2018-00295

EXHIBIT GWT-6

GREGORY W. TILLMAN

ON BEHALF OF

WALMART INC.
<table>
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<tr>
<th>Customer Class</th>
<th>Present Rate of Return</th>
<th>Present Relative Rate of Return</th>
<th>Proposed Rate of Return</th>
<th>Proposed Relative Rate of Return</th>
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<tr>
<td>Residential - Rate RS, RTOD, VFD</td>
<td>2.69%</td>
<td>40%</td>
<td>3.71%</td>
<td>48%</td>
</tr>
<tr>
<td>General Service</td>
<td>11.74%</td>
<td>174%</td>
<td>12.84%</td>
<td>166%</td>
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<tr>
<td>Power Service Secondary</td>
<td>14.44%</td>
<td>215%</td>
<td>15.65%</td>
<td>202%</td>
</tr>
<tr>
<td>Power Service Primary</td>
<td>12.70%</td>
<td>189%</td>
<td>13.94%</td>
<td>180%</td>
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<tr>
<td>Time of Day Secondary</td>
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<td>141%</td>
<td>10.37%</td>
<td>134%</td>
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<tr>
<td>Time of Day Primary</td>
<td>9.52%</td>
<td>141%</td>
<td>10.46%</td>
<td>135%</td>
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<tr>
<td>Retail Transmission Service</td>
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<td>187%</td>
<td>13.72%</td>
<td>177%</td>
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<td>Lighting Energy Service</td>
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<td>282%</td>
<td>18.96%</td>
<td>245%</td>
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<tr>
<td>Traffic Energy Service</td>
<td>16.64%</td>
<td>247%</td>
<td>16.63%</td>
<td>215%</td>
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<tr>
<td>Lighting and Restricted Lighting</td>
<td>7.49%</td>
<td>111%</td>
<td>8.07%</td>
<td>104%</td>
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<tr>
<td>Outdoor Sports Lighting</td>
<td>12.65%</td>
<td>188%</td>
<td>13.52%</td>
<td>174%</td>
</tr>
<tr>
<td>Special Contracts</td>
<td>6.82%</td>
<td>101%</td>
<td>7.94%</td>
<td>102%</td>
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<tr>
<td>Total Jurisdiction</td>
<td>6.73%</td>
<td>100%</td>
<td>7.75%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Testimony of Robert M. Conroy, Table 2.
ATTACHMENT B
COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY UTILITIES COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC RATES ) CASE NO. 2018-00294

PREFILED DIRECT TESTIMONY OF JUSTIN BIEBER ON BEHALF OF THE KROGER CO.

January 16, 2019
**DIRECT TESTIMONY OF JUSTIN BIEBER**

**Introduction**

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

A. My name is Justin Bieber. My business address is 215 South State Street, Suite 200, Salt Lake City, Utah 84111.

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

A. I am a Senior Consultant at Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

**Q.** On whose behalf are you testifying in this proceeding?

A. My testimony is being sponsored by The Kroger Co. (“Kroger”). Kroger is one of the largest retail grocers in the United States, and operates over thirty stores and other facilities in the territory served by Kentucky Utilities Company (“KU”). These facilities purchase in excess of 90 million kilowatt-hours annually from KU.

**Q.** Please describe your professional experience and qualifications.

A. My academic background is in business and engineering. I earned a Bachelor of Science in Mechanical Engineering from Duke University in 2006 and a Master of Business Administration from the University of Southern California in 2012. In 2017, I completed Practical Regulatory Training for the Electric Industry sponsored by the New Mexico State University Center for Public Utilities and the National Association of Regulatory Utility Commissioners. I am also a registered Professional Civil Engineer in the State of California.
I joined Energy Strategies in January 2017, where I provide regulatory and technical support on a variety of energy issues, including regulatory services, transmission and renewable development, and financial and economic analyses. During the time I have worked at Energy Strategies, I have filed and supported the development of testimony before several different state utility regulatory commissions.

Prior to joining Energy Strategies, I held positions at Pacific Gas and Electric Company as Manager of Transmission Project Development, ISO Relations and FERC Policy Principal, and Supervisor of Electric Generator Interconnections. During my career at Pacific Gas and Electric Company, I supported multiple facets of utility operations, and led efforts in policy, regulatory, and strategic initiatives, including supporting the development of testimony before and submittal of comments to the FERC, California ISO, and the California Public Utility Commission.

Q. **Have you previously testified before this Commission?**


Q. **Have you testified before any other state utility regulatory commissions?**

A. Yes. I have testified before the Indiana Utility Regulatory Commission, the Michigan Public Service Commission, the North Carolina Utilities Commission, the Public Utilities Commission of Ohio, and the Public Utility Commission of Oregon.
Overview and Recommendations

Q. What is the purpose of your testimony in this proceeding?
A. My testimony addresses KU’s proposal to use the capitalization methodology of property valuation as the basis for computing KU’s return component of its revenue requirement. KU’s use of this method in this proceeding results in a valuation that is significantly greater than the net value of KU’s rate base assets that are used and useful in providing electric service to its customers.

Q. Please summarize your conclusions and recommendations.
A. The jurisdictional capitalization proposed by KU is approximately $53.9 million greater than its proposed jurisdictional rate base. I recommend that the Commission reject KU’s proposal to earn a return on the portion of its proposed capitalization that is in excess of the value of the used and useful assets that comprise its rate base.

Capitalization versus Rate Base

Q. Please explain how KU computes the operating income component of its proposed revenue requirement.
A. KU proposes to use the capitalization methodology of property valuation as the basis for computing its proposed return. The proposed operating income is the product of the proposed rate of return, which is equal to 7.56%, multiplied by the proposed capitalization of $4,099,135,883. To determine the return component of the revenue requirement, the proposed operating income is grossed up for taxes by multiplying the proposed operating income by KU’s gross revenue conversion factor of 1.34.1

1 Direct Testimony of Christopher M. Garrett, Appendix A – Rate Schedule A.
Q. What alternative property valuation methodologies did KU consider?

A. According to KU witness Christopher Garrett, Section 278.290 of the Kentucky Revised Statutes requires the Commission to give due consideration to three quantifiable values, including original cost rate base, cost of reproduction as a going concern, and capital structure.  

Q. What reasons does KU provide to support its decision not to use the cost of reproduction as a going concern methodology for property valuation?

A. Mr. Garrett explains that the Commission has consistently found that this methodology is not the most appropriate or reasonable measure for rate of return valuation. Mr. Garrett explains that it typically leads to a significantly higher revenue requirement than the capitalization or rate base methodologies and that the United States Supreme Court has been critical of this methodology for ratemaking purposes. Therefore, KU did not feel it was necessary or productive to present results using this methodology.  

Q. What reasons does KU provide to support its proposed use of the capitalization methodology instead of rate base?

A. According to Mr. Garrett the Commission has approved the capitalization methodology in KU’s past six rate cases. Mr. Garrett refers to the Commission’s prior order in Case No. 2000-00080 which states that the Commission “will consider using an approach different from that previously used” only if a justification exists.  

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2 Id, p. 4.
3 Id, pp. 7-8.
4 Direct Testimony of Christopher M. Garrett, p. 5. See also, In the Matter of: The Application of Louisville Gas & Electric Company to adjust and to Increase its Charges for Disconnecting Service, Reconnection Service, and Returned Checks, Case No. 2000-00080, Order at 7 (Ky. PSC Sept. 27, 2000).
claims that sufficient justification does not exist to support departing from more than 40 years of using the capitalization methodology.\(^5\)

Mr. Garrett also asserts that the Commission has indicated a preference for the use of capitalization instead of rate base through its prior order in Case No. 2000-00080.\(^6\)

Lastly, Mr. Garrett states that KU believes capitalization is the appropriate measure given KU’s lack of unregulated activities. Mr. Garrett refers to the Commission’s positions in Case Nos. 1998-00426 and 2000-00080, which state that “while rate base and capitalization theoretically should be equal, it is rare that this happens,”\(^7\) and “when a utility’s capitalization exceeds rate base, it raises concerns that a portion of the capitalization has been used to finance non-regulated activities.”\(^8\) According to Mr. Garrett, no portion of KU’s capitalization has been used to fund non-regulated activities, and therefore, KU sees no reason to change the valuation methodology under these circumstances.\(^9\)

**Q. What are the results of KU’s proposed property valuation using the capitalization and rate base methodologies?**

**A.** KU proposes a Kentucky jurisdictional capitalization of $4,099,135,883 compared to a rate base of $4,045,218,983.\(^{10}\) The difference between these two methodologies is $53,916,900.

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5 Direct Testimony of Christopher M. Garrett, p. 5.
6 Id.
7 In the Matter of: Application of Louisville Gas and Electric Company for Approval of an Alternative Method of Regulation of its Rate and Service, case No. 1998-00426, Order at 3 (Ky. PSC June 1, 1998).
9 Direct Testimony of Christopher M. Garrett, p. 6.
10 Id.
Q. Do you have any concerns with KU’s proposal to use its jurisdictional electric capitalization as the basis for computing its revenue requirement?

A. Yes, I do. The jurisdictional electric capitalization presented by KU is significantly greater than the Company’s rate base. As such, it represents a valuation that is in excess of the net value of assets that are used and useful in providing electric service to customers. I have serious concerns with allowing a return on a valuation that exceeds the net value of the assets that are used and useful for providing electric service to customers.

Q. KU witness Mr. Garrett asserts that there is not sufficient justification to support a change from the capitalization valuation methodology which the Commission has approved in its prior six rate cases.\(^\text{11}\) Do you agree?

A. No, I do not. In KU’s prior six rate cases, KU’s capitalization value did not exceed its rate base. The circumstances of this instant case differ in a very important way from KU’s prior rate cases, because in this case, the capitalization valuation exceeds the rate base valuation by $53.9 million. According to KU’s response to Kroger’s and Walmart’s Requests for Information, the Company is not aware of any case where the Commission has approved KU to earn a return on a capitalization valuation that exceeds its rate base.\(^\text{12}\)

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\(^{11}\) Direct Testimony of Christopher M. Garrett, p. 5.

\(^{12}\) Kentucky Utilities Company Response to First Request for Information of the Kroger Company and Walmart Inc. Question No. 6 (b), November 13, 2018.
Q. Please provide the citation that Mr. Garrett relies upon to support his assertion that the Commission has indicated a preference for the use of capitalization instead of rate base.

A. To support his assertion that the Commission has indicated a preference for the capitalization methodology instead of the rate base methodology, Mr. Garrett cites the following from the Commission’s order in Case No. 2000-00080:

“The capitalization of the utility is a better measure of the real cost of providing service since it is the cost of debt and equity that is reflected in the financial statements of the utility. To impute the operating income requirements based on an inflated rate base in effect establishes a cost of doing business that is non-existent to the utility.”

Q. What is your assessment of Mr. Garrett’s claim that the Commission has indicated a preference for the capitalization methodology.

A. Mr. Garrett’s claim that the Commission has indicated a preference for the capitalization methodology fails to recognize the important difference in circumstances in this case, namely that the proposed capitalization significantly exceeds the proposed rate base. In adopting the capitalization methodology in Case No. 2000-00080, the Commission specifically noted that “to impute the operating income requirements based on an inflated rate base in effect establishes a cost of doing business that is non-existent to the utility.” The Commission recognized that it would be inappropriate to allow the utility to earn a return based on costs that the utility did not incur. The converse is true here. It would be inappropriate for the utility to earn on a return on a valuation that is in

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13 Direct Testimony of Christopher M. Garrett, p. 5.
15 Id.
excess of the net value of assets that are used and useful for providing electric service to customers.

Q. Mr. Garrett claims that capitalization is an appropriate methodology for KU’s property valuation because it does not have any unregulated activities. What is your response?

A. It would clearly be unreasonable to allow a utility to earn a return on a portion of its capitalization if those funds were being used for unregulated activities. However, the fact that KU asserts that it is not using a portion of its capitalization to fund unregulated activities does not mitigate my concerns with allowing KU to earn a return on a portion of its proposed capitalization valuation that exceeds the net value of the rate base assets that are used and useful for providing service to customers.

Q. What is your recommendation regarding the valuation methodology to be utilized to compute a reasonable return for KU?

A. To the extent that the Commission approves a capitalization valuation for KU in this case that exceeds the value of its rate base, KU should not earn a return on the portion of the capitalization that is in excess of its rate base. In prior cases the Commission has supported the capitalization methodology in circumstances where the rate base exceeded the capitalization because it was inappropriate for the utility to earn a return on an inflated rate based on costs that are non-existent to the utility. In this case, where the proposed capitalization exceeds the proposed rate base, it would not be

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16 Direct Testimony of Christopher M. Garrett, p. 6.
appropriate for KU to earn a return on a capitalization valuation that is in excess of the net value of assets that are used and useful in providing electric service.

Q. Based on your recommendation, what would the revenue requirement impact be?

A. KU’s proposed capitalization exceeds its rate base by $53.9 million. Based on KU’s proposed capitalization and rate base and proposed rate of return, my recommendation would result in a revenue requirement reduction of $5.5 million. The derivation of my proposed adjustment is shown in Table JDB-1 below.

Table JDB-1

<table>
<thead>
<tr>
<th>Capitalization Valuation</th>
<th>Rate Base Valuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Capitalization Allocated to Kentucky Jurisdiction</td>
<td>4,099,135,883</td>
</tr>
<tr>
<td>Proposed Rate Base Allocated to Kentucky Jurisdiction</td>
<td>4,045,218,983</td>
</tr>
<tr>
<td>Proposed Rate of Return</td>
<td>7.5591%</td>
</tr>
<tr>
<td>Operating Income at Proposed Rate of Return</td>
<td>309,857,872</td>
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<tr>
<td>Gross Revenue Conversion Factor</td>
<td>1.3394</td>
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<tr>
<td>Return Component of Revenue Requirement</td>
<td>415,010,035</td>
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<tr>
<td>Difference</td>
<td>(5,458,725)</td>
</tr>
</tbody>
</table>

Q. Have you reviewed the direct testimony of Gregory W. Tillman, on behalf of Walmart, Inc.?

A. Yes, I have.

Q. Do you agree with Mr. Tillman’s recommendations in this case?

A. Yes.

Q. Does this conclude your direct testimony?

A. Yes, it does.
VERIFICATION

In the Matter of Electronic Application )
Of Kentucky Utilities Company for an ) Case No. 2018-00294 )
Adjustment of its Electric Rates )

STATE OF UTAH )
COUNTY OF SALT LAKE )

The undersigned, Justin Bieber, being duly sworn, deposes and says that he is a Senior Consultant in the firm of Energy Strategies, LLC, that he has personal knowledge of the matters set forth in the foregoing testimony and exhibits, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

[Signature]
Justin Bieber

Subscribed and sworn to or affirmed before me this 16th day of January, 2019, by Justin Bieber.

[Signature]
Millicent Pichardo
Notary Public
CERTIFICATE OF SERVICE

I hereby certify that Walmart Inc.'s and The Kroger Company's January 16, 2019, electronic filing is a true and accurate copy of the Notice of Filing and the Direct Testimony and Exhibits of Gregory W. Tillman on behalf of Walmart Inc., and Direct Testimony of Justin Bieber on behalf of The Kroger Company to be filed in paper medium; and that on January 16, 2019, the electronic filing has been transmitted to the Commission, and that an original and six (6) copies of the filing will be delivered to the Commission, that no participants have been excused from electronic filing at this time, and served upon the following via Electronic Mail:

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Certificate of Service
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