

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF)
KENTUCKY UTILITIES COMPANY FOR) CASE NO. 2016-00370
AN ADJUSTMENT OF ITS ELECTRIC)
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

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

1 **Contents**

2 Introduction.....1

3 Purpose of Testimony4

4 Summary of Recommendations.....4

5 KU Proposed Revenue Increase7

6 Return on Equity.....8

7 National Utility Industry ROE Trends14

8 Conclusion.....16

9 Cost of Service.....17

10 Rate Design.....18

11 Revenue Allocation.....21

12 TODS Rate Design.....25

Introduction

1
2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.**

3 A. My name is Gregory W. Tillman. My business address is 2001 SE 10th St.,
4 Bentonville, AR 72716-5530. I am employed by Wal-Mart Stores, Inc. as Senior
5 Manager, Energy Regulatory Analysis.

6 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?**

7 A. I am testifying on behalf of Wal-Mart Stores East, LP and Sam's East, Inc.
8 (collectively "Walmart").

9 **Q. PLEASE DESCRIBE YOUR EDUCATION AND EXPERIENCE.**

10 A. I earned a Bachelor of Science in Electrical Engineering from the University of Tulsa
11 in 1987. I have more than 24 years of experience in the regulated and deregulated
12 energy industry including roles in regulatory, pricing, billing, and metering
13 information. After serving on active duty as a Signal Officer in the United States
14 Army, I joined the Public Service Company of Oklahoma ("PSO") where I was
15 employed in various positions in the Information Services, Business Planning, Rates
16 and Regulatory, and Ventures departments from 1990 through 1997. Within the
17 Rates and Regulatory department I served as the Supervisor of Power Billing and
18 Data Collection. In this position I managed the billing for large industrial and
19 commercial customers and led the implementation of the company's real-time pricing
20 program. I also managed the implementation of real-time pricing for three other
21 utilities within the Central and South West Corporation – Southwestern Electric
22 Power Company, Central Power and Light, and West Texas Utilities. In 1997, I

1 joined the Retail department of the Williams Energy Company as the manager of
2 systems for the retail gas and electric data and billing systems. During my tenure at
3 Williams I also managed the customer billing function at Thermogas as well as the
4 billing and accounting systems support functions at Williams Communications. In
5 2000, I joined Automated Energy where I served as the Vice President of Energy
6 Solutions for two years. Following several assignments as a consultant and project
7 manager in various industries, in 2008 I joined Oklahoma Gas & Electric Company
8 ("OG&E") as a senior pricing analyst, was promoted to Manager of Pricing in
9 January 2010, and became the Product Development Pricing Leader in 2013. While
10 at OG&E, I was instrumental in developing and managing OG&E's pricing strategy
11 and products, including the design and implementation of the OG&E's SmartHours™
12 rate. I have been in my current position with Walmart since November, 2015. My
13 Witness Qualification Statement is included herein as Exhibit GWT-1.

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

17 A. No.

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

20 A. Yes. I have testified in proceedings before the Arizona Corporation Commission, the
21 Arkansas Public Service Commission, the Michigan Public Service Commission, the
22 Oklahoma Corporation Commission, the South Carolina Public Service Commission,

1 the Public Utility Commission of Texas, and the Wisconsin Public Service
2 Commission. My testimony addressed the topics of revenue requirement, rate design,
3 revenue allocation, pricing, customer impacts, tariffs, and terms and conditions of
4 service. *See* Exhibit GWT-1.

5 **Q. ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?**

6 A. Yes. I am sponsoring the exhibits listed in the Table of Contents.

7 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS IN**
8 **KENTUCKY.**

9 A. Walmart operates 103 retail units and two distribution centers, employing 31,102
10 associates in Kentucky. In fiscal year ending 2016, Walmart purchased \$1.3 billion
11 worth of goods and services from Kentucky-based suppliers, supporting an additional
12 35,041 supplier jobs.¹

13 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN**
14 **KENTUCKY UTILITIES COMPANY'S SERVICE TERRITORY.**

15 Walmart has 33 retail units that take electric service from Kentucky Utilities
16 Company ("KU" or "the Company"). Primarily, Walmart takes service under rate
17 Time-of-Day Secondary Service ("TODS").
18

¹ <http://corporate.walmart.com/our-story/locations/united-states#/united-states/kentucky>

Purpose of Testimony

1
2 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

3 A. The purpose of my testimony is to address aspects of the KU rate case filing, provide
4 recommendations to assist the Commission in its thorough and careful consideration
5 of the impact of the Company's proposed rate increase on customers, address the
6 Company's Cost of Service Study ("COSS"), and provide recommendations regarding
7 the proposed rate design.

8
9 **Summary of Recommendations**

10 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE**
11 **COMMISSION.**

12 A. My recommendations to the Commission are as follows:

- 13 1) The Commission should balance the interests of the Company with those of its
14 customers. To that end, the Commission should thoroughly and carefully
15 consider all facets of the Company's filing; special consideration should be given
16 to the impact of the Company's requested revenue requirement and return on
17 equity ("ROE") on customers as these are the greatest drivers of the rate increases
18 to customers. By balancing the needs of the Company against the costs to its
19 customers, the Commission can ensure that any increase in the Company's rates
20 reflects the minimum amount necessary to compensate the Company for adequate
21 and reliable service while also providing KU an opportunity to earn a reasonable
22 return.

- 1 2) The Commission should consider the impact of the proposed capital structure on
2 the Company's equity risk in its determination of the appropriate ROE.
- 3 3) The Commission should deny KU's proposed inclusion of approximately \$118
4 million of Construction Work in Progress ("CWIP") in rate base. If, however, the
5 Commission determines that CWIP should continue to be included in rate base, it
6 should: (i) monitor the growth in CWIP from case to case (as the Company shows
7 a significant increase in CWIP since its 2014 filing); and (ii) recognize the
8 resulting shift in risk from the Company's shareowners to its customers and reflect
9 that shift in risk to customers in the form of a reduced ROE.
- 10 4) The Commission should closely examine the Company's proposed revenue
11 requirement increase and the associated ROE. When determining the appropriate
12 revenue requirement and authorized ROE, the Commission should pay particular
13 attention to:
- 14 a) The impact of the resulting revenue requirement increase on customers;
- 15 b) The Company's reduced risk stemming from:
- 16 (i) favorable regulatory treatment of CWIP in rate base;
- 17 (ii) the Company's request to calculate the revenue requirement
18 using a forecast test year, which uses the most up-to-date
19 and current rates, as opposed to an historic test year; and,
- 20 (iii) the Company's favorable capital structure.
- 21 c) Rate case ROEs approved by commissions nationwide.

- 1 5) For the purposes of this docket, Walmart does not oppose the Company's cost of
2 service study.
- 3 6) At the proposed revenue requirement increase, Walmart does not oppose the
4 Company's revenue allocation.
- 5 7) If the Commission ultimately approves a revenue requirement less than that
6 proposed by the Company, the reduction in the revenue requirement increase
7 should be used for the dual purposes of further reducing the currently existing
8 inter-class subsidies, and reducing the impact to all customers as outlined within
9 my testimony.
- 10 8) The Commission should reject the structural change to the TODS rate design and
11 order the Company to maintain its current rate structure. The Company should
12 modify the pricing to reflect the current 75 percent base demand ratchet at the
13 approved revenue requirement.
- 14 9) In order to address the Company's concerns regarding rate design in light of the
15 installation of distributed generation resources, the Commission should order the
16 Company to provide, in its next base rate case filing, a more thorough analysis of
17 the impact of distributed generation resources and should further require the
18 Company to develop alternative rate designs that address the value of distributed
19 generation, the costs of service, and impact on all customers.

1 impact of a rate increase on customers, paying particular attention to the Company's
2 requested revenue requirement and ROE. Such consideration ensures that any
3 increase in the Company's rates reflects the minimum amount necessary to
4 compensate the Company for adequate and reliable service, while also providing KU
5 an opportunity to earn a reasonable return.

Return on Equity

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

9 A. KU witness McKenzie recommends an ROE of 10.23 percent. *See* Testimony of
10 Adrien M. McKenzie, p. 5, line 12. This recommendation is based on a range of 9.5
11 percent to 10.7 percent resulting from his discounted cash flow, capital asset pricing
12 model, empirical capital asset pricing model, and risk premium analyses. *See id.*,
13 p. 5, line 24. The requested ROE at the Company's proposed capital structure results
14 in a proposed weighted cost of capital equal to 7.29 percent. *See* Schedule J-1.1 and
15 J-1.2.

16 **Q. ARE YOU CONCERNED THAT THE COMPANY'S PROPOSED ROE OF**
17 **10.23 PERCENT IS EXCESSIVE?**

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

1 **Q. IS THE COMPANY'S PROPOSED ROE HIGHER THAN THE CURRENTLY**
2 **AUTHORIZED ROE?**

3 A. The Company's most recent rate case resulted in an approved "black box" settlement
4 and, as such, no ROE was specified in the settlement or the Commission's order. *See*
5 *generally In the matter of: Application of Kentucky Utilities Company for an*
6 *Adjustment of its Electric Rates*, Case No. 2014-00371, Order (June 30, 2015) ("2014
7 Rate Case Order"). The most recent ROE awarded to the Company was 10.25
8 percent in its 2012 rate case. *See In the matter of: Application of Kentucky Utilities*
9 *Company for an Adjustment of its Electric Rates*, Case No 2012-00221, Order at 3, 6
10 (Dec. 20, 2012). Although the 2014 Rate Case did not result in a specified ROE for
11 base rates, the settlement approved by the Commission did specify that a 10.0 percent
12 ROE was reasonable for KU's monthly environmental cost recovery ("ECR") filings.
13 *See* 2014 Rate Case Order, p. 3. Thus, the ROE proposed in this proceeding
14 represents a 23 basis point increase to the stipulated ROE for the ECR approved by
15 the Commission in the Company's 2014 Rate Case Order.

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

18 A. The impact of the ROE change is an increase to revenue requirement of
19 approximately \$7.5 million as compared to that resulting from the 10.0 percent ROE
20 approved for use in the ECR. The requested increase due to the increased ROE
21 constitutes approximately 7.2 percent of the base revenue increase requested by KU.
22 *See* Exhibit GWT-2.

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

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

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

9 A. The Company proposes a capital structure consisting of an equity portion of 53.28
10 percent, a long-term debt portion of 44.25 percent, and short-term debt portion of
11 2.47 percent. *See* Schedule J-1.1 and J-1.2.

12 **Q. DOES WALMART TAKE A POSITION ON THE CAPITAL STRUCTURE**
13 **PROPOSED BY THE COMPANY?**

14 A. No; however, the Commission should consider the impact of the proposed capital
15 structure on the Company's equity risk in its determination of the appropriate ROE.

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

18 A. Yes, as KU witness McKenzie explains "[o]ther things equal, a higher debt ratio, or
19 lower common equity ratio, translates into increased financial risk for all investors."
20 Testimony of Adrien M. McKenzie, p. 23, lines 16-17. It follows that a lower debt
21 ratio, or higher common equity ratio, would translate into reduced financial risk,
22 leading to a reduced cost of equity.

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

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

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

7 A. Yes. Including CWIP in rate base results in charges to ratepayers for assets that are
8 not yet "*used and useful*" in providing electric service. Under the Company's
9 proposal, ratepayers will pay for assets prior to receiving any benefits from those
10 assets. This violates the matching principle (*i.e.*, customers should bear costs at the
11 time they are receiving the corresponding benefits).

12 The problem is compounded by changes in the number and mix of customers that
13 occur during the construction process, before the asset becomes used and useful. For
14 example, customers may pay for certain assets during the construction phase, but
15 leave the system before those assets become operational, and thus receive no benefit
16 for their portion of the cost of the assets for which they paid.

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

19 A. Yes. First, including CWIP in rate base shifts risk onto ratepayers that, traditionally,
20 is assumed by the utility's investors. Investors are compensated for bearing this risk
21 through the authorization of a return on the investment and the value of financing the
22 construction once the asset is placed in service. Including CWIP in rate base places

1 the risk on the utility's customers who receive no current benefit for the use of their
2 money. Second, if the Company encounters problems during the construction of the
3 plant resulting in stoppage of the construction, non-completion of the project, and/or a
4 substantial delay in the project's completion, investors are not incentivized to rectify
5 the delays and/or stoppages, and ratepayers have no recourse for recovering or
6 mitigating the cost of financing the asset's construction.

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

9 A. KU proposes to include approximately \$118.7 million of CWIP in its rate base. *See*
10 Schedule B-4.

11 **Q. AT THE COMPANY'S PROPOSED CWIP AMOUNT, HOW MUCH OF KU'S**
12 **RATE BASE WOULD BE ASSOCIATED WITH CWIP?**

13 A. As proposed, CWIP constitutes approximately 3.3 percent of the Company's rate
14 base. *See* Exhibit GWT-3.

15 **Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF INCLUDING**
16 **CWIP IN RATE BASE?**

17 A. The inclusion of CWIP in rate base results in a revenue requirement impact to
18 customers of approximately \$14.2 million, annually. *See id.*

19 **Q. HOW DO THESE VALUES COMPARE TO THE SAME VALUES**
20 **INCLUDED IN THE COMPANY'S 2014 RATE CASE FILING?**

21 A. When compared to the 2014 rate case filing, these values have grown significantly.

1 **Q. PLEASE ELABORATE.**

2 A. Since KU's 2014 rate case filing, CWIP included in rate base has increased from
3 \$91.9 million to the Company's proposed \$118.7 million, annually, which represents
4 an increase in the percentage of CWIP of total rate base from 2.5 percent to 3.3
5 percent. The revenue requirement related to CWIP has also increased from \$10.8
6 million to the Company's proposed \$14.2 million, annually. *See In the matter of:*
7 *Application of Kentucky Utilities Company for an Adjustment of its Electric Rates,*
8 Case No. 2014-00371, Walmart Direct Testimony of Steve W. Chriss, Exhibit SWC-
9 2 (Mar. 6, 2015). Each of these values represents an increase of approximately 30
10 percent over the Company's 2014 rate case filing.

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

13 A. The Commission should deny KU's proposed inclusion of approximately \$118
14 million of CWIP in rate base. If, however, the Commission determines that CWIP
15 should continue to be included in rate base, it should: (1) monitor the growth in
16 CWIP from case to case; and (2) recognize the resulting shift in risk from the
17 Company's shareowners to its customers and reflect that shift in risk to customers in
18 the form of a reduced authorized ROE.

1 *National Utility Industry ROE Trends*

2 **Q. HOW DOES THE COMPANY'S PROPOSED ROE COMPARE WITH ROEs**
3 **APPROVED BY OTHER UTILITY REGULATORY COMMISSIONS?**

4 A. The ROE proposed by the Company is higher than the average ROE approved by
5 other utility regulatory commissions nationwide in 2014, 2015, 2016, and so far in
6 2017. When the nationwide data is limited to only 2015 and 2016, the gap between
7 the average ROE and the Company's proposed ROE widens significantly. *See*
8 Exhibit GWT-4.

9 **Q. WHAT IS YOUR UNDERSTANDING OF THE ROE AWARDED IN RECENT**
10 **RATE CASES?**

11 A. According to data from SNL Financial,¹ a financial news and reporting company,
12 there have been 93 reported electric utility rate case ROEs authorized by state
13 regulatory commissions for investor-owned electric utilities in 2014, 2015, 2016, and
14 so far in 2017. *See id.* The average of the reported ROEs in those cases is 9.66
15 percent. The range of reported authorized ROEs for the same period is 8.64 percent
16 to 10.55 percent, and the median authorized ROE is 9.70 percent. *See id.*

¹ Regulatory Research Associates is part of SNL Financial.

1 **Q. SEVERAL OF THE REPORTED AUTHORIZED ROES ARE FOR**
2 **DISTRIBUTION-ONLY UTILITIES OR FOR ONLY A UTILITY'S**
3 **DISTRIBUTION SERVICE RATES. WHAT IS THE AVERAGE**
4 **AUTHORIZED ROE IN THE REPORTED GROUP FOR VERTICALLY**
5 **INTEGRATED UTILITIES LIKE KU?**

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

12 **Q. PLEASE EXPLAIN.**

13 A. The average authorized ROE for vertically integrated utilities in 2014 was 9.92
14 percent, in 2015 it was 9.75 percent, and in 2016 it was 9.77 percent. Additionally, in
15 2015 and 2016, 17 vertically integrated utilities have been authorized ROEs of 9.60
16 percent or less. *See id.* As such, the Company's proposed 10.23 percent ROE is
17 counter to broader electric industry trends.

1 Q. WHAT IS THE REVENUE REQUIREMENT IMPACT IF THE
2 COMMISSION WERE TO AWARD AN ROE OF 9.76 PERCENT, THE
3 AVERAGE ROE AWARDED FOR VERTICALLY INTEGRATED
4 UTILITIES IN 2015 AND 2016?

5 A. Authorizing KU an ROE of 9.76 percent instead of the requested 10.23 percent would
6 result in a reduction to the requested increase, inclusive of taxes, of about \$15.2
7 million. This represents about 14.7 percent of the Company's requested increase. *See*
8 Exhibit GWT-5.

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

11 A. No. Decisions of other state regulatory commissions are not binding on the
12 Commission. Each commission considers the specific circumstances in each case in
13 its determination of the proper ROE. Walmart is providing this information to
14 illustrate a national customer's perspective on industry trends in authorized ROE.

15 *Conclusion*

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

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

- 21 (1) The resulting revenue requirement increase impact on customers;

1 **Q. HAS THE COMPANY PROPOSED A CHANGE TO ITS COST OF SERVICE**
2 **METHODOLOGY?**

3 A. Yes. According to Company witness Conroy, KU is proposing to replace the
4 longstanding modified Base-Intermediate-Peak ("modified BIP") methodology with a
5 loss of load probability ("LOLP") methodology. *See* Testimony of Robert M.
6 Conroy, p. 6, line 21 – p. 7, line 2.

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

9 A. For the purposes of this docket, Walmart does not oppose the use of the LOLP
10 methodology or the Company's proposed COSS. However, to the extent that
11 alternative cost of service models or modifications to the Company's model are
12 proposed by other parties, Walmart reserves the right to address any such changes in
13 sur-rebuttal testimony.

Rate Design

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

18 A. As Company witness Seelye explained, "[c]ost of service is a standard measure of
19 reasonableness for utility rate design." Testimony of William Steven Seelye, p. 2,
20 lines 16-17. Simply stated, proper cost of service allocates to each rate class the costs
21 incurred by the utility in providing each class with electric service. If the utility's rate
22 design and revenue allocation produce rates that are closely aligned with the cost of

1 service, then this is an indication that the resulting rates are reasonable. Cost-based
2 revenue allocation and rate design are therefore the primary tools available to the
3 Commission for establishing economically efficient, or *proper*, price signals.

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

6 A. Proper price signals refer to the existence of a price system that satisfies the intended
7 functions of public utility pricing. Dr. Bonbright, a former professor emeritus of
8 finance at Columbia University and author of Principles of Public Utility Rates,
9 describes four primary functions of public utility pricing. See James C. Bonbright,
10 Principles of Public Utility Rates, First Edition, 1961, Chapter III.

- 11 • *The Producer-Motivation or Capital-Attraction Function.* Public
12 utilities are allowed to charge a price that induces and enables them to
13 provide electric service while earning a reasonable return for investors.
14 This function tends to become the primary basis for decisions on total
15 return and authorized revenue for the utility.
- 16 • *The Efficiency Incentive Function.* The introduction of pressure on the
17 producer to continue to reduce production costs in order to maximize
18 profits. In a competitive market, this function takes the form of prices
19 being brought into line with costs through the forces of market
20 competition and in turn incents producers to reduce production costs to
21 increase profits or become more price-competitive. In regulated utilities
22 setting revenue that recovers the prudent costs to provide service and a fair

1 rate of return on utility companies' investment is the regulatory substitute
2 for this price system function, though this effect is limited.

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

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

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

1 *Revenue Allocation*

2 **Q. WHAT IS REVENUE ALLOCATION?**

3 A. Revenue allocation, sometimes referred to as rate spread, is the assignment of the
4 revenue responsibility to each customer class. A revenue allocation that assigns
5 revenue to each class at the cost of service is free of inter-class subsidies.

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

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

1 **Q. WHAT IS THE ULTIMATE GOAL WHEN ALLOCATING REVENUE?**

2 A. To the extent possible, inter-class subsidies should be eliminated through a revenue
3 allocation that reflects the cost of service. If this is not possible in the immediate
4 case, the Commission should establish a clear path to the elimination or reduction of
5 undesired subsidies, continually moving each class closer to their respective cost of
6 service until undesired subsidies are eliminated and price signals, thus system
7 efficiency, are improved.

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

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

1 **Q. WHAT IS THE CURRENT AND PROPOSED RORR FOR EACH CLASS IN**
 2 **KU'S PROPOSED REVENUE ALLOCATION?**

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

5 **Table 1: Present and Proposed Relative Rates of Return**

Customer Class	Class Relative Rates of Return			
	Present		Proposed	
	Rate of Return	Relative Rate of Return	Rate of Return	Relative Rate of Return
Residential - Rate RS, RTOD, VFD	4.36%	78.4%	5.85%	80.2%
General Service	9.20%	165.5%	11.05%	151.6%
All Electric Schools	6.77%	121.8%	8.75%	120.0%
Power Service Secondary	9.26%	166.5%	11.12%	152.5%
Power Service Primary	10.70%	192.4%	12.55%	172.2%
Time of Day Secondary	6.06%	109.0%	7.91%	108.5%
Time of Day Primary	4.05%	72.8%	6.10%	83.7%
Retail Transmission Service	4.50%	80.9%	6.72%	92.2%
Fluctuating Load Service	1.24%	22.3%	3.14%	43.1%
Lighting Energy Service	18.57%	334.0%	18.56%	254.6%
Traffic Energy Service	11.34%	204.0%	13.11%	179.8%
Lighting and Restricted Lighting	8.44%	151.8%	9.66%	132.5%
Total Jurisdiction	5.56%	100.0%	7.29%	100.0%
Source Testimony of Robert M. Conroy				

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

9 A. My understanding is that the Company assigned larger relative portions of the overall
 10 revenue increase to the rate classes with low rates of return on rate base, and smaller
 11 relative portions of the overall increase to the rate classes with high rates of return.
 12 Testimony of William Steven Seelye, p. 6, lines 19-22.

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

3 A. Yes, all classes are moved toward the cost of service, though in several cases that
4 movement is slight.

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

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

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

13 A. If the Commission ultimately approves a revenue requirement less than that proposed
14 by the Company, the reduction in the revenue requirement increase should be used for
15 the dual purposes of: (1) further reducing the currently existing intra-class subsidies;
16 and (2) reducing the impact to all customers. To accomplish these purposes, one-half
17 (1/2) of the reduction in the revenue requirement increase should be applied to
18 proportionately reduce the class rate of return on those classes with a RROR greater
19 than 100 percent. The remaining one-half (1/2) of the reduction should be used to
20 proportionately reduce the increase to all classes.

1 *TODS Rate Design*

2 **Q. BRIEFLY DESCRIBE THE TODS RATE?**

3 A. The TODS Rate is a multi-part rate including a Basic Service Charge, an Energy
4 Charge, a Peak Demand Charge, an Intermediate Demand Charge, and a Base
5 Demand Charge. The Peak Demand Charge applies to billing demands that occur
6 during the weekday hours ("Peak Demand Period") from 1:00 PM to 7:00 PM during
7 the summer months of May through September ("summer peak months") and during
8 the weekday hours from 6:00 AM to 12:00 PM during the winter months of October
9 through April ("winter peak months"). The Intermediate Demand Charge applies to
10 billing demands that occur during the weekday hours ("Intermediate Demand
11 Period") from 10:00 AM to 10:00 PM during the summer peak months and from 6:00
12 AM to 10:00 PM during the winter peak months. The Base Demand Charge applies
13 to the billing demands that occur at any other time during the month.

14 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSED**
15 **CHANGES TO THE RATE?**

16 A. The Company proposes an increase to the demand ratchet for the Base Demand
17 Charge from 75 percent to 100 percent. In addition to the structural change, the
18 Company proposes rate changes for each component of the TODS rate as shown in
19 the following table:

Component	Present Rate	Proposed Rate	Change	Percent Change
Basic Service	\$200/Month	\$200/Month	\$0	0%
Energy	\$0.03527/kWh	\$0.03531/kWh	\$0.0004	1.1%
Peak Demand	\$6.13/kW	\$7.18/kW	\$1.05/kW	17.1%
Intermediate Demand	\$4.53/kW	\$6.11/kW	\$1.58/kW	34.9%
Base Demand	\$5.20/kW	\$3.24/kW	(-\$1.96/kW)	-37.7%
*Base Demand Revenue	\$22,988,580	\$16,883,065	(-\$6,105,515)	-26.5%

Source: Schedule M-2.3, p. 9.

1 While the Base Demand Charge rate has decreased by 38 percent, the change in the
 2 billing ratchet from 75 percent to 100 percent creates a change in the billing
 3 determinants for the Base Demand charge. When total revenue is considered, the
 4 change in the Base Demand Component is actually a decrease of 26.5 percent.

5 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S REASON FOR**
 6 **THE PROPOSED CHANGE TO THE RATCHET APPLICABLE TO THE**
 7 **BASE DEMAND CHARGES FOR RATE TODS?**

8 A. I understand the Company is proposing the demand ratchet change in conjunction
 9 with its proposal to eliminate its existing Supplemental or Standby Service Rider
 10 ("Rider SS").

11 **Q. WHAT IS THE PURPOSE OF RIDER SS?**

12 A. Rider SS is intended to ensure that customers whose primary source of power is their
 13 own generating resources, but who nonetheless desire for the Company to provide
 14 what is essentially firm backup service, pay the full fixed cost associated with the
 15 facilities and personnel necessary to provide that service. Testimony of Robert M.
 16 Conroy, p. 19, lines 5-8. The charges in the SS rider essentially represent a firm
 17 capacity reservation charge that compensates the Company for providing adequate

1 generation, transmission and distribution resources to serve a participating customer's
2 needs when their own generation source is unavailable.

3 **Q. WHY IS THE COMPANY PROPOSING TO ELIMINATE THE SS RIDER?**

4 A. The Company states that the proposal is intended to "address a potential opportunity
5 for customers using the Company for back-up service to free-ride on the Company's
6 system due to the current demand-charge structures of Rates TODS, TODP, RTS, and
7 FLS." *Id.*, p. 19, lines 12-14.

8 **Q. HAS THE COMPANY INDICATED HOW MANY CUSTOMERS**
9 **PARTICIPATE IN THE RIDER SS?**

10 A. According to the testimony of Company witness Conroy, only one customer takes
11 service under Rider SS. *See id.*, p. 19, lines 4-5.

12 **Q. HAS THE COMPANY INDICATED HOW MANY CUSTOMERS THAT**
13 **TAKE SERVICE UNDER RATES TODS, TODP, RTS, AND FLS, HAVE**
14 **THEIR OWN GENERATING RESOURCES AS THEIR PRIMARY SOURCE**
15 **OF POWER?**

16 A. The Company is unaware of any customers on these rate schedules whose primary
17 source of power is their own generating resources. *See Exhibit GWT-7.*

18 **Q. WHAT IS THE COMPANY'S REASON FOR PROPOSING A 100 PERCENT**
19 **RATCHET IN THE RATE DESIGN IN LIEU OF THE STANDBY RIDER?**

20 A. The Company claims that fundamental changes are taking place in the electric utility
21 industry whereby more customers are installing distributed generation to meet their
22 power needs and falling back on the utility to supply power when their facilities are

1 not operating. The Company further states that it is important that utilities implement
2 rates that allow the recovery of the appropriate amount of fixed costs associated with
3 serving customers who have installed distributed generation facilities but who want to
4 rely on the utility to provide generation, transmission, and distribution service when
5 the distributed generation facilities are not operating. *See* Testimony of William
6 Steven Seelye, pp. 45-47.

7 **Q. ACCORDING TO THE COMPANY, HOW MANY OF ITS CUSTOMERS**
8 **WITHIN THE TODS, TODP, RTS, AND FLS CLASSES HAVE INSTALLED**
9 **DISTRIBUTED GENERATION FACILITIES?**

10 A. Based on data available in the Company's response to Commission staff's request for
11 information, three customers have installed distributed generation. Of these three
12 customers, one is in the TODS class and two are in the TODP class. *See* Exhibit
13 GWT-8.

14 **Q. WHAT IS THE TYPICAL PURPOSE OF RATCHETED DEMAND**
15 **CHARGES IN RATE-MAKING?**

16 A. Typically, billing demand ratchets are used to reduce revenue risks or possible
17 subsidy issues associated with fixed cost recovery for large customers that have a
18 tendency or potential for large swings in monthly billing demands. Ratchets can also
19 be intended to recover specific costs of facilities dedicated to serve a particular
20 customer. Services such as generation and transmission are not typically dedicated to
21 a specific customer. Since these more fungible services can be used to serve other
22 customers' needs, demand ratchets become less appropriate for their recovery.

1 **Q. DOES THE USE OF A 100 PERCENT DEMAND RATCHET ON THE BASE**
2 **DEMAND CHARGE IN THESE RATES ACCOMPLISH THE SAME**
3 **FUNCTION AS DOES RIDER SS?**

4 A. No. Rider SS ensures the Company is compensated for providing and maintaining
5 sufficient generation, transmission, and distribution capacity to serve a customer's
6 needs when that customer's primary power source is not available. The proposed 100
7 percent demand ratchet solution focuses on mitigating a perceived revenue risk
8 associated with resulting month-to-month fluctuations in the customer's maximum
9 base demand charges due to the installation of distributed generation. The base
10 demand charges, according to the Company, are designed only to recover cost of
11 distribution and transmission services and do not address the cost of generation. *See*
12 Testimony of William Steven Seelye, p. 40, lines 1-5.

13 **Q. DO YOU HAVE OTHER CONCERNS WITH THE PROPOSED**
14 **MODIFICATION TO THE RATE STRUCTURE?**

15 A. Yes, I am concerned that the proposed solution ignores the benefits of distributed
16 generation and implements disincentives to customers' demand management
17 initiatives. While the magnitude of the value of distributed generation continues to be
18 debated in many jurisdictions, most, if not all, stakeholders do recognize and stipulate
19 that benefits accrue to the utility, its customers, and society. The proposed solution
20 fails to recognize these benefits. Additionally, the existence of a 100 percent demand
21 ratchet sends a price signal that reduces the economic value of demand management

1 measures, discouraging the deployment of demand management programs intended to
2 increase system efficiency.

3 **Q. HAS THE COMPANY PROVIDED AN ASSESSMENT OF THE CUSTOMER**
4 **IMPACT OF THE CHANGE TO THE DEMAND RATCHET?**

5 A. No; however, the Company, in response to Commission Staff, has indicated that this
6 change results in a maximum billing impact of 28 percent. *See* Exhibit GWT-9.

7 **Q. DOES THE COMPANY'S STATED MAXIMUM IMPACT CONCERN YOU?**

8 A. Yes. A maximum increase of 28 percent indicates that some customers in these
9 classes are likely to experience seriously adverse impacts due to this unnecessary
10 change.

11 **Q. IS IT IMPERATIVE THAT THE COMMISSION TAKE ACTION TO**
12 **ADDRESS THE COMPANY'S CONCERNS WITH DISTRIBUTED**
13 **GENERATION IN THIS CASE?**

14 A. Given the limited participation in Rider SS, the lack of customers for which Rider SS
15 was intended to apply, the differences of purpose in the Rider SS and demand
16 ratchets, the minimal number of distributed generation installations in these rate
17 classes, the lack of the recognition of the value of distributed generation, and the
18 limited information on customer impact, it is my opinion that the implementation of a
19 solution to the Company's concern is premature.

1 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION FOR THE**
2 **TODS RATE DESIGN?**

3 A. The Commission should reject the structural change to the TODS rate design and
4 order the Company to maintain its current rate structure. The Company should
5 modify the pricing to reflect the current 75 percent base demand ratchet at the
6 approved revenue requirement. In order to address the Company's concerns regarding
7 the rate design in light of the installation of distributed generation resources, the
8 Commission should order the Company to provide, in its next base rate case, a more
9 thorough analysis and develop alternative rate designs that address the value of
10 distributed generation, the costs of service and impact on all customers.

11 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

12 A. Yes.

VERIFICATION

STATE OF ARKANSAS)
) SS:
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

Gregory W. Tillman

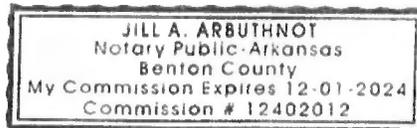
Subscribed and sworn to before me, a Notary Public in and before said County and State, this 3rd day of March 2017.

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)
KENTUCKY UTILITIES COMPANY FOR)
AN ADJUSTMENT OF ITS ELECTRIC) CASE NO. 2016-00370
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

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

EDUCATION

1991-1994	The University of Tulsa	Graduate Coursework, M.B.A.
1987	The University of Tulsa	B.S., Electrical Engineering

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 Service Commission of South Carolina Docket No. 2016-227-E: IN RE: Application of Duke Energy Progress, LLC for Authority to Adjust and Increase Its Electric Rates and Charges

Arkansas Public Service Commission Docket No. 16-027-R: In The Matter of Net Metering and The Implementation of Act 827 of 2015.

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.

Arizona Corporation Commission Docket No. E-01933A-15-0322: In the Matter of the Application of Tucson Electric Power Company For the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of Tucson Electric Power Company Devoted to its Operations Throughout the State of Arizona, and for Related Approvals. (Rate Design)

Arizona Corporation Commission Docket No. E-01933A-15-0322: In the Matter of the Application of Tucson Electric Power Company For the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of Tucson Electric Power Company Devoted to its Operations Throughout the State of Arizona, and for Related Approvals. (Revenue Requirement)

2015

Arizona Corporation Commission Docket No. E-04204A-15-0142: In the Matter of the Application of UNS Electric, Inc. For the Establishment of Just and Reasonable Rates and Charges Designed to Realize a Reasonable Rate of Return on the Fair Value of the Properties of UNS Electric, Inc. Devoted to Its Operations Throughout the State of Arizona, and for Related Approvals. (Rate Design)

2012

Arkansas Public Service Commission Docket No. 12-067-U: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order Approving a Temporary Surcharge to Recover the Costs of a Renewable Wind Generation Facility

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

Calculation of Revenue Requirement Impact of KU's Proposed Increase in ROE

(1)	Schedule J-1	KU Requested Rate of Return				7.29%
		1) Calculate Rate of Return Using the Current ROE (ROE = 10.0%)				
		Capital Component	Percent of Total	Percent of Total Capital	Cost	Weighted Cost
(2)	Schedule J-1.1/J-1.2	Short-term Debt	2.47%	2.47%	0.74%	0.02%
(3)	Schedule J-1.1/J-1.2	Long-term Debt	44.25%	44.25%	4.12%	1.82%
(4)	(ROE = 10.0%)	Common Equity	53.28%	53.23%	10.00%	5.32%
(5)	(2)+(3)+(4)	Rate of Return (ROE = 10.0%)				7.16%
		2) Calculate Revenue Requirement Impact at the Propose ROE				
(6)	Schedule B-1	Rate Base (\$000)				\$ 3,639,080
(7)	= (5)	Rate of Return (ROE = 10.0%)				7.16%
(8)	(6) x (7)	Adjusted Income Requirement (ROE = 10.0%)				\$ 260,710
(9)	Schedule C-1	KU Proposed Income Requirement (\$000)				\$ 265,294
(10)	(9) - (8)	Difference in Income Requirement (\$000)				\$ 4,584
(11)	Schedule H-1	Conversion Factor				1.6421
(12)	(10) x (11)	Difference in Revenue Requirement (\$000)				\$ 7,527
(13)	Schedule M-2.1	Requested Revenue Requirement Increase (\$000)				\$ 103,078
(14)	(12) / (13)	Percent of Increase from ROE Increase				7.30%

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF)
KENTUCKY UTILITIES COMPANY FOR)
AN ADJUSTMENT OF ITS ELECTRIC) CASE NO. 2016-00370
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

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

<u>Line No.</u>	<u>Units</u>	<u>Description</u>	<u>Source</u>	<u>Amount</u>
(1)	(\$000)	Proposed CWIP Included in Rate Base	Schedule B-4	\$ 118,704
(2)	(\$000)	Proposed Total Rate Base	Schedule B-1	\$ 3,639,080
(3)		CWIP Percentage of Rate Base	(1) / (2)	3.26%
(4)		Proposed Rate of Return	Schedule J-1	7.29%
(5)		Gross Revenue Adjustment Factor	Shedule H-1	1.642132
(6)	(\$000)	Revenue Requirement from CWIP	(1) x (4) x (5)	\$ 14,210

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF)
KENTUCKY UTILITIES COMPANY FOR)
AN ADJUSTMENT OF ITS ELECTRIC) CASE NO. 2016-00370
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

EXHIBIT GWT-4 OF GREGORY W. TILLMAN
ON BEHALF OF
WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to Present

State	Utility	Docket	Decision Date	Vertically Integrated (V)/Distribution (D)	Return on Equity (%)
New York	Consolidated Edison Co. of NY	13-E-0030	2/20/2014	D	9.20%
North Dakota	Northern States Power Co.	PU-12-813	2/26/2014	V	9.75%
New Hampshire	Liberty Utilities Granite St	DE-13-063	3/17/2014	D	9.55%
District of Columbia	Potomac Electric Power Co.	1103-2013-E	3/26/2014	D	9.40%
New Mexico	Southwestern Public Service Co	12-00350-UT	3/26/2014	V	9.96%
Delaware	Delmarva Power & Light Co.	13-115	4/2/2014	D	9.70%
Texas	Entergy Texas Inc.	41791	5/16/2014	V	9.80%
Massachusetts	Fitchburg Gas & Electric Light	13-90	5/30/2014	D	9.70%
Wisconsin	Wisconsin Power and Light Co	6680-UR-119	6/6/2014	V	10.40%
Maine	Emera Maine	2013-00443	6/30/2014	D	9.55%
Maryland	Potomac Electric Power Co.	9336	7/2/2014	D	9.62%
Louisiana	Entergy Louisiana LLC (New Orleans)	UD-13-01	7/10/2014	V	9.95%
New Jersey	Rockland Electric Company	ER-13111135	7/23/2014	D	9.75%
Maine	Central Maine Power Co.	2013-00168	7/29/2014	D	9.45%
Wyoming	Cheyenne Light Fuel Power Co.	20003-132-ER-13	7/31/2014	V	9.90%
Arkansas	Entergy Arkansas Inc.	13-028-U ¹	8/15/2014	V	9.50%
New Jersey	Atlantic City Electric Co.	ER-14030245	8/20/2014	D	9.75%
Vermont	Green Mountain Power Corp	8190, 8191	8/25/2014	V	9.60%
Utah	PacifiCorp	13-035-184	8/29/2014	V	9.80%
Florida	Florida Public Utilities Co.	140025-EI	9/15/2014	V	10.25%
Nevada	Nevada Power Co.	14-05004	10/9/2014	V	9.80%
Illinois	MidAmerican Energy Co.	14-0066	11/6/2014	V	9.56%
Wisconsin	Wisconsin Public Service Corp.	6690-UR-123	11/6/2014	V	10.20%
Wisconsin	Wisconsin Electric Power Co.	05-UR-107	11/14/2014	V	10.20%
Virginia	Appalachian Power Co.	PUE-2014-00026	11/26/2014	V	9.70%
Wisconsin	Madison Gas and Electric Co.	3270-UR-120	11/26/2014	V	10.20%
Oregon	Portland General Electric Co.	UE-283	12/4/2014	V	9.68%
Illinois	Commonwealth Edison Co.	14-0312	12/10/2014	D	9.25%
Illinois	Ameren Illinois	14-0317	12/10/2014	D	9.25%
Mississippi	Entergy Mississippi Inc.	2014-UN-0132	12/11/2014	V	10.07%
Wisconsin	Northern States Power Co.	4220-UR-120	12/12/2014	V	10.20%
Connecticut	Connecticut Light & Power Co.	14-05-06	12/17/2014	D	9.17%
Colorado	Black Hills Colorado Electric	14AL-0393E	12/18/2014	V	9.83%
Wyoming	PacifiCorp	20000-446-ER-14	1/23/2015	V	9.50%
Colorado	Public Service Co. of CO	14AL-0660E	2/24/2015	V	9.83%
New Jersey	Jersey Central Power & Light Co.	ER-12111052	3/18/2015	D	9.75%
Washington	PacifiCorp	UE-140762	3/25/2015	V	9.50%
Minnesota	Northern States Power Co.	E-002/GR-13-868	3/26/2015	V	9.72%
Michigan	Wisconsin Public Service Corp.	U-17669	4/23/2015	V	10.20%
Missouri	Union Electric Co.	ER-2014-0258	4/29/2015	V	9.53%
West Virginia	Appalachian Power Co.	14-1152-E-42-T	5/26/2015	V	9.75%
New York	Central Hudson Gas & Electric	14-E-0318	6/17/2015	D	9.00%
New York	Consolidated Edison Co. of NY	15-E-0050	6/17/2015	D	9.00%
Missouri	Kansas City Power & Light	ER-2014-0370	9/2/2015	V	9.50%
Kansas	Kansas City Power & Light	15-KCPE-116-RTS	9/10/2015	V	9.30%
New York	Orange & Rockland Utilts Inc.	14-E-0493	10/15/2015	D	9.00%
Michigan	Consumers Energy Co.	U-17735	11/19/2015	V	10.30%
Wisconsin	Wisconsin Public Service Corp.	6690-UR-124	11/19/2015	V	10.00%
Wisconsin	Northern States Power Co.	4220-UR-121	12/3/2015	V	10.00%
Illinois	Ameren Illinois	15-0305	12/9/2015	D	9.14%

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2014 to Present

State	Utility	Docket	Decision Date	Vertically Integrated (V)/Distribution (D)	Return on Equity (%)
Illinois	Commonwealth Edison Co.	15-0287	12/9/2015	D	9.14%
Michigan	DTE Electric Co.	U-17767	12/11/2015	V	10.30%
Oregon	Portland General Electric Co.	UE 294	12/15/2015	V	9.60%
Texas	Southwestern Public Service Co	43695	12/17/2015	V	9.70%
Idaho	Avista Corp.	AVU-E-15-05	12/18/2015	V	9.50%
Wyoming	PacifiCorp	20000-469-ER-15	12/30/2015	V	9.50%
Washington	Avista Corp.	UE-150204	1/6/2016	V	9.50%
Arkansas	Entergy Arkansas Inc.	15-015-U	2/13/2016	V	9.75%
Indiana	Indianapolis Power & Light Co.	44576	3/16/2016	V	9.85%
Massachusetts	Fitchburg Gas & Electric Light	15-80	4/29/2016	D	9.80%
Maryland	Baltimore Gas and Electric Co.	9406	6/3/2016	D	9.75%
New Mexico	El Paso Electric Co.	15-00127-UT	6/8/2016	V	9.48%
New York	NY State Electric & Gas Corp.	15-E-0283	6/15/2016	D	9.00%
New York	Rochester Gas & Electric Corp.	15-E-0285	6/15/2016	D	9.00%
Indiana	Northern Indiana Public Service Co.	44688	7/18/2016	V	9.98%
Tennessee	Kingsport Power Company	16-00001	8/9/2016	V	9.85%
Arizona	UNS Electric Inc.	E-04204A-15-0142	8/18/2016	V	9.50%
New Jersey	Atlantic City Electric Co.	ER-16030252	8/24/2016	D	9.75%
Washington	PacifiCorp	UE-152253	9/1/2016	V	9.50%
Michigan	Upper Peninsula Power Co.	U-17895	9/8/2016	V	10.00%
New Mexico	Public Service Co. of NM	15-00127-UT	9/28/2016	V	9.58%
Massachusetts	Massachusetts Electric Co.	15-155	9/30/2016	D	9.90%
Wisconsin	Madison Gas and Electric Co.	3270-UR-121	11/9/2016	V	9.80%
Oklahoma	Public Service Company of OK	PUD 201500208	11/10/2016	V	9.50%
Maryland	Potomac Electric Power Co.	9418	11/15/2016	D	9.55%
Wisconsin	Wisconsin Power and Light Co	6680-UR-120	11/18/2016	V	10.00%
Florida	Florida Power & Light Co.	160021-EI	11/29/2016	V	10.55%
California	Liberty Utilities CalPeco	A15-05-008	12/1/2016	V	10.00%
Illinois	Ameren Illinois	16-0262	12/6/2016	D	8.64%
Illinois	Commonwealth Edison Co.	16-0259	12/6/2016	D	8.64%
South Carolina	Duke Energy Progress Inc.	2016-227-E	12/7/2016	V	10.10%
New Jersey	Jersey Central Power & Light Co.	ER-16040383	12/12/2016	D	9.60%
Connecticut	United Illuminating Co.	16-06-04	12/14/2016	D	9.10%
Colorado	Black Hills Colorado Electric	16AL-0326E	12/19/2016	V	9.37%
Maine	Emera Maine	2015-00360	12/19/2016	D	9.00%
North Carolina	Virginia Electric & Power Co.	E-22 Sub 532	12/22/2016	V	9.90%
Nevada	Sierra Pacific Power Co.	16-06006	12/22/2016	V	9.60%
Idaho	Avista Corp.	AVU-E-16-03	12/28/2016	V	9.50%
New York	Consolidated Edison Co. of NY	16-E-0069	1/24/2017	D	9.00%
Michigan	DTE Electric Co.	U-18014	1/31/2017	V	10.10%
Maryland	Delmarva Power & Light Co.	9424	2/15/2017	D	9.60%
Arizona	Tucson Electric Power Co.	E-01933A-15-0322	2/24/2017	V	9.75%
Michigan	Consumers Energy Co.	U-17990	2/28/2017	V	10.10%

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.

Calculation of Revenue Requirement Impact of KU's Proposed ROE vs National Average for '15-'16

(1)	Schedule J-1	KU Requested Rate of Return				7.29%
		1) Calculate Rate of Return Using the Current ROE (ROE = 9.76%)				
		Capital Component	Percent of Total	Percent of Total Capital	Cost	Weighted Cost
(2)	Schedule J-1.1/J-1.2	Short-term Debt	2.47%	2.47%	0.74%	0.02%
(3)	Schedule J-1.1/J-1.2	Long-term Debt	44.25%	44.25%	4.12%	1.82%
(4)	(ROE = 9.76%)	Common Equity	53.28%	53.23%	9.76%	5.20%
(5)	(2)+(3)+(4)	Rate of Return (ROE = 9.76%)				7.04%
		2) Calculate Revenue Requirement Impact at the Propose ROE				
(6)	Schedule B-1	Rate Base (\$000)				\$ 3,639,080
(7)	= (5)	Rate of Return (ROE = 9.76%)				7.04%
(8)	(6) x (7)	Adjusted Income Requirement (ROE = 9.76%)				\$ 256,061
(9)	Schedule C-1	KU Proposed Income Requirement (\$000)				\$ 265,294
(10)	(9) - (8)	Difference in Income Requirement (\$000)				\$ 9,233
(11)	Schedule H-1	Conversion Factor				1.6421
(12)	(10) x (11)	Difference in Revenue Requirement (\$000)				\$ 15,161
(13)	Schedule M-2.1	Requested Revenue Requirement Increase (\$000)				\$ 103,078
(14)	(12) / (13)	Percent of Increase from ROE Increase				14.71%

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF)
KENTUCKY UTILITIES COMPANY FOR)
AN ADJUSTMENT OF ITS ELECTRIC) **CASE NO. 2016-00370**
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

EXHIBIT GWT-6 OF GREGORY W. TILLMAN
ON BEHALF OF
WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

Class Relative Rates of Return				
Customer Class	Present		Proposed	
	Rate of Return	Relative Rate of Return	Rate of Return	Relative Rate of Return
Residential - Rate RS, RTOD, VFD	4.36%	78.4%	5.85%	80.2%
General Service	9.20%	165.5%	11.05%	151.6%
All Electric Schools	6.77%	121.8%	8.75%	120.0%
Power Service Secondary	9.26%	166.5%	11.12%	152.5%
Power Service Primary	10.70%	192.4%	12.55%	172.2%
Time of Day Secondary	6.06%	109.0%	7.91%	108.5%
Time of Day Primary	4.05%	72.8%	6.10%	83.7%
Retail Transmission Service	4.50%	80.9%	6.72%	92.2%
Fluctuating Load Service	1.24%	22.3%	3.14%	43.1%
Lighting Energy Service	18.57%	334.0%	18.56%	254.6%
Traffic Energy Service	11.34%	204.0%	13.11%	179.8%
Lighting and Restricted Lighting	8.44%	151.8%	9.66%	132.5%
Total Jurisdiction	5.56%	100.0%	7.29%	100.0%
Source Testimony of Robert M. Conroy				

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:

ELECTRONIC APPLICATION OF)
KENTUCKY UTILITIES COMPANY FOR)
AN ADJUSTMENT OF ITS ELECTRIC) CASE NO. 2016-00370
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

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

KENTUCKY UTILITIES COMPANY

CASE NO. 2016-00370

**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 KU 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)
KENTUCKY UTILITIES COMPANY FOR)
AN ADJUSTMENT OF ITS ELECTRIC) CASE NO. 2016-00370
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

EXHIBIT GWT-8 OF GREGORY W. TILLMAN
ON BEHALF OF
WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

KENTUCKY UTILITIES COMPANY

CASE NO. 2016-00370

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

Question No. 79

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

Q-79. Refer to the Seelye Testimony, page 4, lines 5-9.

- a. By rate class, provide the number of customers that have installed distributed generation.
- b. Mr. Seelye states on page 15, line 10, of his testimony that distributed generation has not yet created a significant problem for KU. Explain how a movement towards 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-79.

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

Rate Class	Number of Customers
General Service Single Phase	16
General Service Three Phase	11
Power Service Secondary	4
Residential Service	118
Time of Day Primary	2
Time of Day Secondary	1
Total	152

- b. For many year, 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

Response to Question No. 79

Page 2 of 2

Malloy/Seelye

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 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 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)
KENTUCKY UTILITIES COMPANY FOR)
AN ADJUSTMENT OF ITS ELECTRIC) CASE NO. 2016-00370
RATES AND FOR CERTIFICATES OF)
PUBLIC CONVENIENCE AND)
NECESSITY)

EXHIBIT GWT-9 OF GREGORY W. TILLMAN
ON BEHALF OF
WAL-MART STORES EAST, LP AND SAM'S EAST, INC.

KENTUCKY UTILITIES COMPANY

CASE NO. 2016-00370

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

Question No. 87

Responding Witness: William S. Seelye

Q-87. Refer to the Seelye Testimony, page 49, lines 8-16.

- a. State whether KU 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-87.

- 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, RTS, and FLS shown in Schedule M-2.3, 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:

FLS:	0.3%
RTS:	9.4%
TODP:	28.0%
TODS:	22.5%

This calculation uses proposed rates, includes only base rate components, and excludes riders for all active KU 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:

Rebecca W. Goodman, Esq.
Lawrence W. Cook, Esq.
Kent Chandler, Esq.
Office of the Attorney General
1024 Capital Center Drive, Suite 200
Frankfort, KY 40601-8204
Rebecca.Goodman@ky.gov
Larry.Cook@ky.gov
Kent.Chandler@ky.gov

Robert M. Conroy
Vice President – State Regulation and Rates
Rick E. Lovekamp
Manager – Regulatory Affairs/Tariffs
LG&E and KU Services Company
220 West Main Street
Louisville, KY 40202
robert.conroy@lge-ku.com
rick.lovekamp@lge-ku.com

Allyson K. Sturgeon, Esq.
Sara Veeneman, Esq.
LG&E and KU Services Company
220 West Main Street
Louisville, KY 40202
Allyson.Sturgeon@lge-ku.com
sara.veeneman@lge-ku.com

Kendrick R. Riggs, Esq.
W. Duncan Crosby, III, Esq.
Stoll Keenon Ogden PLLC
2000 PNC Plaza
500 West Jefferson Street
Louisville, KY 40202-2828
kendrick.riggs@skofirm.com
duncan.crosby@skofirm.com

Lindsey W. Ingram, III, Esq.
Monica H. Braun, Esq.
Gerald E. Wuetcher, Esq.
Stoll Keenon Ogden PLLC
300 West Vine Street, Suite 2100
Lexington, KY 40507-1801
l.ingram@skofirm.com
monica.braun@skofirm.com
gerald.wuetcher@skofirm.com

Michael L. Kurtz, Esq.
Kurt J. Boehm, Esq.
Jody Kyler Cohn, Esq.
Boehm, Kurtz & Lowry
36 East Seventh Street, Suite 1510
Cincinnati, Ohio 45202
MKurtz@bkllawfirm.com
kboehm@bkllawfirm.com
jkylercohn@bkllawfirm.com

Robert C. Moore, Esq.
Stites & Harbison PLLC
421 West Main Street
P.O. Box 634
Frankfort, KY 40602-0634
rmoore@stites.com

Iris G. Skidmore, Esq.
Bates & Skidmore
415 W. Main St., Suite 2
Frankfort, KY 40601
BatesandSkidmore@gmail.com

James W. Gardner, Esq.
M. Todd Osterloh, Esq.
Sturgill, Turner, Barker & Moloney, PLLC
333 W. Vine Street, Suite 1500
Lexington, KY 40507
jgardner@sturgillturner.com
tosterloh@sturgillturner.com

David J. Barberie, Esq.
Andrea C. Brown, Esq.
Janet M. Graham, Esq.
Department of Law
Lexington-Fayette Urban County
Government
200 East Main Street
Lexington, KY 40507
dbarberi@lexingtonky.gov
abrown2@lexingtonky.gov
jgraham@lexingtonky.gov

Laurence J. Zielke, Esq.
Janice M. Theriot, Esq.
Zielke Law Firm, PLLC
1250 Meidinger Tower
462 South 4th Street
Louisville, KY 40202
lzielke@zielkefirm.com
jtheriot@zielkefirm.com

Gardner F. Gillespie, Esq.
Paul Werner, Esq.
Carrie A. Ross, Esq.
Sheppard Mullin Richter & Hampton LLP
2099 Pennsylvania Avenue NW, Suite 100
Washington, DC 20006-6801
ggillespie@sheppardmullin.com
pwerner@sheppardmullin.com
cross@sheppardmullin.com

Joe F. Childers, Esq.
Joe F. Childers & Associates
300 Lexington Building
201 West Short Street
Lexington, KY 40507
childerslaw81@gmail.com

Casey Roberts, Esq.
Sierra Club
1536 Wynkoop St., Suite 312
Denver, CO 80202
casey.roberts@sierraclub.org

Matthew E. Miller, Esq.
Sierra Club
50 F Street, NW, Eighth Floor
Washington, DC 20001
matthew.miller@sierraclub.org



Don C. A. Parker (Kentucky I.D. No. 94113)