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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

DIRECT TESTIMONY AND EXHIBITS OF
GREGORY W. TILLMAN
ON BEHALF OF
WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

Filed: March 3, 2017
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of Testimony</td>
<td>4</td>
</tr>
<tr>
<td>Summary of Recommendations</td>
<td>4</td>
</tr>
<tr>
<td>LG&amp;E Proposed Revenue Increase</td>
<td>7</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>8</td>
</tr>
<tr>
<td>National Utility Industry ROE Trends</td>
<td>13</td>
</tr>
<tr>
<td>Conclusion</td>
<td>15</td>
</tr>
<tr>
<td>Cost of Service</td>
<td>16</td>
</tr>
<tr>
<td>Rate Design</td>
<td>17</td>
</tr>
<tr>
<td>Revenue Allocation</td>
<td>20</td>
</tr>
<tr>
<td>PSP and PSS Rate Design</td>
<td>24</td>
</tr>
<tr>
<td>TODP and TODS Rate Design</td>
<td>25</td>
</tr>
</tbody>
</table>
Exhibits

1. Exhibit GWT-1 — Witness Qualifications Statement
2. Exhibit GWT-2 — Calculation of Revenue Requirement Impact of LG&E’s Proposed Increase in ROE
3. Exhibit GWT-3 — Calculation of Revenue Requirement Impact of Including CWIP in Rate Base
4. Exhibit GWT-4 — Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to Present
5. Exhibit GWT-5 — Calculation of Revenue Requirement Impact of LG&E’s Proposed ROE vs National Average for ’15-’16
6. Exhibit GWT-6 — Class Relative Rates of Return
8. Exhibit GWT-8 — LG&E’s Response to Commission Staff’s Second Request for Information, dated Jan. 11, 2017, Question No. 87
9. Exhibit GWT-9 — LG&E’s Response to Commission Staff’s Second Request for Information, dated Jan. 11, 2017, Question No. 95
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 Wal-Mart Stores, Inc. as Senior Manager, Energy Regulatory Analysis.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?
A. I am testifying on behalf of Wal-Mart Stores East, LP and Sam's East, Inc. (collectively "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. I have more than 24 years of experience in the regulated and deregulated energy industry including roles in regulatory, pricing, billing, and metering information. After serving on active duty as a Signal Officer in the United States Army, I joined the Public Service Company of Oklahoma ("PSO") where I was employed in various positions in the Information Services, Business Planning, Rates and Regulatory, and Ventures departments from 1990 through 1997. Within 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 the company's real-time pricing program. I also managed the implementation of real-time pricing for three other utilities within the Central and South West Corporation – Southwestern Electric Power Company, Central Power and Light, and West Texas Utilities. In 1997, I
joined the Retail department of the Williams Energy Company as the manager of systems for the retail gas and electric data and billing systems. During my tenure at Williams I also managed the customer billing function at Thermogas as well as the billing and accounting systems support functions at Williams Communications. In 2000, I joined Automated Energy where I served as the Vice President of Energy Solutions for two years. Following several assignments as a consultant and project manager in various industries, in 2008 I joined Oklahoma Gas & Electric Company ("OG&E") as a senior pricing analyst, 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 the 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")?

A. No.

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

A. Yes. I have testified in proceedings before the Arizona Corporation Commission, the Arkansas Public Service Commission, the Michigan Public Service Commission, the Oklahoma Corporation Commission, the South Carolina Public Service Commission,
the Public Utility Commission of Texas, 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. Walmart operates 103 retail units and two distribution centers, employing 31,102 associates in Kentucky. In fiscal year ending 2016, Walmart purchased $1.3 billion worth of goods and services from Kentucky-based suppliers, supporting an additional 35,041 supplier jobs.¹

Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN LOUISVILLE GAS AND ELECTRIC'S SERVICE TERRITORY.

A. Walmart has 18 retail units that take electric service from Louisville Gas and Electric ("LG&E" or "the Company"). Walmart stores take service under rates Power Services Primary ("PSP"), Power Services Secondary ("PSS"), Time-of-Day Primary ("TODP"), and Time-of-Day Secondary Service ("TODS").

¹ http://corporate.walmart.com/our-story/locations/united-states#/united-states/kentucky
Purpose of Testimony

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?
A. The purpose of my testimony is to address aspects of the LG&E rate case filing, provide recommendations to assist the Commission in its thorough and careful consideration of the impact of the Company's proposed rate increase on customers, address the Company's Cost of Service Study ("COSS"), and provide recommendations regarding the proposed rate design.

Summary of Recommendations

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE COMMISSION.
A. My recommendations to the Commission are as follows:

1) The Commission should balance the interests of the Company with those of its customers. To that end, the Commission should thoroughly and carefully consider all facets of the Company's filing; special consideration should be given to the impact of the Company's requested revenue requirement and return on equity ("ROE") on customers as these are the greatest drivers of the rate increases to customers. By balancing the needs of the Company against the costs to its customers, the Commission can ensure that any increase in the Company's rates reflects the minimum amount necessary to compensate the Company for adequate and reliable service while also providing LG&E an opportunity to earn a reasonable return.
2) The Commission should consider the impact of the proposed capital structure on the Company's equity risk in its determination of the appropriate ROE.

3) The Commission should deny LG&E's proposed inclusion of approximately $51 million of construction work in progress ("CWIP") in rate base. If, however, the Commission determines that CWIP should continue to be included in rate base, it should: (i) monitor the growth in CWIP from case to case (as the Company shows a significant increase in CWIP since its 2014 filing); and (ii) recognize the resulting shift in risk from the Company's shareowners to its customers and reflect that shift in risk to customers in the form of a reduced ROE.

4) The Commission should closely examine the Company's proposed revenue requirement increase and the associated ROE. When determining the appropriate revenue requirement and authorized ROE, the Commission should pay particular attention to:

   a) The impact of the resulting revenue requirement increase on customers;

   b) The Company's reduced risk stemming from:

      (i) favorable regulatory treatment of CWIP in rate base;

      (ii) the Company's request to calculate the revenue requirement using a forecast test year, which uses the most up-to-date and current rates, as opposed to an historic test year; and, (iii) the Company's favorable capital structure.

   c) Rate case ROEs approved by commissions nationwide.
5) For the purposes of this docket, Walmart does not oppose the Company's cost of service study.

6) At the proposed revenue requirement increase, Walmart does not oppose the Company's revenue allocation.

7) If the Commission ultimately approves a revenue requirement less than that proposed by the Company, the reduction in the revenue requirement increase should be used for the dual purposes of further reducing the currently existing inter-class subsidies, and reducing the impact to all customers as outlined within my testimony.

8) The Commission should reject the structural change to the TODS rate design and order the Company to maintain its current rate structure. The Company should modify the pricing to reflect the current 75 percent base demand ratchet at the approved revenue requirement.

9) In order to address the Company's concerns regarding rate design in light of the installation of distributed generation resources, the Commission should order the Company to provide, in its next base rate case filing, a more thorough analysis of the impact of distributed generation resources and should further require the Company to develop alternative rate designs that address the value of distributed generation, the costs of service, and impact on all customers.
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.

LG&E Proposed Revenue Increase

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

A. According to Company witness Conroy, LG&E proposes an increase of $93.6 million, or 8.5 percent. See Testimony of Robert M. Conroy, p. 4, line 7. This increase is based on a fully forecasted test period ending June 30, 2018. See Application, p. 8, ¶ 13.

Q. SHOULD THE COMMISSION GENERALLY CONSIDER THE IMPACT OF THE PROPOSED RATE INCREASE OF $103.1 MILLION ON CUSTOMERS IN SETTING THE REVENUE REQUIREMENT AND ROE FOR THE COMPANY?

A. Yes. Electricity represents a significant portion of a retailer's operating costs. 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, paying particular attention to the Company's requested revenue requirement and ROE. 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 also providing LG&E an opportunity to earn a reasonable return.

Return on Equity

Q. WHAT IS THE COMPANY'S PROPOSED ROE IN THIS DOCKET?
A. LG&E witness McKenzie recommends an ROE of 10.23 percent. See Testimony of Adrien M. McKenzie, p. 5, line 12. This recommendation is based on a range of 9.5 percent to 10.7 percent resulting from his discounted cash flow, capital asset pricing model, empirical capital asset pricing model, and risk premium analyses. See id., p. 5, line 24. The requested ROE at the Company's proposed capital structure results in a proposed weighted cost of capital equal to 7.24 percent. See Schedule J-1.1 and J-1.2.

Q. ARE YOU CONCERNED THAT THE COMPANY'S PROPOSED ROE OF 10.23 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 THE CURRENTLY AUTHORIZED ROE?

A. The Company's most recent rate case resulted in an approved "black box" settlement and, as such, no ROE was specified in the settlement or the Commission's order. See generally In the matter of: Application of Louisville Gas and Electric for an Adjustment of its Electric and Gas Rates, Case No. 2014-00372, Order (June 30, 2015) ("2014 Rate Case Order"). The most recent ROE awarded to the Company was 10.25 percent in its 2012 rate case. See In the matter of: Application of Louisville Gas and Electric for an Adjustment of its Electric and Gas Rates, A Certificate of Public Convenience and Necessity, Approval of Ownership of Gas Service Lines and Risers, and a Gas Line Surcharge, Case No 2012-00222, Order at 4, 8 (Dec. 20, 2012). Although the 2014 Rate Case did not result in a specified ROE for base rates, the settlement approved by the Commission did specify that a 10.0 percent ROE was reasonable for LG&E's monthly environmental cost recovery ("ECR") filings. See 2014 Rate Case Order, p. 4. Thus, the ROE proposed in this proceeding represents a 23 basis point increase to the stipulated ROE for the ECR approved by the Commission in the Company's 2014 Rate Case Order.

Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF THE COMPANY'S PROPOSED 23 BASIS POINT INCREASE?

A. The impact of the ROE change is an increase to revenue requirement of approximately $7.5 million as compared to that resulting from the 10.0 percent ROE approved for use in the ECR. The requested increase due to the increased ROE
constitutes approximately 8.0 percent of the base revenue increase requested by LG&E. See Exhibit GWT-2.

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. When compared to the use of a historical test year in setting rates, this practice reduces the Company's exposure to the regulatory lag in its cost recovery.

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 53.27 percent, a long-term debt portion of 42.91 percent, and short-term debt portion of 3.82 percent. See Schedule J-1.1 and 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.

Q. DOES THE COMPANY STATE THAT THE CAPITAL STRUCTURE IMPACTS ITS RETURN ON EQUITY NEEDS?

A. Yes, as LG&E witness McKenzie explains "[other things equal, a higher debt ratio, or lower common equity ratio, translates into increased financial risk for all investors." Testimony of Adrien M. McKenzie, p. 24, lines 5-6. It follows that 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 (i.e., customers should bear costs at the time they are receiving the corresponding benefits).

The problem is compounded by changes in the number and mix of customers that occur during the construction process, before the asset becomes used and useful. 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.

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

A. Yes. First, including CWIP in rate base shifts risk onto ratepayers that, traditionally, is assumed by the utility's investors. Investors are compensated for bearing this risk
through the authorization of a return on the investment and the value of financing the
construction once the asset is placed in service. Including CWIP in rate base places
the risk on the utility's customers who receive no current benefit for the use of their
money. Second, if 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, investors are not incentivized to rectify
the delays and/or stoppages, and ratepayers have no recourse for recovering or
mitigating the cost of financing the asset's construction.

Q. HOW MUCH CWIP DOES THE COMPANY PROPOSE TO INCLUDE IN
ITS RATE BASE?

A. LG&E proposes to include approximately $51.1 million of CWIP in its rate base. See
Schedule B-4.

Q. AT THE COMPANY'S PROPOSED CWIP AMOUNT, HOW MUCH OF
LG&E'S RATE BASE WOULD BE ASSOCIATED WITH CWIP?

A. As proposed, CWIP constitutes approximately 2.15 percent of the Company's rate
base. See Exhibit GWT-3.

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 $6.1 million, annually. See id.
Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION REGARDING THE INCLUSION OF CWIP IN RATE BASE?

A. The Commission should deny LG&E's proposed inclusion of approximately $51 million of CWIP in rate base. If, however, the Commission determines that CWIP should continue to be included in rate base, it should recognize the resulting shift in risk from the Company's shareowners to its customers and reflect that shift in risk to customers in the form of a reduced authorized ROE.

National Utility Industry ROE Trends

Q. HOW DOES THE COMPANY'S PROPOSED ROE COMPARE 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 2014, 2015, 2016, and so far in 2017. When the nationwide data is limited to only 2015 and 2016, the gap between the average ROE and the Company's proposed ROE widens significantly. See Exhibit GWT-4.

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 93 reported electric utility rate case ROEs authorized by state regulatory commissions for investor-owned electric utilities in 2014, 2015, 2016, and so far in 2017. See id. The average of the reported ROEs in those cases is 9.66

¹ Regulatory Research Associates is part of SNL Financial.
percent. The range of reported authorized ROEs for the same period is 8.64 percent to 10.55 percent, and the median authorized ROE is 9.70 percent. See 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 LG&E?

A. In the group reported by SNL Financial, the average ROE for vertically integrated utilities authorized from 2014 through present is 9.82 percent. See id. When viewed year-over-year for 2015 and 2016, the more recent ROE awards are lower than those awarded in 2014. The ROE awards in 2017 for vertically integrated utilities are currently higher than those in 2014, but that is because two of the three awards are in Michigan, which has awarded 10.1 percent to two utilities. See id.

Q. PLEASE EXPLAIN.

A. The average authorized ROE for vertically integrated utilities in 2014 was 9.92 percent, in 2015 it was 9.75 percent, and in 2016 it was 9.77 percent. Additionally, in 2015 and 2016, 17 vertically integrated utilities have been authorized ROEs of 9.60 percent or less. See id. As such, the Company's proposed 10.23 percent ROE is counter to broader electric industry trends.
Q. WHAT IS THE REVENUE REQUIREMENT IMPACT IF THE COMMISSION WERE TO AWARD AN ROE OF 9.76 PERCENT, THE AVERAGE ROE AWARDED FOR VERTICALLY INTEGRATED UTILITIES IN 2015 AND 2016?

A. Authorizing LG&E an ROE of 9.76 percent instead of the requested 10.23 percent would result in a reduction to the requested increase, inclusive of taxes, of about $12.5 million. This represents about 12.2 percent of the Company's requested increase. See Exhibit GWT-5.

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. 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's perspective on industry trends in authorized ROE.

Conclusion

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

A. The Commission should closely examine the Company's proposed revenue requirement increase and the associated ROE, especially when viewed in light of:

(1) The resulting revenue requirement increase impact on customers;
(2) The reduced risk associated with the favorable regulatory environment which includes the inclusion of CWIP in rate base, the use of forecasted test year, and a risk reducing capital structure; and,

(3) Rate case ROEs approved by commissions nationwide.

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. HAS THE COMPANY PROPOSED A CHANGE TO ITS COST OF SERVICE METHODOLOGY?

A. Yes. According to Company witness Conroy, LG&E is proposing to replace the longstanding modified Base-Intermediate-Peak ("modified BIP") methodology with a loss of load probability ("LOLP") methodology. See Testimony of Robert M. Conroy, p. 7, lines 4-7.

Q. DOES WALMART OPPOSE THE CHANGE TO METHODOLOGY OR THE COMPANY'S PROPOSED COST OF SERVICE STUDY?

A. For the purposes of this docket, Walmart does not oppose the use of the LOLP methodology or 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 in sur-rebuttal testimony.

Rate Design

Q. WHAT IS THE ROLE OF COST OF SERVICE IN SETTING THE UTILITY'S RATES?

A. As Company witness Seelye explained, "[c]ost of service is a standard measure of reasonableness for utility rate design." Testimony of William Steven Seelye, p. 2, lines 20-21. Simply stated, proper cost of service allocates to each rate class the costs incurred by the utility in providing each class with electric service. If the utility's rate design and revenue allocation produce rates that are closely aligned with the cost of
service, then this is an indication that the resulting rates are reasonable. Cost-based revenue allocation and rate design are therefore the primary tools available to the Commission for establishing economically efficient, or proper, price signals.

Q. WHAT ARE PROPER PRICE SIGNALS AND WHAT IS THE FUNCTION OF UTILITY PRICING?


- **The Producer-Motivation or Capital-Attraction Function.** Public utilities are allowed to charge a price that induces and enables them to provide electric service while earning a reasonable return for investors. This function tends to become the primary basis for decisions on total return and authorized revenue for the utility.

- **The Efficiency Incentive Function.** The introduction of pressure on the producer to continue to reduce production costs in order to maximize profits. In a competitive market, this function takes the form of prices being brought into line with costs through the forces of market competition and in turn incents producers to reduce production costs to increase profits or become more price-competitive. In regulated utilities setting revenue that recovers the prudent costs to provide service and a fair
rate of return on utility companies' investment is the regulatory substitute for this price system function, though this effect is limited.

- **The Demand-Control or Consumer-Rationing Function.** Often cited as the primary rate-making concern of economists, this function is focused on presenting prices that encourage or incent customers to ration their own consumption, preventing wasteful consumption and pursuing greater system efficiency.

- **The Income-Distributive Function.** The price level that most accurately reflects the proper level of wealth transfer (that is, revenue requirement) from consumers to utility in compensation for the costs incurred to provide service. Included within this function of pricing is an ability-to-pay standard which simply states that prices may be adjusted to modify the re-distribution of wealth between consumers and supplier (i.e., revenue requirement), between customer classes (i.e., inter-class subsidies), or between customers within a class (i.e., intra-class subsidies).

It is important to note that the ability-to-pay standard, when applied beyond a reasonable level of severity, may result in the breakdown of the other functions of utility pricing. An example of that breakdown is the wasteful use of energy during the peak period resulting from a reduction of on-peak prices through subsidies intended to soften the impact of cooling costs on customers. The increased peak period demand resulting from the breakdown of the demand control function may lead to new production plant needs, resulting in increased total cost of service.
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 the cost of service is free of inter-class subsidies.

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, thus system efficiency, are improved.

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 LG&E'S PROPOSED REVENUE ALLOCATION?

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

Table 1: Present and Proposed Relative Rates of Return

<table>
<thead>
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<th>Class Relative Rates of Return</th>
<th>Present</th>
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<th>Proposed</th>
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<tr>
<td>Customer Class</td>
<td>Rate of Return</td>
<td>Relative Rate of Return</td>
<td>Rate of Return</td>
<td>Relative Rate of Return</td>
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<tr>
<td>Residential - Rate RS, RTOD, VFD</td>
<td>2.04%</td>
<td>41.5%</td>
<td>4.17%</td>
<td>57.0%</td>
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<tr>
<td>General Service</td>
<td>8.65%</td>
<td>175.8%</td>
<td>11.37%</td>
<td>155.5%</td>
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<tr>
<td>Power Service Secondary</td>
<td>9.70%</td>
<td>197.2%</td>
<td>12.34%</td>
<td>168.8%</td>
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<tr>
<td>Power Service Primary</td>
<td>7.03%</td>
<td>142.9%</td>
<td>10.00%</td>
<td>136.8%</td>
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<tr>
<td>Time of Day Secondary</td>
<td>11.90%</td>
<td>241.9%</td>
<td>14.39%</td>
<td>196.9%</td>
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<tr>
<td>Time of Day Primary</td>
<td>5.39%</td>
<td>109.6%</td>
<td>8.25%</td>
<td>112.9%</td>
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<tr>
<td>Retail Transmission Service</td>
<td>4.83%</td>
<td>98.2%</td>
<td>8.05%</td>
<td>110.1%</td>
</tr>
<tr>
<td>Lighting Energy Service</td>
<td>17.55%</td>
<td>356.7%</td>
<td>17.50%</td>
<td>239.4%</td>
</tr>
<tr>
<td>Traffic Energy Service</td>
<td>10.39%</td>
<td>211.2%</td>
<td>13.48%</td>
<td>184.4%</td>
</tr>
<tr>
<td>Lighting and Restricted Lighting</td>
<td>6.01%</td>
<td>122.2%</td>
<td>7.54%</td>
<td>103.1%</td>
</tr>
<tr>
<td>Special Contracts</td>
<td>2.47%</td>
<td>50.2%</td>
<td>5.13%</td>
<td>70.2%</td>
</tr>
<tr>
<td>Total Jurisdiction</td>
<td>4.92%</td>
<td>100.0%</td>
<td>7.31%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Testimony of Robert M. Conroy

Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S APPROACH TO ALLOCATION OF THE REVENUE INCREASE TO CUSTOMER CLASSES?

A. My understanding is that the Company assigned larger relative portions of the overall revenue increase to the rate classes with low rates of return on rate base, and smaller relative portions of the overall increase to the rate classes with high rates of return.

Q. DOES THE COMPANY'S PROPOSED REVENUE ALLOCATION MOVE ALL RATE CLASSES CLOSER TO THEIR RESPECTIVE COSTS OF SERVICE?

A. No. The TODP and Retail Transmission Service classes, even at increases slightly lower than the system average, move away from their costs of service. The remaining classes are moved toward the cost of service, though in several cases that movement is slight.

Q. AT THE PROPOSED REVENUE REQUIREMENT, DOES WALMART OPPOSE THE COMPANY'S REVENUE ALLOCATION?

A. At the proposed revenue requirement, Walmart does not oppose the Company's proposed revenue allocation.

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

A. If the Commission ultimately approves a revenue requirement less than that proposed by the Company, the reduction in the revenue requirement increase should be used for the dual purposes of: (1) further reducing the currently existing intra-class subsidies; and (2) reducing the impact to all customers. To accomplish these purposes, one-half (1/2) of the reduction in the revenue requirement increase should be applied to proportionately reduce the class rate of return on those classes with a RROR greater
than 100 percent. The remaining one-half (1/2) of the reduction should be used to proportionately reduce the increase to all classes.

**PSP and PSS Rate Design**

Q. **BRIEFLY DESCRIBE THE PSP AND PSS RATES?**

A. Rates PSP and PSS are multi-part rates including a Basic Service Charge, Summer and Winter Demand Charges, and an Energy Charge.

Q. **WHAT IS YOUR UNDERSTANDING OF THE CHANGES PROPOSED BY LG&E FOR RATES PSP AND PSS?**

A. Rate PSP, the Company is proposing to change the Basic Service Charge from $200 per month to $240 per month, make no change to the Energy Charge, increase the Summer Demand Charge from $15.92 per kW-month to $18.64 per kW-month, and the Winter Demand Charge from $13.63 per kW-month to $15.96 per kW-month. See Schedule M-2.3-E, p. 7.

For Rate PSS, the Company is proposing no changes to the Basic Service and Energy Charges and an increase to the Summer Demand Charge from $18.40 per kW-month to $20.93 per kW-month and the Winter Demand Charge from $15.99 per kW-month to $18.19 per kW-month. See Schedule M-2.3-E, p. 6.

Q. **DOES WALMART OPPOSE THE COMPANY'S PROPOSED RATE DESIGN FOR RATES PSP AND PSS?**

A. No. Walmart does not oppose the rate design for rates PSS and PSP as proposed by the Company.
TODP and TODS Rate Design

Q. BRIEFLY DESCRIBE THE TODP and TODS RATES?

A. The TODP and TODS Rates are multi-part rates 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 other time during the month.

Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED CHANGES TO THESE RATES?

A. The Company proposes an increase to the demand ratchet for the Base Demand Charges from 75 percent to 100 percent. In addition to the structural change, the Company proposes rate changes for each component as shown in the following tables.
Table 2: LG&E Proposed Changes to TODP

<table>
<thead>
<tr>
<th>Component</th>
<th>Present Rate</th>
<th>Proposed Rate</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Service</td>
<td>$300/Month</td>
<td>$330/Month</td>
<td>$30</td>
<td>10%</td>
</tr>
<tr>
<td>Energy</td>
<td>$0.03824/kWh</td>
<td>$0.03824/kWh</td>
<td>$0.00</td>
<td>0%</td>
</tr>
<tr>
<td>Peak Demand</td>
<td>$5.26/kW</td>
<td>$6.86/kW</td>
<td>$1.60/kW</td>
<td>30.4%</td>
</tr>
<tr>
<td>Intermediate Demand</td>
<td>$3.91/kW</td>
<td>$5.03/kW</td>
<td>$1.12/kW</td>
<td>28.6%</td>
</tr>
<tr>
<td>Base Demand</td>
<td>$3.75/kW</td>
<td>$3.18/kW</td>
<td>(-$0.57/kW)</td>
<td>-15.2%</td>
</tr>
<tr>
<td>*Base Demand Revenue</td>
<td>$16,346,274</td>
<td>$15,523,935</td>
<td>(-$822,339)</td>
<td>-5.0%</td>
</tr>
</tbody>
</table>

Source: Schedule M-2.3-E, p. 9.

Table 2a: LG&E Proposed Changes to TODS

<table>
<thead>
<tr>
<th>Component</th>
<th>Present Rate</th>
<th>Proposed Rate</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Service</td>
<td>$200/Month</td>
<td>$200/Month</td>
<td>$0</td>
<td>0%</td>
</tr>
<tr>
<td>Energy</td>
<td>$0.04049/kWh</td>
<td>$0.04049/kWh</td>
<td>$0.00</td>
<td>0%</td>
</tr>
<tr>
<td>Peak Demand</td>
<td>$6.74/kW</td>
<td>$7.56/kW</td>
<td>$0.82/kW</td>
<td>12.2%</td>
</tr>
<tr>
<td>Intermediate Demand</td>
<td>$5.10/kW</td>
<td>$5.54/kW</td>
<td>$0.44/kW</td>
<td>8.6%</td>
</tr>
<tr>
<td>Base Demand</td>
<td>$4.60/kW</td>
<td>$4.84/kW</td>
<td>$0.24/kW</td>
<td>5.2%</td>
</tr>
<tr>
<td>*Base Demand Revenue</td>
<td>$11,922,129</td>
<td>$14,706,686</td>
<td>$2,784,557</td>
<td>23.4%</td>
</tr>
</tbody>
</table>

Source: Schedule M-2.3-E, p. 8.

While the TODP Base Demand Charge rate has decreased by 15.2 percent, the change in the billing ratchet from 75 percent to 100 percent created a change in the billing determinants for the Base Demand charge. When total revenue is considered,
the change in the Base Demand Component is actually a decrease of 5 percent.
Likewise for the TODS rate, the Base Demand Charge rate has increased by 5.2 percent, yet the revenue for the Base Demand Charge has increased by 23.4 percent.

Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S REASON FOR THE PROPOSED CHANGE TO THE RATCHET APPLICABLE TO THE BASE DEMAND CHARGES FOR RATE TODS?
A. I understand the Company is proposing the demand ratchet change in conjunction with its proposal to eliminate its existing Supplemental or Standby Service Rider ("Rider SS").

Q. WHAT IS THE PURPOSE OF RIDER SS?
A. Rider SS is intended to ensure that customers whose primary source of power is their own generating resources, but who nonetheless desire for the Company to provide what is essentially firm backup service, pay the full fixed cost associated with the facilities and personnel necessary to provide that service. Testimony of Robert M. Conroy, p. 19, lines 5-8. The charges in the SS rider essentially represent a firm capacity reservation charge that compensates the Company for providing adequate generation, transmission and distribution resources to serve a participating customer's needs when their own generation source is unavailable.

Q. WHY IS THE COMPANY PROPOSING TO ELIMINATE THE SS RIDER?
A. The Company states that the proposal is intended to "address a potential opportunity for customers using the Company for back-up service to free-ride on the Company's
system due to the current demand-charge structures of Rates TODS, TODP, RTS, and
FLS. "Id., p. 19, lines 12-14.

Q. HAS THE COMPANY INDICATED HOW MANY CUSTOMERS
PARTICIPATE IN THE RIDER SS?
A. According to the testimony of Company witness Conroy, no customers take service
under Rider SS. See id., p. 19, lines 4-5.

Q. HAS THE COMPANY INDICATED HOW MANY CUSTOMERS THAT
TAKE SERVICE UNDER RATES TODS, TODP, RTS, AND FLS, HAVE
THEIR OWN GENERATING RESOURCES AS THEIR PRIMARY SOURCE
OF POWER?
A. The Company is unaware of any customers on these rate schedules whose primary
source of power is their own generating resources. See Exhibit GWT-7.

Q. WHAT IS THE COMPANY'S REASON FOR PROPOSING A 100 PERCENT
RATCHET IN THE RATE DESIGN IN LIEU OF THE STANDBY RIDER?
A. The Company claims that fundamental changes are taking place in the electric utility
industry whereby more customers are installing distributed generation to meet their
power needs and falling back on the utility to supply power when their facilities are
not operating. The Company further states that it is important that utilities implement
rates that allow the recovery of the appropriate amount of fixed costs associated with
serving customers who have installed distributed generation facilities but who want to
rely on the utility to provide generation, transmission, and distribution service when
the distributed generation facilities are not operating. See Testimony of William
Steven Seelye, pp. 45-48.

Q. ACCORDING TO THE COMPANY, HOW MANY OF ITS CUSTOMERS
WITHIN THE TODS, TODP, RTS, AND FLS CLASSES HAVE INSTALLED
DISTRIBUTED GENERATION FACILITIES?
A. Based on data available in the Company's response to Commission staff's request for
information, one customer has installed distributed generation. This customer is in
the TODP class. See Exhibit GWT-8.

Q. WHAT IS THE TYPICAL PURPOSE OF RATCHETED DEMAND
CHARGES IN RATE-MAKING?
A. Typically, billing demand ratchets are used to reduce revenue risks or possible
subsidy issues associated with fixed cost recovery for large customers that have a
tendency or potential for large swings in monthly billing demands. Ratchets can also
be intended to recover specific costs of facilities dedicated to serve a particular
customer. Services such as generation and transmission are not typically dedicated to
a specific customer. Since these more fungible services can be used to serve other
customers' needs, demand ratchets become less appropriate for their recovery.

Q. DOES THE USE OF A 100 PERCENT DEMAND RATCHET ON THE BASE
DEMAND CHARGE IN THESE RATES ACCOMPLISH THE SAME
FUNCTION AS DOES RIDER SS?
A. No. Rider SS ensures the Company is compensated for providing and maintaining
sufficient generation, transmission, and distribution capacity to serve a customer's
needs when that customer's primary power source is not available. The proposed 100
percent demand ratchet solution focuses on mitigating a perceived revenue risk
associated with resulting month-to-month fluctuations in the customer's maximum
base demand charges due to the installation of distributed generation. The base
demand charges, according to the Company, are designed only to recover cost of
distribution and transmission services and do not address the cost of generation. See

Q. DO YOU HAVE OTHER CONCERNS WITH THE PROPOSED
MODIFICATION TO THE RATE STRUCTURE?
A. Yes, I am concerned that the proposed solution ignores the benefits of distributed
generation and implements disincentives to customers' demand management
initiatives. While the magnitude of the value of distributed generation continues to be
debated in many jurisdictions, most, if not all, stakeholders do recognize and stipulate
that benefits accrue to the utility, its customers, and society. The proposed solution
fails to recognize these benefits. Additionally, the existence of a 100 percent demand
ratchet sends a price signal that reduces the economic value of demand management
measures, discouraging the deployment of demand management programs intended to
increase system efficiency.

Q. HAS THE COMPANY PROVIDED AN ASSESSMENT OF THE CUSTOMER
IMPACT OF THE CHANGE TO THE DEMAND RATCHET?
A. No; however, the Company, in response to Commission Staff, has indicated that this
change results in a maximum billing impact of 26.9 percent. See Exhibit GWT-9.
Q. DOES THE COMPANY'S STATED MAXIMUM IMPACT CONCERN YOU?
A. Yes. A maximum increase of 26.9 percent indicates that some customers in these classes are likely to experience seriously adverse impacts due to this unnecessary change.

Q. IS IT IMPERATIVE THAT THE COMMISSION TAKE ACTION TO ADDRESS THE COMPANY'S CONCERNS WITH DISTRIBUTED GENERATION IN THIS CASE?
A. Given the limited participation in Rider SS, the lack of customers for which Rider SS was intended to apply, the differences of purpose in the Rider SS and demand ratchets, the minimal number of distributed generation installations in these rate classes, the lack of the recognition of the value of distributed generation, and the limited information on customer impact, it is my opinion that the implementation of a solution to the Company's concern is premature.

Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION FOR THE TODS RATE DESIGN?
A. The Commission should reject the structural change to the TODS rate design and order the Company to maintain its current rate structure. The Company should modify the pricing to reflect the current 75 percent base demand ratchet at the approved revenue requirement. In order to address the Company's concerns regarding the rate design in light of the installation of distributed generation resources, the Commission should order the Company to provide, in its next base rate
case, a more thorough analysis and develop alternative rate designs that address the
value of distributed generation, the costs of service and impact on all customers.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.
VERIFICATION

STATE OF ARKANSAS

COUNTY OF BENTON

The undersigned, Gregory W. Tillman, being duly sworn, deposes and says that he is Senior Manager, Energy Regulatory Analysis for Wal-Mart Stores, 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 3rd day of March 2017.

Jill A. Arbuthnot (SEAL)
Notary Public

My Commission Expires: 12-01-2024
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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

EXHIBITS OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC.
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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

EXHIBIT GWT-1 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC.
Gregory W. Tillman  
Senior Manager, Energy Regulatory Analysis  
Wal-Mart Stores, Inc.  
Business Address: 2001 SE 10th Street, Bentonville, AR, 72716-5530  
Business Phone: (479) 204-7993  

EXPERIENCE  
November 2015 – Present  
Wal-Mart Stores, 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
TESTIMONY BEFORE REGULATORY COMMISSIONS

2017
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. (Rate Design)

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. (Revenue Requirement)


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
IN THE MATTER OF:

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

EXHIBIT GWT-2 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC.
Calculation of Revenue Requirement Impact of LG&E'S Proposed Increase in ROE

1) Calculate Rate of Return Using the Current ROE (ROE = 10.0%)

<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>2.47%</td>
<td>3.82%</td>
<td>0.72%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Long-term Debt</td>
<td>44.25%</td>
<td>42.91%</td>
<td>4.12%</td>
<td>1.77%</td>
</tr>
<tr>
<td>Common Equity</td>
<td>53.28%</td>
<td>53.27%</td>
<td>10.00%</td>
<td>5.33%</td>
</tr>
</tbody>
</table>

2) Calculate Revenue Requirement Impact at the Current ROE

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-1</td>
<td>Rate Base ($000)</td>
<td>$2,380,934</td>
</tr>
<tr>
<td></td>
<td>Rate of Return (ROE = 10.0%)</td>
<td>7.12%</td>
</tr>
<tr>
<td></td>
<td>Adjusted Income Requirement (ROE = 10.0%)</td>
<td>$169,580</td>
</tr>
<tr>
<td>C-1</td>
<td>LG&amp;E Proposed Income Requirement ($000)</td>
<td>$174,166</td>
</tr>
<tr>
<td></td>
<td>Difference in Income Requirement ($000)</td>
<td>$4,586</td>
</tr>
<tr>
<td>H-1</td>
<td>Conversion Factor</td>
<td>1.6409</td>
</tr>
<tr>
<td></td>
<td>Difference in Revenue Requirement ($000)</td>
<td>$7,526</td>
</tr>
<tr>
<td>M-2.1</td>
<td>Requested Revenue Requirement Increase ($000)</td>
<td>$93,618</td>
</tr>
<tr>
<td></td>
<td>Percent of Increase from ROE Increase</td>
<td>8.04%</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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

EXHIBIT GWT-3 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM’S EAST, 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>($000)</td>
<td>Proposed CWIP Included in Rate Base</td>
<td>Schedule B-4</td>
<td>$ 51,108</td>
</tr>
<tr>
<td>(2)</td>
<td>($000)</td>
<td>Proposed Total Rate Base</td>
<td>Schedule B-1</td>
<td>$ 2,380,934</td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td>CWIP Percentage of Rate Base</td>
<td>(1) / (2)</td>
<td>2.15%</td>
</tr>
<tr>
<td>(4)</td>
<td></td>
<td>Proposed Rate of Return</td>
<td>Schedule J-1</td>
<td>7.24%</td>
</tr>
<tr>
<td>(5)</td>
<td></td>
<td>Gross Revenue Adjustment Factor</td>
<td>Schedule H-1</td>
<td>1.640935</td>
</tr>
<tr>
<td>(6)</td>
<td>($000)</td>
<td>Revenue Requirement from CWIP</td>
<td>(1) x (4) x (5)</td>
<td>$ 6,072</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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371
EXHIBIT GWT-4 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC.
<table>
<thead>
<tr>
<th>State</th>
<th>Utility</th>
<th>Docket</th>
<th>Decision Date</th>
<th>Vertically Integrated (%)</th>
<th>Return on Equity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>Consolidated Edison Co. of NY</td>
<td>13-E-0030</td>
<td>2/20/2014</td>
<td>D</td>
<td>9.20%</td>
</tr>
<tr>
<td>North Dakota</td>
<td>Northern States Power Co.</td>
<td>PU-12-813</td>
<td>2/26/2014</td>
<td>V</td>
<td>9.75%</td>
</tr>
<tr>
<td>New Mexico</td>
<td>Southwestern Public Service Co</td>
<td>12-00350-UT</td>
<td>3/26/2014</td>
<td>V</td>
<td>9.96%</td>
</tr>
<tr>
<td>Delaware</td>
<td>Delmarva Power &amp; Light Co.</td>
<td>13-115</td>
<td>4/2/2014</td>
<td>D</td>
<td>9.70%</td>
</tr>
<tr>
<td>Texas</td>
<td>Entergy Texas Inc.</td>
<td>41791</td>
<td>5/16/2014</td>
<td>V</td>
<td>9.80%</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>Fitchburg Gas &amp; Electric Light</td>
<td>13-90</td>
<td>5/30/2014</td>
<td>D</td>
<td>9.70%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Wisconsin Power and Light Co.</td>
<td>6680-UR-119</td>
<td>6/6/2014</td>
<td>V</td>
<td>10.40%</td>
</tr>
<tr>
<td>Maine</td>
<td>Emera Maine</td>
<td>2013-00443</td>
<td>6/30/2014</td>
<td>D</td>
<td>9.55%</td>
</tr>
<tr>
<td>Maryland</td>
<td>Potomac Electric Power Co.</td>
<td>9336</td>
<td>7/2/2014</td>
<td>D</td>
<td>9.62%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>Entergy Louisiana LLC (New Orleans)</td>
<td>UD-13-01</td>
<td>7/10/2014</td>
<td>V</td>
<td>9.95%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Rockland Electric Company</td>
<td>ER-13111135</td>
<td>7/23/2014</td>
<td>D</td>
<td>9.75%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>Entergy Arkansas Inc.</td>
<td>13-028-U 1</td>
<td>8/15/2014</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Atlantic City Electric Co.</td>
<td>ER-14030245</td>
<td>8/20/2014</td>
<td>D</td>
<td>9.75%</td>
</tr>
<tr>
<td>Vermont</td>
<td>Green Mountain Power Corp</td>
<td>8190, 8191</td>
<td>8/25/2014</td>
<td>V</td>
<td>9.60%</td>
</tr>
<tr>
<td>Utah</td>
<td>PacifiCorp</td>
<td>13-035-184</td>
<td>8/29/2014</td>
<td>V</td>
<td>9.80%</td>
</tr>
<tr>
<td>Florida</td>
<td>Florida Public Utilities Co.</td>
<td>140025-EI</td>
<td>9/15/2014</td>
<td>V</td>
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</tr>
<tr>
<td>Nevada</td>
<td>Nevada Power Co.</td>
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<td>10/9/2014</td>
<td>V</td>
<td>9.80%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Wisconsin Public Service Corp.</td>
<td>6690-UR-123</td>
<td>11/6/2014</td>
<td>V</td>
<td>10.20%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Wisconsin Electric Power Co.</td>
<td>05-UR-107</td>
<td>11/14/2014</td>
<td>V</td>
<td>10.20%</td>
</tr>
<tr>
<td>Virginia</td>
<td>Appalachian Power Co.</td>
<td>PUE-2014-0026</td>
<td>11/26/2014</td>
<td>V</td>
<td>9.70%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Madison Gas and Electric Co.</td>
<td>3270-UR-120</td>
<td>11/26/2014</td>
<td>V</td>
<td>10.20%</td>
</tr>
<tr>
<td>Illinois</td>
<td>Commonwealth Edison Co.</td>
<td>14-0312</td>
<td>12/10/2014</td>
<td>D</td>
<td>9.25%</td>
</tr>
<tr>
<td>Illinois</td>
<td>Ameren Illinois</td>
<td>14-0317</td>
<td>12/10/2014</td>
<td>D</td>
<td>9.25%</td>
</tr>
<tr>
<td>Mississippi</td>
<td>Entergy Mississippi Inc.</td>
<td>2014-UN-0132</td>
<td>12/11/2014</td>
<td>V</td>
<td>10.07%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Northern States Power Co.</td>
<td>4220-UR-120</td>
<td>12/12/2014</td>
<td>V</td>
<td>10.20%</td>
</tr>
<tr>
<td>Colorado</td>
<td>Black Hills Continental Electric</td>
<td>14AI-093E</td>
<td>12/18/2014</td>
<td>V</td>
<td>9.83%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>PacifiCorp</td>
<td>20000-446-ER-14</td>
<td>1/23/2015</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Colorado</td>
<td>Public Service Co. of CO</td>
<td>14AL-00610E</td>
<td>2/24/2015</td>
<td>V</td>
<td>9.83%</td>
</tr>
<tr>
<td>New Jersey</td>
<td>Jersey Central Power &amp; Light Co.</td>
<td>ER-12111052</td>
<td>3/18/2015</td>
<td>D</td>
<td>9.75%</td>
</tr>
<tr>
<td>Washington</td>
<td>PacifiCorp</td>
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<td>3/25/2015</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Michigan</td>
<td>Wisconsin Public Service Corp.</td>
<td>U-17689</td>
<td>4/23/2015</td>
<td>V</td>
<td>10.20%</td>
</tr>
<tr>
<td>Missouri</td>
<td>Union Electric Co.</td>
<td>ER-2014-0258</td>
<td>4/29/2015</td>
<td>V</td>
<td>9.53%</td>
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<tr>
<td>West Virginia</td>
<td>Appalachian Power Co.</td>
<td>14-1152-E-42-T</td>
<td>5/26/2015</td>
<td>V</td>
<td>9.75%</td>
</tr>
<tr>
<td>New York</td>
<td>Central Hudson Gas &amp; Electric</td>
<td>14-E-0318</td>
<td>6/17/2015</td>
<td>D</td>
<td>9.00%</td>
</tr>
<tr>
<td>New York</td>
<td>Consolidated Edison Co. of NY</td>
<td>15-E-0050</td>
<td>6/17/2015</td>
<td>D</td>
<td>9.00%</td>
</tr>
<tr>
<td>Missouri</td>
<td>Kansas City Power &amp; Light</td>
<td>ER-2014-0370</td>
<td>9/2/2015</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Kansas</td>
<td>Kansas City Power &amp; Light</td>
<td>15-KCPE-116-RTS</td>
<td>9/10/2015</td>
<td>V</td>
<td>9.30%</td>
</tr>
<tr>
<td>New York</td>
<td>Orange &amp; Rockland Utilities Co.</td>
<td>14-E-0493</td>
<td>10/15/2015</td>
<td>V</td>
<td>9.00%</td>
</tr>
<tr>
<td>Michigan</td>
<td>Consumers Energy Co.</td>
<td>U-17735</td>
<td>11/19/2015</td>
<td>V</td>
<td>10.30%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Wisconsin Public Service Corp.</td>
<td>6690-UR-124</td>
<td>11/19/2015</td>
<td>V</td>
<td>10.00%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Northern States Power Co.</td>
<td>4220-UR-121</td>
<td>11/3/2015</td>
<td>V</td>
<td>10.00%</td>
</tr>
</tbody>
</table>
Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to Present

<table>
<thead>
<tr>
<th>State</th>
<th>Utility</th>
<th>Docket</th>
<th>Decision Date</th>
<th>Vertical (V) Distribution (D)</th>
<th>Return on Equity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>Commonwealth Edison Co.</td>
<td>15-0287</td>
<td>12/9/2015</td>
<td>D</td>
<td>9.14%</td>
</tr>
<tr>
<td>Michigan</td>
<td>DTE Electric Co.</td>
<td>U-17767</td>
<td>12/11/2015</td>
<td>V</td>
<td>10.30%</td>
</tr>
<tr>
<td>Oregon</td>
<td>Portland General Electric Co.</td>
<td>UE 294</td>
<td>12/15/2015</td>
<td>V</td>
<td>9.60%</td>
</tr>
<tr>
<td>Texas</td>
<td>Southwestern Public Service Co</td>
<td>43695</td>
<td>12/17/2015</td>
<td>V</td>
<td>9.70%</td>
</tr>
<tr>
<td>Idaho</td>
<td>Avista Corp.</td>
<td>AVU-E-15-05</td>
<td>12/18/2015</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Wyoming</td>
<td>PacifiCorp</td>
<td>20000-469-ER-15</td>
<td>12/30/2015</td>
<td>V</td>
<td>9.50%</td>
</tr>
<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>9.73%</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 Co.</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>9.73%</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>9.73%</td>
</tr>
<tr>
<td>Washington</td>
<td>PacifiCorp</td>
<td>UE-152253</td>
<td>9/1/2016</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Michigan</td>
<td>Upper Peninsula Electric 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>11/9/2016</td>
<td>V</td>
<td>9.80%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Public Service Company of OK</td>
<td>PUD 201500208</td>
<td>11/10/2016</td>
<td>V</td>
<td>9.50%</td>
</tr>
<tr>
<td>Maryland</td>
<td>Potomac Electric Power 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-El</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>
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<tr>
<td>South Carolina</td>
<td>Duke Energy Progress Inc.</td>
<td>2016-227-E</td>
<td>12/7/2016</td>
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<td>10.10%</td>
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<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>
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<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>
</tr>
<tr>
<td>Nevada</td>
<td>Sierra Pacific Power Co.</td>
<td>16-06006</td>
<td>12/22/2016</td>
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<tr>
<td>Idaho</td>
<td>Avista Corp.</td>
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<td>12/28/2016</td>
<td>V</td>
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</tr>
<tr>
<td>New York</td>
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<td>1/24/2017</td>
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<tr>
<td>Michigan</td>
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<td>U-18014</td>
<td>1/31/2017</td>
<td>V</td>
<td>10.10%</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>Michigan</td>
<td>Consumers Energy Co.</td>
<td>U-17990</td>
<td>2/28/2017</td>
<td>V</td>
<td>10.10%</td>
</tr>
</tbody>
</table>

1 The Arkansas Public Service Commission originally approved a 9.3% ROE, but increased it to 9.5% on rehearing. See Order No. 35, Arkansas Docket 13-028-U.
## Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to Present

<table>
<thead>
<tr>
<th>State</th>
<th>Utility</th>
<th>Decision Docket Date (D)</th>
<th>Vertically Integrated (V/Utility)</th>
<th>Return on Equity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Period</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td># of Decisions</td>
<td>93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average (All Utilities)</td>
<td></td>
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<td>9.66%</td>
<td></td>
</tr>
<tr>
<td>Average (Distribution Only)</td>
<td></td>
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<td>9.35%</td>
<td></td>
</tr>
<tr>
<td>Average (Vertically Integrated Only)</td>
<td></td>
<td></td>
<td>9.82%</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td></td>
<td></td>
<td>9.70%</td>
<td></td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
<td></td>
<td>8.64%</td>
<td></td>
</tr>
<tr>
<td>Maximum</td>
<td></td>
<td></td>
<td>10.55%</td>
<td></td>
</tr>
</tbody>
</table>

### 2014

| # of Decisions | 33            |                          |                                   |                      |
|---------------|---------------|--------------------------|                                   |                      |
| Average (All Utilities) |         |                          | 9.75%                             |                      |
| Average (Distribution Only) |     |                          | 9.49%                             |                      |
| Average (Distribution Only, exc. IL FRP) |   |                          | 9.53%                             |                      |
| Average (Vertically Integrated Only) |   |                          | 9.92%                             |                      |

### 2015

| # of Decisions | 23            |                          |                                   |                      |
|---------------|---------------|--------------------------|                                   |                      |
| Average (All Utilities) |         |                          | 9.60%                             |                      |
| Average (Distribution Only) |     |                          | 9.17%                             |                      |
| Average (Distribution Only, exc. IL FRP) |   |                          | 9.19%                             |                      |
| Average (Vertically Integrated Only) |   |                          | 9.75%                             |                      |

### 2016

| # of Decisions | 32            |                          |                                   |                      |
|---------------|---------------|--------------------------|                                   |                      |
| Average (All Utilities) |         |                          | 9.60%                             |                      |
| Average (Distribution Only) |     |                          | 9.31%                             |                      |
| Average (Distribution Only, exc. IL FRP) |   |                          | 9.45%                             |                      |
| Average (Vertically Integrated Only) |   |                          | 9.77%                             |                      |

### 2017

| # of Decisions | 5             |                          |                                   |                      |
|---------------|---------------|--------------------------|                                   |                      |
| Average (All Utilities) |         |                          | 9.71%                             |                      |
| Average (Distribution Only) |     |                          | 9.30%                             |                      |
| Average (Distribution Only, exc. IL FRP) |   |                          | 9.00%                             |                      |
| Average (Vertically Integrated Only) |   |                          | 9.98%                             |                      |

Source: SNL Financial LC, March 1, 2017
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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY)

CASE NO. 2016-00371

EXHIBIT GWT-5 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC.
Calculation of Revenue Requirement Impact of LG&E's Proposed ROE vs National Average for '15-'16

(1) Schedule J-1
LG&E Requested Rate of Return

1) Calculate Rate of Return Using the Current ROE (ROE = 9.76%)

<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>2.47%</td>
<td>3.82%</td>
<td>0.72%</td>
<td>0.03%</td>
</tr>
<tr>
<td>Long-term Debt</td>
<td>44.25%</td>
<td>42.91%</td>
<td>4.12%</td>
<td>1.77%</td>
</tr>
<tr>
<td>Common Equity</td>
<td>53.28%</td>
<td>53.27%</td>
<td>9.76%</td>
<td>5.20%</td>
</tr>
</tbody>
</table>

(5) \[(2)+(3)+(4)\] Rate of Return (ROE = 9.76%) 6.99%

2) Calculate Revenue Requirement Impact at the Propose ROE

(6) Schedule B-1
Rate Base ($000) $2,380,934

(7) \[(6) \times (7)\] Rate of Return (ROE = 9.76%) 6.99%

(8) \[(6) \times (7)\] Adjusted Income Requirement (ROE = 9.76%) $166,536

(9) Schedule C-1
LG&E Proposed Income Requirement ($000) $174,166

(10) \[(9) - (8)\] Difference in Income Requirement ($000) $7,630

(11) Schedule H-1
Conversion Factor 1.6409

(12) \[(10) \times (11)\] Difference in Revenue Requirement ($000) $12,521

(13) Schedule M-2.1
Requested Revenue Requirement Increase ($000) $103,078

(14) \[(12) / (13)\] Percent of Increase from ROE Increase 12.15%
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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY CASE NO. 2016-00371

EXHIBIT GWT-6 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC.
<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>2.04%</td>
<td>41.5%</td>
<td>4.17%</td>
<td>57.0%</td>
</tr>
<tr>
<td>General Service</td>
<td>8.65%</td>
<td>175.8%</td>
<td>11.37%</td>
<td>155.5%</td>
</tr>
<tr>
<td>Power Service Secondary</td>
<td>9.70%</td>
<td>197.2%</td>
<td>12.34%</td>
<td>168.8%</td>
</tr>
<tr>
<td>Power Service Primary</td>
<td>7.03%</td>
<td>142.9%</td>
<td>10.00%</td>
<td>136.8%</td>
</tr>
<tr>
<td>Time of Day Secondary</td>
<td>11.90%</td>
<td>241.9%</td>
<td>14.39%</td>
<td>196.9%</td>
</tr>
<tr>
<td>Time of Day Primary</td>
<td>5.39%</td>
<td>109.6%</td>
<td>8.25%</td>
<td>112.9%</td>
</tr>
<tr>
<td>Retail Transmission Service</td>
<td>4.83%</td>
<td>98.2%</td>
<td>8.05%</td>
<td>110.1%</td>
</tr>
<tr>
<td>Lighting Energy Service</td>
<td>17.55%</td>
<td>356.7%</td>
<td>17.50%</td>
<td>239.4%</td>
</tr>
<tr>
<td>Traffic Energy Service</td>
<td>10.39%</td>
<td>211.2%</td>
<td>13.48%</td>
<td>184.4%</td>
</tr>
<tr>
<td>Lighting and Restricted Lighting</td>
<td>6.01%</td>
<td>122.2%</td>
<td>7.54%</td>
<td>103.1%</td>
</tr>
<tr>
<td>Special Contracts</td>
<td>2.47%</td>
<td>50.2%</td>
<td>5.13%</td>
<td>70.2%</td>
</tr>
<tr>
<td><strong>Total Jurisdiction</strong></td>
<td><strong>4.92%</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>7.31%</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Source: Testimony of Robert M. Conroy
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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

EXHIBIT GWT-7 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM'S EAST, INC.
LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

Response to Supplemental Requests for Information of Kroger
Dated February 7, 2017

Question No. 5

Responding Witness: David S. Sinclair

Q-5. For the Forecasted Test Period, for LG&E rate schedules TODS, TODP, RTS, and FLS, separately, please provide the following information:

a. The number of customers whose primary source of power is their own generating resources.

b. The kWh sales supplied by the Company to customers whose primary source of power is their own generating resources.

c. The Demand Base billing kW (assuming a 100% ratchet) applicable customers whose primary source of power is their own generating resources.

If the Company does not possess this information, please provide the Company's best estimate.

A-5.

a. The company is unaware of any customers on these rate schedules whose primary source of power is their own generating resources.

b. See the response to Item a. above.

c. See the response to Item a. above.
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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

EXHIBIT GWT-8 OF GREGORY W. TILLMAN
ON BEHALF OF
WAL-MART STORES EAST, LP AND SAM’S EAST, INC.
Louisville Gas and Electric Company

Case No. 2016-00371

Response to Commission Staff's Second Request for Information
Dated January 11, 2017

Question No. 87

Responding Witness: John P. Malloy / William S. Seelye


a. By rate class, provide the number of customers that have installed distributed generation.

b. Mr. Seelye states on page 15, line 22 of his testimony that distributed generation has not yet created a significant problem for LG&E. Explain how a movement toward a rate design that more accurately reflects the actual cost of providing service is necessary, as opposed to a gradual movement to coincide with a gradual increase in distributed generation.

A-87.

a. The Company has identified the following number of customers by rate class with distributed generation (which includes net metering customers):

<table>
<thead>
<tr>
<th>Rate Class</th>
<th>Number of Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Service Single Phase</td>
<td>17</td>
</tr>
<tr>
<td>General Service Three Phase</td>
<td>12</td>
</tr>
<tr>
<td>Power Service Secondary</td>
<td>2</td>
</tr>
<tr>
<td>Residential Service</td>
<td>233</td>
</tr>
<tr>
<td>Time of Day Primary</td>
<td>1</td>
</tr>
<tr>
<td>Special Contracts</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>267</strong></td>
</tr>
</tbody>
</table>

b. For many years, it has been the Company’s objective to move its rate design to more accurately reflect the actual cost of providing service. In this proceeding, the Company is proposing to take incremental steps toward gradually achieving that objective. It must be emphasized that the Company is not proposing to modify its rates to fully reflect cost of service in this proceeding. For example, the Company is not proposing in this proceeding to replace its two-part rates for Residential Rates RS and General Service GS with multi-part rates, even though a multi-part rate would more accurately
reflect the actual cost of providing service and even though multi-part rates have been used for large power customers for decades. In this proceeding, the Company is taking the initial steps of (i) changing the presentation of the charges for Rates RS and GS to break out the variable cost component of the energy charge (Variable Energy Charge) and the fixed cost component of the energy charge (Infrastructure Energy Charge) and (ii) changing the demand structure of its large power rates (TOD-S, TOD-P, RTS, and FLS) to more accurately reflect cost of service. However, it should be pointed out that Rates TOD-S, TOD-P, RTS, and FLS are currently structured as multi-part rates; therefore, the changes being proposed to these rates should still be considered a "gradual movement" that has been taking place over many years. Therefore, it is the Company's position that the rate changes being proposed in this proceeding do reflect a gradual movement toward cost-based rates.

It is also important to consider the disadvantages of gradual rate changes as it pertains to distributed generation. A rate design that is not cost based, one that improperly recovers fixed costs through variable charges, sends a false economic signal to anyone who would install distributed generation because the customer's avoided cost for installing a generator would be higher than it would be under a cost based rate. A false economic signal might incent someone to install distributed generation, when under a cost based rate, they would not. It is therefore important to send accurate price signals so that customers do not invest in distributed generation under a false set of price signals, only to see circumstances change as rates move toward true cost. This is a problem that regulatory commissions are struggling with in other jurisdictions.
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 AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY

CASE NO. 2016-00371

EXHIBIT GWT-9 OF GREGORY W. TILLMAN ON BEHALF OF WAL-MART STORES EAST, LP AND SAM’S EAST, INC.
Q-95. Refer to the Seelye Testimony, page 49, lines 11-19.

a. State whether LG&E expects that the customer bill increases and decreases due to the proposed change to the Base Demand Charge demand ratchet will net to, or near, zero.

b. Provide the largest effect the proposed change to the Base Demand Charge demand ratchet will have on a single customer in each affected rate class.

A-95.

a. Yes. Based on test year-year billing determinants, the customer bill increases and decreases due to the proposed change to the Base Demand Charge demand ratchet are designed to net to zero. For the billing determinants for Rates TODS, TODP, and RTS shown in Schedule M-2.3-E, the current Base Demand Charge is applied to billing demands with the current ratchet and the proposed Base Demand Charge is applied to billing demands with the proposed ratchet.

b. The largest percentage increase that the proposed demand ratchet will have on any single customer:

   RTS:  2.2%
   TODP:  5.0%
   TODS: 26.9%

This calculation uses proposed rates, includes only base rate components, and excludes riders for all active LG&E customers for the 12 months ended August 2016.
CERTIFICATE OF SERVICE

I hereby certify that Walmart's March 3, 2017, electronic filing is a true and accurate copy of the Direct Testimony and Exhibits of Gregory W. Tillman to be filed in paper medium; and that on March 3, 2017, the electronic filing has been transmitted to the Commission, and that an original and one copy 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
Case No. 2016-00371
Page 2

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Certificate of Service
Case No. 2016-00371
Page 3

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