

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, A)	
CERTIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY TO DEPLOY ADVANCED)	CASE NO. 2020-00350
METERING INFRASTRUCTURE,)	
APPROVAL OF CERTAIN REGULATORY)	
AND ACCOUNTING TREATMENTS, AND)	
ESTABLISHMENT OF A ONE-YEAR)	
SURCREDIT)	

DIRECT TESTIMONY AND EXHIBITS OF

LISA V. PERRY

ON BEHALF OF

WALMART INC.

Filed: March 5, 2021

Table of Contents

I. Introduction	1
II. Purpose of Testimony and Summary of Recommendations	3
III. Revenue Requirement and ROE	6
(A) Risk Reducing Measures Employed by the Company	8
(B) Customer Impact	8
(C) Recent ROEs Approved by the Commission	9
(D) National Utility Industry ROE Trends	11
(E) Conclusion	13
IV. Cost of Service Study and Revenue Allocation	14
(A) Cost of Service Study	14
(B) Revenue Allocation	16
V. Rate Design	19

Exhibits

Exhibit LVP-1	Witness Qualifications Statement
Exhibit LVP-2	Calculation of Revenue Requirement Impact of LG&E's Proposed Increase in ROE
Exhibit LVP-3	Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2017 to Present
Exhibit LVP-4	Calculation of Revenue Requirement Impact of LG&E's Proposed ROE v. ROE Awarded to Kentucky Power Company in 2021

1 **I. Introduction**

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

3 A. My name is Lisa V. Perry. My business address is 2608 SE J Street, Bentonville,
4 AR 72716-0550. I am employed by Walmart Inc. ("Walmart") as Senior Manager,
5 Energy Services.

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

7 A. I am testifying on behalf of Walmart.

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

9 A. I received a J.D. in 1999 and a LL.M. in Taxation in 2000 from the University of Florida
10 Levin College of Law. From 2001 to 2019, I was in private practice with an emphasis
11 from 2007 to 2019 in Energy Law. My practice included representing large commercial
12 clients before the utility regulatory commissions in Colorado, Texas, New Mexico,
13 Arkansas, and Louisiana in matters ranging from general rate cases to renewable energy
14 programs. I joined the energy department at Walmart in September 2019 as Senior
15 Manager, Energy Services. My Witness Qualifications Statement is attached as Exhibit
16 LVP-1.

17 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE THE**
18 **KENTUCKY PUBLIC SERVICE COMMISSION ("COMMISSION")?**

19 A. Yes, I submitted testimony in Case No. 2020-00174.

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

3 A. Yes, I have submitted testimony with State Regulatory Commissions for Arkansas,
4 Colorado, Florida, Louisiana, Michigan, Oklahoma, South Carolina, Texas, and
5 Virginia. I have also provided legal representation for customer stakeholders before the
6 State Regulatory Commissions for Colorado, Texas, Arkansas, Louisiana, and New
7 Mexico in the cases listed under "Commission Dockets" in Exhibit LVP-1.

8 **Q. ARE YOU SPONSORING EXHIBITS IN YOUR TESTIMONY?**

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

10 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS IN**
11 **KENTUCKY.**

12 A. As shown on Walmart's website, Walmart operates 102 retail units and two distribution
13 centers. Walmart employs over 27,000 associates in the Commonwealth of Kentucky.
14 In fiscal year ending 2020, Walmart purchased \$506.1 million worth of goods and
15 services from Kentucky-based suppliers, supporting over 40,000 supplier jobs.¹

16 **Q. PLEASE BRIEFLY DESCRIBE WALMART'S OPERATIONS WITHIN THE**
17 **SERVICE TERRITORY FOR LOUISVILLE GAS AND ELECTRIC**
18 **COMPANY ("LG&E" OR "COMPANY").**

19 A. Walmart has approximately 16 retail stores and related facilities, including
20 Supercenters, Sam's Clubs, and Neighborhood Markets within LG&E's service
21 territory. The majority of these facilities are served on the TODS (Time of Day –

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

1 Secondary) and TODP (Time of Day – Primary) Schedules with some smaller facilities
2 taking service from the GS (General Service) Schedule.

3
4 **II. Purpose of Testimony and Summary of Recommendations**

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 A. The purpose of my testimony is to address aspects of LG&E's Application
7 ("Application") filed with the Commission on November 25, 2020. Specifically, I
8 address the Company's requested Return on Equity ("ROE") and provide
9 recommendations to assist the Commission in its consideration of the proposed ROE.
10 In addition, I have reviewed the Company's proposed cost allocation, revenue
11 allocation, and rate design and, based on my review, make no recommendations on
12 these issues.

13 **Q. ARE THERE OTHER WITNESSES FILING TESTIMONY ON BEHALF OF**
14 **WALMART IN THIS CASE?**

15 A. Yes, Andrew Teague, Senior Manager, Energy Services, is filing Direct Testimony
16 addressing Walmart's concerns with the means by which interval energy usage data
17 would be made available to customers through the Company's MyMeter portal as a
18 result of the Company's proposal to deploy Advanced Metering Infrastructure in its
19 territory.

1 **Q. IN SETTING THE REVENUE REQUIREMENT, ROE, ALLOCATION, AND**
2 **RATE DESIGN CHANGES FOR THE COMPANY, SHOULD THE**
3 **COMMISSION CONSIDER THE IMPACT OF THE PROPOSED RATE**
4 **INCREASE ON BUSINESS CUSTOMERS?**

5 A. Yes. Electricity is a significant operating cost for retailers such as Walmart. When
6 electric rates increase, the increased cost to retailers can put pressure on consumer
7 prices and on the other expenses required by a business to operate. The Commission
8 should thoroughly and carefully consider the impact on customers in examining the
9 requested revenue requirement and ROE, in addition to all other facets of this case, to
10 ensure that any increase in the Company's rates is the minimum amount necessary to
11 provide safe, adequate, and reliable service, while also providing LG&E with the
12 opportunity to recover its reasonable and prudent costs and earn a reasonable return on
13 its investment.

14 **Q. PLEASE SUMMARIZE WALMART'S RECOMMENDATIONS TO THE**
15 **COMMISSION.**

16 A. Walmart's recommendations to the Commission are as follows:

17 1) Unless the Commission determines that a higher ROE is warranted due to
18 changes in circumstances since the Company's last rate case, the Commission
19 should approve an ROE no higher than 9.725 percent, especially in light of:

- 20 a. The impact of the resulting revenue requirement increase on customers;
21 b. The Company's use of risk-reducing rate making structures like a
22 forecast test year; and,

1 c. Recent ROEs approved in Kentucky and other jurisdictions nationally
2 that do not support the Company's proposed ROE.

3 2) Walmart does not take a position on the Company's proposed cost of service
4 model at this time. However, to the extent that alternative cost of service
5 methodologies or modifications to the Company's proposal are made by other
6 parties, Walmart reserves the right to address any such changes in accordance
7 with the Commission's procedures in this case.

8 3) For purposes of this case, at the Company's proposed revenue requirement,
9 Walmart does not oppose the Company's proposed revenue allocation. If the
10 Commission approves a revenue requirement lower than that proposed by the
11 Company, the Commission should use the reduction from the proposed revenue
12 requirement to move the customer classes closer to their respective costs of
13 service while ensuring that no class receives an increase larger than that
14 proposed by the Company.

15 4) For purposes of this case, Walmart does not oppose the Company's proposed
16 TODS and TODP rate design. However, to the extent that modifications to the
17 Company's proposal are proposed by other parties, Walmart reserves the right
18 to address any such changes in accordance with the Commission's procedures
19 in this case.

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

4 A. No. The fact that an issue is not addressed herein or in related filings should not be
5 construed as an endorsement of, agreement with, or consent to any filed position.

6
7 **III. Revenue Requirement and ROE**

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

10 A. My understanding is that the Company is seeking an annual revenue increase of
11 approximately \$131.1 million, or 11.6 percent. *See* Application, p. 3, para. 6. This
12 proposed increase is based on a 12-month, fully forecasted test period ending June 30,
13 2022, as supported by a 12-month base period ending February 28, 2021. *See id.*, p. 7,
14 para. 13. It is also my understanding that this base period includes six months of
15 historical data and six months of estimated data. *See id.*

16 **Q. WHAT IS THE COMPANY'S PROPOSED ROE IN THIS CASE?**

17 A. LG&E proposes an ROE of 10.0 percent. *See* Direct Testimony of Adrien M.
18 McKenzie, CFA ("McKenzie Direct"), p. 6, line 21. Company witness McKenzie
19 supports this ROE based on a range of 9.3 percent to 10.5 percent with an upward
20 adjustment of 10 basis points to this range based on what he describes as a "flotation
21 cost adjustment." *Id.*, p. 7, lines 10-15. The proposed ROE of 10.0 percent is the
22 midpoint of this adjusted range (9.4 percent to 10.6 percent). *See id.*, p. 7, lines 16-17.

1 In addition, the Company proposes a capital structure of 46.81 percent debt and 53.19
2 percent equity for rate making purposes. *See* Revised Schedule J-1.1/J-1.2. Applying
3 the Company's proposed ROE to its proposed capital structure, the Company is asking
4 the Commission to approve a Rate of Return equal to 7.17 percent based on 13-month
5 weighted average cost of capital ("WACC"). *See id.*

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

8 A. Yes. On April 30, 2019, the Commission awarded the Company an ROE in its last base
9 rate case of 9.725 percent.² The 10.00 percent ROE proposed in this proceeding
10 represents an increase of approximately 27 basis points to the Company's currently
11 authorized ROE.

12 **Q. IS WALMART CONCERNED THAT THE COMPANY'S ROE IS**
13 **EXCESSIVE?**

14 A. Yes. Walmart believes that the Company's proposed ROE of 10.0 percent is excessive,
15 especially in light of:

- 16 1) the use of risk-reducing rate-making structures such as the forecast test year;
- 17 2) the customer impact of the resulting revenue requirement increase as discussed
18 below; and,
- 19 3) recent ROEs approved in Kentucky and other jurisdictions nationwide that do
20 not support the Company's requested ROE, as discussed below.

² *See In the Matter of: Electronic Application of Louisville Gas and Electric Company for an Adjustment of its Electric and Gas Rates*, Case No. 2018-00295, Order (issued Apr. 30, 2019) ("2018 Rate Case Order"), pp. 8, 33.

1 *(A) Risk Reducing Measures Employed by the Company*

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

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

8
9 *(B) Customer Impact*

10 **Q. WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S CURRENTLY**
11 **APPROVED ROE?**

12 A. As stated above, my understanding is that the Company's currently approved ROE is
13 9.725 percent.³

14 **Q. HAVE YOU CALCULATED AN ESTIMATE OF THE IMPACT OF THE**
15 **RETURN ON RATE BASE FROM THE COMPANY'S PROPOSED INCREASE**
16 **IN ROE FROM 9.725 PERCENT TO 10.0 PERCENT?**

17 A. Yes. Using the Company's proposed rate base, cost of debt, and capital structure, the
18 impact of the proposed increase in authorized ROE is approximately \$8.2 million, or
19 6.22 percent of the proposed revenue requirement increase. *See Exhibit LVP-2.*

³ See 2018 Rate Case Order, pp. 8, 33.

1 ***(C) Recent ROEs Approved by the Commission***

2 **Q. IS THE COMPANY'S PROPOSED ROE SIGNIFICANTLY HIGHER THAN**
3 **THE ROEs APPROVED BY THIS COMMISSION FROM 2017 TO PRESENT?**

4 A. Yes. Since 2017, this Commission has issued orders with stated ROEs in eight cases
5 for investor owned utilities with the average of the ROEs approved equal to 9.61
6 percent. *See* Exhibit LVP-3.

7 **Q. IN WHICH OTHER CASES DID THE COMMISSION ISSUE ORDERS WITH**
8 **STATED ROEs?**

9 A. The Commission issued Orders with stated ROEs in the following cases:

- 10 • Case No. 2020-00174, the Kentucky Power Company ("KPCo") rate case that was
11 completed in 2021, in which the Commission approved an ROE of 9.30 percent.⁴
- 12 • Case No. 2019-00271 the Duke Energy Kentucky Inc. ("Duke") rate case that was
13 completed in 2020, in which the Commission approved an ROE of 9.25 percent.⁵
- 14 • Case No. 2018-00294, the Kentucky Utilities Company ("KU") rate case that was
15 completed in 2019, in which the Commission approved an ROE of 9.725 percent.⁶

⁴ *In the Matter of: Electronic Application of Kentucky Power Company for (1) a General Adjustment of its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief*, Case No. 2020-00174, Order (issued Jan. 13, 2021) ("KPCo 2020 Rate Case Order"), p. 50.

⁵ *In the Matter of: Electronic Application of Duke Energy Kentucky, Inc. for 1) an Adjustment of the Electric Rates; 2) Approval of New Tariffs; 3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 4) All Other Required Approvals and Relief*, Case No. 2019-00271, Order (issued Apr. 27, 2020), p. 46.

⁶ *See In the Matter of: Electronic Application of Kentucky Utilities Company for an Adjustment of its Electric Rates*, Case No. 2018-00294, Order (issued Apr. 30, 2019), p. 8.

- 1 • Case No. 2018-00295, LG&E rate case that was completed in 2019, in which the
2 Commission approved an ROE of 9.725 percent.⁷
- 3 • Case No. 2017-00321, the Duke rate case that was completed in 2018, in which the
4 Commission approved an ROE of 9.725 percent.⁸
- 5 • Case No. 2017-00179, the KPCo rate case that was completed in 2018, in which
6 the Commission approved an ROE of 9.70 percent.⁹
- 7 • Case No. 2016-00370, the KU rate case that was completed in 2017, in which the
8 Commission approved an ROE of 9.70 percent.¹⁰
- 9 • Case No. 2016-00371, the LG&E rate case that was completed in 2017, in which
10 the Commission approved an ROE of 9.70 percent.¹¹

11 As such, the Company's proposed 10.00 percent ROE is counter to recent Commission
12 actions regarding ROEs for other investor-owned electric utilities in Kentucky.

13

⁷ 2018 Rate Case Order, p. 8

⁸ *In the Matter of: Electronic Application of Duke Energy Kentucky, Inc. for: 1) an Adjustment of the Electric Rates; 2) Approval of an Environmental Compliance Plan and Surcharge Mechanism; 3) Approval of New Tariffs; 4) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 5) All Other Required Approvals and Relief*, Case No. 2017-00321, Order (issued Apr. 13, 2018), p. 39.

⁹ *In the Matter of: Electronic Application of Kentucky Power Company for (1) a General Adjustment of its Rates for Electric Service; (2) an Order Approving its 2017 Environmental Compliance Plan; (3) an Order Approving its Tariffs and Riders; (4) an Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities; and (5) an Order Granting All Other Required Approvals and Relief*, Case No. 2017-00179, Order (issued Jan. 18, 2018), p. 27.

¹⁰ *In the Matter of: Electronic Application of Kentucky Utilities Company for an Adjustment of its Electric Rates and for Certificates of Public Convenience and Necessity*, Case No. 2016-00370, Order (issued June 22, 2017), p. 18.

¹¹ *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, Order (issued June 22, 2017), p. 20.

1 ***(D) National Utility Industry ROE Trends***

2 **Q. IS THE COMPANY'S PROPOSED ROE SIGNIFICANTLY HIGHER THAN**
3 **THE ROEs APPROVED BY OTHER UTILITY REGULATORY**
4 **COMMISSIONS SINCE 2017?**

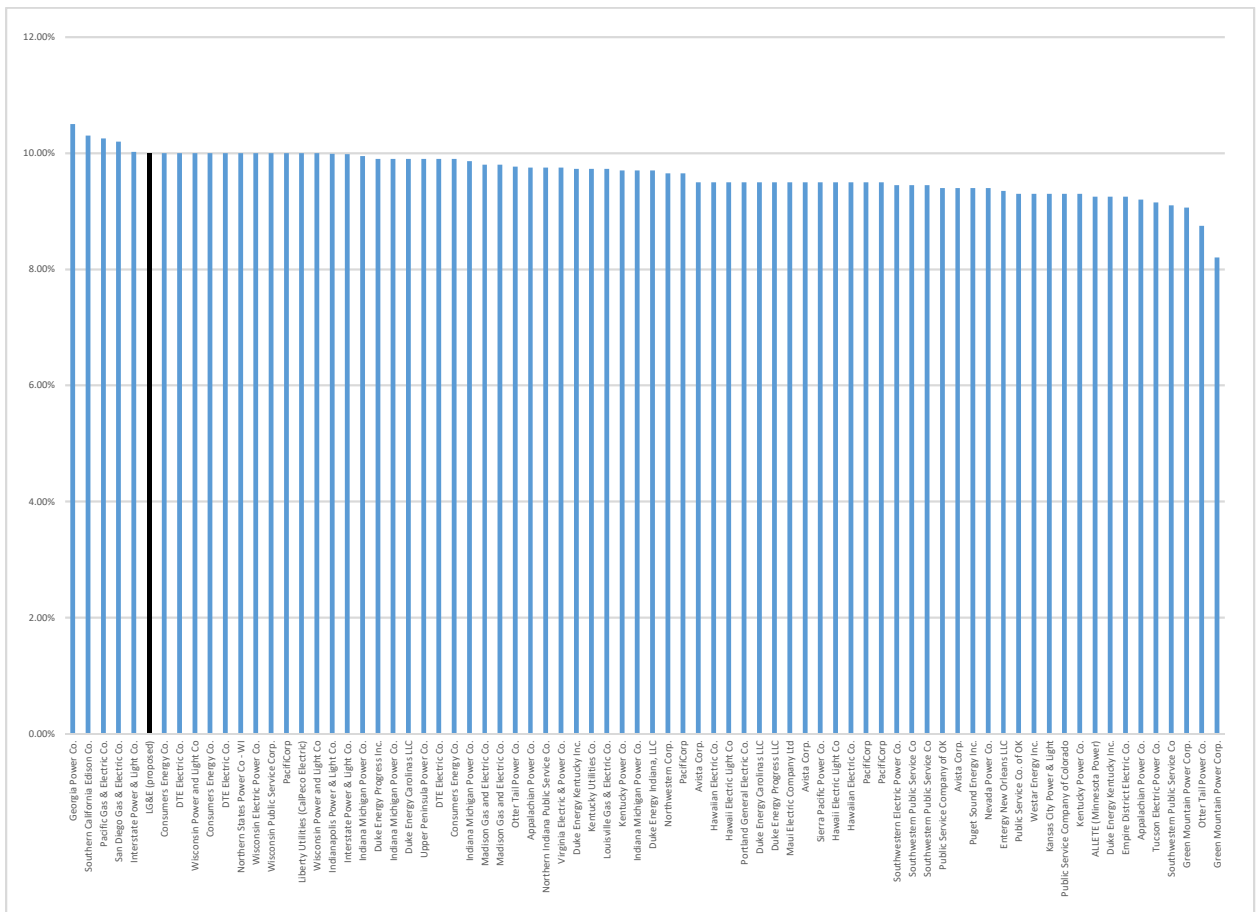
5 A. Yes. According to data from S&P Global Market Intelligence ("S&P Global"), a
6 financial news and reporting company, the average of the 156 reported electric utility
7 rate case ROEs authorized by commissions to investor-owned utilities since 2017 is
8 9.56 percent. *See* Exhibit LVP-3. The range of reported authorized ROEs over this
9 period is 8.20 percent to 11.95 percent, and the median authorized ROE is 9.56 percent.
10 *Id.* The average and median value of 9.56 percent is significantly below the Company's
11 proposed ROE of 10.00 percent. As such, the Company's proposed 10.00 percent ROE
12 is counter to broader electric industry trends.

13 **Q. SEVERAL OF THE REPORTED AUTHORIZED ROEs ARE FOR**
14 **DISTRIBUTION-ONLY UTILITIES OR FOR ONLY A UTILITY'S**
15 **DISTRIBUTION SERVICE RATES. WHAT IS THE AVERAGE**
16 **AUTHORIZED ROE IN THE REPORTED GROUP FOR VERTICALLY**
17 **INTEGRATED UTILITIES LIKE LG&E?**

18 A. In the group reported by S&P Global, the average authorized ROE for vertically
19 integrated utilities from 2017 through present is 9.69 percent, and the trend in these
20 averages has been relatively stable. *Id.* The average ROE authorized for vertically
21 integrated utilities in 2017 was 9.80 percent; in 2018, it was 9.68 percent; in 2019, it
22 was 9.73 percent; in 2020, it was 9.55 percent; and so far in 2021, it is 9.30 percent. *Id.*
23 There has only been one ROE authorized for a vertically integrated utility in 2021, and

1 it was the ROE awarded by this Commission to KPCo in Case No. 2020-00174. By
 2 comparison to all nationwide metrics, the Company's proposed 10.00 percent ROE is
 3 counter to broader electric industry trends and, in fact, as shown in Figure 1, would be
 4 equal to the sixth highest approved ROE for any vertically integrated utility at any time
 5 since 2018.

6



7
 8
 9
 10

Figure 1. LG&E's Proposed ROE Versus Authorized ROEs for Vertically Integrated Utilities, 2018 to present. Source: Exhibit LVP-3.

1 **Q. WHAT IS THE REVENUE REQUIREMENT IMPACT WERE THE**
2 **COMMISSION TO APPROVE AN ROE FOR LG&E EQUIVALENT TO 9.30**
3 **PERCENT, THE SAME ROE AWARDED TO KPCO IN 2021?**

4 A. If the Commission were to approve an ROE for LG&E of 9.30 percent, versus the
5 Company's proposal of 10.00 percent, it would result in a reduction to the requested
6 revenue requirement increase of about \$18.7 million. *See* Exhibit LVP-4. This
7 represents about a 14.26 percent reduction of the Company's requested revenue
8 requirement increase. *Id.*

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

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

16
17 ***(E) Conclusion***

18 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION IN**
19 **REGARD TO THE COMPANY'S PROPOSED ROE?**

20 A. Unless the Commission determines that a higher ROE is warranted due to changes in
21 circumstances since the Company's last rate case, the Commission should approve an
22 ROE no higher than 9.725 percent, especially when accounting for: (i) the impact of
23 the resulting revenue increase on customers; (ii) the Company's use of risk-reducing

1 rate making structures like a forecast test year; and (iii) the fact that recent ROEs
2 approved in Kentucky and other jurisdictions are much lower than the ROE requested
3 by the Company.

4
5 **IV. Cost of Service Study and Revenue Allocation**

6 *(A) Cost of Service Study*

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

9 A. Walmart advocates that rates be set based on the utility's cost of service for each rate
10 class. This produces equitable rates that reflect cost causation, sends proper price
11 signals, and minimizes price distortions.

12 **Q. HOW DOES THE COMPANY PROPOSE TO ALLOCATE FIXED**
13 **PRODUCTION COSTS?**

14 A. It is my understanding that the Company allocated fixed production costs to the
15 customer classes in its COSS based on an hourly loss of load probability ("LOLP")
16 methodology, which is an hourly determination of the probability that a utility
17 generating capacity will be insufficient to meet the demand for electricity. *See* Direct
18 Testimony of Robert M. Conroy ("Conroy Direct"), p. 17, lines 6-11. Production plant

1 costs are allocated to various classes based on each class' contribution to the LOLP
2 over a specified period. *See* Conroy Direct, p. 17, lines 13-15.

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

5 A. Yes; however, in the Company's last rate case, the Commission ordered the Company
6 to conduct alternative cost of service studies using different cost allocation methods in
7 its next rate case. *See* 2018 Rate Case Order, p. 21. In this case and pursuant to the 2018
8 Rate Case Order, the Company also conducted a COSS using a six-coincident peak ("6-
9 CP") methodology and a separate study using a 12-CP methodology to allocate
10 production costs. *See* Conroy Direct, p. 17, lines 17-21. Although the Company
11 conducted these alternative studies, it is my understanding that the Company relied
12 mainly on the LOLP methodology but made adjustments based on the results from the
13 6-CP methodology and the Company's application of gradualism. *See* Conroy Direct,
14 p. 18, lines 8-11.

15 **Q. DOES WALMART TAKE A POSITION ON THE COMPANY'S PROPOSED**
16 **COST OF SERVICE METHODOLOGY AT THIS TIME?**

17 A. For purposes of this case, Walmart does not oppose the Company's proposed COSS.
18 However, to the extent that alternative cost of service methodologies or modifications
19 to the Company's methodology are proposed by other parties, Walmart reserves the
20 right to address any such changes in accordance with the Commission's procedures in
21 this case.

22

1 **(B) 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 its cost of service is free of inter-class subsidies. In contrast,
6 where revenue is allocated to a class at a level above its cost of service, that rate class
7 is subsidizing any rate class that is allocated revenue below its cost of service.

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

11 A. Yes. At times, the regulator may find it necessary to approve a level of revenue
12 requirement to a particular class which differs from the cost responsibility amount
13 determined in the COSS. This is often driven by the need to ensure that customers are
14 not seriously adversely impacted by major changes to the level of rates. Other reasons
15 can include perceived differences in COSS results and reality, relative risks assigned
16 to classes, social goals associated with the role of the prices in a particular jurisdiction,
17 and response to the state of the economy within or external to the regulatory
18 jurisdiction. The Commission may exercise its discretion based on one or more of these
19 concerns to adjust revenue allocation to support policy or advance the public interest.
20 However, these adjustments often result in rates that are not cost-based and, as a result,
21 may not be 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 case,
4 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 are improved. Where
7 proper price signals in the form of cost-based rates are in place, it generates overall
8 system efficiencies since customers understand the actual costs of the energy they use.

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

11 A. It is my understanding that the Company, in general, is proposing a higher rate increase
12 to rate classes that have a lower than average rate of return and a lower rate increase to
13 rate classes that have a higher than average rate of return. *See* Conroy Direct, p. 19,
14 line 20 to p. 20, line 1.

15 **Q. WHAT METHODOLOGY HAS THE COMPANY PROPOSED TO**
16 **ALLOCATE ITS PROPOSED REVENUE REQUIREMENT INCREASE?**

17 A. The Company is proposing to increase revenues for most rate classes by approximately
18 11.80%, except for three lighting classes, which will receive no net increase or a rate
19 reduction. *See* Direct Testimony of William Steven Seelye ("Seelye Direct"), p. 7, lines
20 14-16; *see also* Schedule M-2.1.

1 **Q. IS IT YOUR UNDERSTANDING THAT THE COMPANY'S PROPOSED**
2 **REVENUE ALLOCATION MOVES TODS AND TODP TOWARDS A COST-**
3 **BASED CLASS REVENUE REQUIREMENT?**

4 A. Yes. Based on my analysis of Exhibit WSS-32, the Company's proposed revenue
5 allocation brings TODS from a relative rate of return of 1.23¹² to a relative rate of return
6 of 1.19.¹³ See Seelye Direct, Exhibit WSS-32, pp. 27-29. Additionally, under the
7 Composed proposed revenue allocation, TODP will move from a relative rate of return
8 of 1.49¹⁴ to a relative rate of return of 1.42.¹⁵ See *id.*

9 **Q. DOES WALMART TAKE A POSITION ON THE COMPANY'S PROPOSED**
10 **REVENUE ALLOCATION AT THIS TIME?**

11 A. For purposes of this case, at the Company's proposed revenue requirement, Walmart
12 does not oppose the Company's proposed revenue allocation. If the Commission
13 approves a revenue requirement lower than that proposed by the Company, the
14 Commission should use the reduction to move the customer classes closer to their
15 respective costs of service while ensuring that no class receives an increase larger than
16 that proposed by the Company.

¹² Class rate of return of 5.33 percent divided by the total system return of 4.34 percent.

¹³ Class rate of return of 8.55 percent divided by the total proposed system return of 7.18 percent.

¹⁴ Class rate of return of 6.45 percent divided by the total system return of 4.34 percent.

¹⁵ Class rate of return of 10.18 percent divided by the total proposed system return of 7.18 percent.

1 **V. Rate Design**

2 **Q. BRIEFLY DESCRIBE THE TODS AND TODP RATE.**

3 A. The TODS and TODP Rates are each a multi-part rate for large customers that includes
4 a Basic Service Charge, an Energy Charge (per kWh), and Peak, Intermediate, and Base
5 Demand Charges (per kVA).

6 **Q. DOES THE COMPANY PROPOSE ANY CHANGES TO THE TODS OR TODP**
7 **RATE PRICING STRUCTURE.**

8 A. No, it does not. *See Seelye Direct, p. 32, lines 4-6.*

9 **Q. DOES WALMART OPPOSE THE COMPANY'S PROPOSED TODS AND**
10 **TODP RATE DESIGN?**

11 A. For purposes of this case, Walmart does not oppose the Company's proposed TODS
12 and TODP rate design. However, to the extent that modifications to the Company's
13 proposal are proposed by other parties, Walmart reserves the right to address any such
14 changes in accordance with the Commission's procedures in this case.

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

16 A. Yes.

VERIFICATION

In the Matter of:

ELECTRONIC APPLICATION OF)
LOUISVILLE GAS AND ELECTRIC)
COMPANY FOR AN ADJUSTMENT OF ITS)
ELECTRIC AND GAS RATES, A)
CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY TO DEPLOY ADVANCED)
METERING INFRASTRUCTURE,)
APPROVAL OF CERTAIN REGULATORY)
AND ACCOUNTING TREATMENTS, AND)
ESTABLISHMENT OF A ONE-YEAR)
SURCREDIT)

CASE NO. 2020-00350

STATE OF ARKANSAS)
)
COUNTY OF BENTON)

The undersigned, Lisa V. Perry, being duly sworn, deposes and says that she is Senior Manager, Energy Services for Walmart Inc., and that she 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 her information, knowledge, and belief.

L.V. Perry

Lisa V. Perry

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 04 day of March 2021.

Enzo Martinez

Notary Public



My Commission Expires:
10-21-2030

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, A)	
CERTIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY TO DEPLOY ADVANCED)	CASE NO. 2020-00350
METERING INFRASTRUCTURE,)	
APPROVAL OF CERTAIN REGULATORY)	
AND ACCOUNTING TREATMENTS, AND)	
ESTABLISHMENT OF A ONE-YEAR)	
SURCREDIT)	

EXHIBITS OF
LISA V. PERRY
ON BEHALF OF
WALMART 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, A)	
CERTIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY TO DEPLOY ADVANCED)	CASE NO. 2020-00350
METERING INFRASTRUCTURE,)	
APPROVAL OF CERTAIN REGULATORY)	
AND ACCOUNTING TREATMENTS, AND)	
ESTABLISHMENT OF A ONE-YEAR)	
SURCREDIT)	

EXHIBIT LVP-1 OF

LISA V. PERRY

ON BEHALF OF

WALMART INC.

Lisa V. Perry

Senior Manager, Energy Services

Walmart Inc.

Business Address: 2608 SE J Street, Bentonville, Arkansas 72716

Business Phone: (479) 274-0238

EXPERIENCE

September 2019 – Present

Walmart Inc., Bentonville, AR

Senior Manager, Energy Services

November 2017 – September 2019

Oram & Houghton PLLC, Round Rock, TX

Of Counsel, Energy Law

February 2016 – November 2017

Ray Quinney & Nebeker, P.C., Salt Lake City, UT

Of Counsel, Energy Law

September 2007 – February 2016

Welborn, Sullivan, Meck & Tooley, P.C., Denver, CO

Partner, Energy Law

EDUCATION

2000 University of Florida Levin College of Law LL.M., Taxation

1999 University of Florida Levin College of Law J.D.

1996 University of South Florida B.A., Criminology

1993 University of South Florida B.A., Psychology

FILED TESTIMONY

2021

Commonwealth of Virginia State Corporation Commission Case No. PUR-2020-00164: *Ex Parte*: Allocating RPS costs to certain customers of Virginia Electric and Power Company.

Issue: Determining which costs and benefits of Virginia Clean Economy Act-related assets should be allocated to non-utility customers and seeking approval of a Rider NBC to recover/credit some of those costs and/or benefits.

Oklahoma Corporation Commission Cause No. PUD 202000097: Application of Public Service Company of Oklahoma (“PSO”) for Approval of the Cost Recovery of Facilities to be Located at Ft. Sill; a Determination there is a Need for the Facilities; Approval for Future Inclusion in Base Rates for Cost Recovery of Prudent Costs Incurred by PSO for the Facilities; Approval of a Temporary Cost Recovery Rider; and Such Other Relief the Commission Deems PSO is Entitled.

Issue: Seeking approval to acquire a solar facility and gas facility sited at Fort Sill.

Commonwealth of Virginia State Corporation Commission Case No. PUR-2020-00134: *Ex Parte*: Establishing 2020 RPS Proceeding for Virginia Electric and Power Company.

Issue: Seeking approval of a Renewable Portfolio Standard Plan and rider pursuant to the Virginia Clean Economy Act (VCEA).

2020

Commonwealth of Virginia State Corporation Commission Case No. PUR-2020-00135: *Ex Parte*: Establishing 2020 RPS Proceeding for Appalachian Power Company.

Issue: Seeking approval of a Renewable Portfolio Standard Plan pursuant to the Virginia Clean Economy Act (VCEA).

Public Service Commission of South Carolina Docket No. 2019-209-E: In re: South Carolina Energy Freedom Act (House Bill 3659) Proceeding Related to Dominion Energy South Carolina, Incorporated and S.C. Code Ann. Section 58-41-30 Related to Electrical Utilities and Their Current Voluntary Renewable Energy Program, and Such Other Proceedings Required By the Commission.

Issue: Seeking approval of a Voluntary Renewable Energy Rider.

Public Service Commission of South Carolina Docket No. 2020-125-E: In re: Application of Dominion Energy South Carolina, Incorporated for Adjustment of Rates and Charges.

Issue: General rate case.

Arkansas Public Service Commission Docket No. 16-036-FR: In the Matter of Formula Rate Plan Filings of Entergy Arkansas, Inc., Pursuant to APSC Docket No. 15-015-U.

Issue: Seeking five-year extension of Formula Rate Plan.

Colorado Public Utilities Commission Proceeding No. 20A-0204E: In the Matter of the Application of Public Service Company of Colorado for Approval of its 2021-2023 Transportation Electrification Plan.

Issue: Seeking approval of utility's plan to encourage EV adoption in its service territory.

Commonwealth of Kentucky Public Service Commission Case No. 2020-00174: Electronic Application of Kentucky Power Company for (1) a General Adjustment of its Rates for Electric Service; (2) Approval of Tariffs and Riders; (3) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; (4) Approval of a Certificate of Public Convenience and Necessity; and (5) All Other Required Approvals and Relief.

Issue: General rate case.

Oklahoma Corporation Commission Cause No. PUD 202000021: In the Matter of the Application of Oklahoma Gas and Electric Company for an Order of the Commission Approving a Recovery Mechanism for Expenditures Related to the Oklahoma Grid Enhancement Plan.

Issue: Seeking approval of a rider that allows for interim recovery of costs associated with expenditures made to enhance the grid.

Commonwealth of Virginia State Corporation Commission Case No. PUR-2020-00015: Application of Appalachian Power Company For a 2020 Triennial Review of the Rates, Terms and Conditions for the Provision of Generation, Distribution and Transmission Services Pursuant to § 56-585.1 A of the Code of Virginia.

Issue: General Rate Case.

Michigan Public Service Commission Case No. U-20697: In the matter of the application of Consumers Energy Company for authority to increase its rates for the generation and distribution of electricity and for other relief.

Issue: General rate case.

Florida Public Service Commission Consolidated Docket Nos. 20200067-EI, 20200069-EI, 20200070-EI, 20200071-EI: In re: Review of 2020-2029 Storm Protection Plan pursuant to Rule 25-6.030, F.A.C., Tampa Electric Company *et al.*

Issue: Seeking approval of Storm Protection Plans submitted by Tampa Electric Company, Duke Energy Florida, LLC, Gulf Power Company, and Florida Power & Light Company.

Arkansas Public Service Commission Docket No. 20-027-U: In the Matter of the Application of Walmart Inc. for Approval to Bid Demand Response into Wholesale Electricity Markets Through an Aggregator of Retail Customers.

Issue: Seeking approval to bid demand response into MISO through a third-party aggregator.

Public Utility Commission of Texas Docket No. 49737, SOAH Docket No. 473-19-6862: Application of Southwestern Electric Power Company for Certificate of Convenience and Necessity Authorization and Related Relief for the Acquisition of Wind Generation Facilities.

Issue: Seeking approval to acquire a wind generation facility located in Oklahoma.

Louisiana Public Service Commission Docket No. U-35324: Application of Southwestern Power Company (SWEPCO) for Certification and Approval of the Acquisition of Certain Renewable Resources in Accordance with the MBM Order and the 1983 and 1994 General Orders.

Issue: Seeking approval to acquire a wind generation facility located in Oklahoma.

Commonwealth of Virginia State Corporation Commission Case No. PUR-2019-00201: Application of Virginia Electric and Power Company for approval of its 2019 DSM Update pursuant to § 56-585.1 A 5 of the Code of Virginia.

Issue: Seek approval to implement eleven new demand-side management programs, to extend existing programs - some with updated parameters and cost/benefit results, and to continue three rate adjustment clauses.

2019

Oklahoma Corporation Commission Cause No. PUD 201900048: Application of Public Service Company of Oklahoma for Approval of the Cost Recovery of the Selected Wind Facilities; A Determination there is a Need for the SWFs; Approval for Future Inclusion in Base Rates Cost Recovery of Prudent Costs Incurred by PSO for the SWFs; Approval of a Temporary Cost

Recovery Rider; Approval of Certain Accounting Procedures Regarding Federal Production Tax Credits; and Such Other Relief the Commission Deems PSO in Entitled.

Issue: Seeking approval to acquire a wind generation facility located in Oklahoma and Wind Facility Asset Rider.

Commonwealth of Virginia State Corporation Commission Case No. PUR-2019-00094: Application of Virginia Electric and Power Company for Approval of a 100 Percent Renewable Energy Tariff, Designated Rider TRG, Pursuant to §§ 56-577 A 5 and 56-234 of the Code of Virginia.

Issue: Seek approval of a 100 percent renewable energy tariff.

Public Service Commission of South Carolina Docket No. 2019-239-E: In re: Dominion Energy South Carolina, Incorporated's Request for Approval of an Expanded Portfolio of Demand Side Management Programs, and a Modified Demand Side Management Rate Rider.

Issue: Seeking approval of an expanded Demand Side Management Plan and modified Demand Side Management Rate Rider.

Arkansas Public Service Commission Docket No. 19-035-U: In the Matter of the Application of Southwestern Electric Power Company for Approval to Acquire Wind Generating Facilities Pursuant to the Arkansas Clean Energy Development Act.

Issue: Seeking approval to acquire a wind generation facility located in Oklahoma and Wind Facility Asset Rider.

Commonwealth of Virginia State Corporation Commission Case No. PUR-2019-00154: Petition of Virginia Electric and Power Company for approval of a plan for electric distribution grid transformation projects pursuant to § 56-585.1 A 6 of the Code of Virginia, and for approval of an addition to the terms and condition applicable to electric service.

Issue: Seeking approval of certain expenditures relating to grid improvement and grid hardening.

COMMISSION DOCKETS (Appearing as Attorney of Record)

2019

Public Utility Commission of Texas Docket No. 49421: Application of CenterPoint Energy Houston Electric, LLC for Authority to Change Rates.

Issue: General rate case

Public Utility Commission of Texas Docket No. 49494: Application of AEP Texas Inc. for Authority to Change Rates.

Issue: General rate case

Public Utility Commission of Colorado Docket No. 19AL-0268E: In the Matter of Advice Letter No. 1797 Filed by Public Service Company of Colorado to Reset the Currently Effective General Rate Schedule Adjustment ("GRSA") as Applied to Base Rates for all Electric Rate Schedules as well as Implement a Base Rate kWh Charge, General Rate Schedule Adjustment-Energy ("GRSA-E") to Become Effective June 20, 2019.

Issue: General rate case, Phase I

2018

Public Utility Commission of Texas Docket No. 48371: Entergy Texas, Inc.'s Statement of Intent and Application for Authority to Change Rates.

Issue: General rate case

Public Utility Commission of Colorado Docket No. 18M-0074EG: In the Matter of the Commission's Consideration of the Impact of the Federal Tax Cuts and Jobs Act of 2017 on the Rates of Colorado Investor-Owned Electric and Natural Gas Utilities.

Issue: Commenced by the Commission to consider the impacts of the Tax Cut and Jobs Act of 2017 on the revenue requirements and rates of all Colorado investor-owned electric and natural gas utilities.

2017

Public Utility Commission of Texas Docket No. 47461: Application of Southwestern Electric Power Company for Certificate of Convenience and Necessity Authorization and Related Relief for the Wind Catcher Energy Connection Project in Oklahoma.

Issue: Purchase of a wind generation facility and generation tie line.

Public Utility Commission of Texas Docket No. 47527: Application of Southwestern Public Service Company for Authority to Change Rates.

Issue: General rate case

Public Utility Commission of Colorado Docket No. 17A-0462EG: In the Matter of the Application of Public Service Company of Colorado for Approval of a Number of Strategic Issues Relating to its Electric and Gas Demand-Side Management Plan.

Issue: Seek Commission re-examination and approval of the overall objectives and structure of Public Service's DSM initiatives to guide the Company in designing future DSM plans.

Public Utility Commission of Colorado Docket No. 17AL-0649E: In the Matter of Advice Letter No. 1748-Electric Filed by Public Service Company of Colorado to Revise its PUC No. 8-Electric Tariff to Implement a General Rate Schedule Adjustment and Other Rate Changes Effective on Thirty Days' Notice.

Issue: General rate case, Phase I

Arkansas Public Service Commission Docket No. 17-038-U: In the Matter of the Application of Southwestern Electric Power Company for Approval to Acquire a Wind Generating Facility and to Construct a Dedicated Generation Tie Line.

Issue: Purchase of a wind generation facility and generation tie line.

Louisiana Public Service Commission Docket No. U-34619: Application for Expedited Certification and Approval of the Acquisition of Certain Renewable Resources and the Construction of a Generation Tie Pursuant to the 1983 and/or 1994 General Orders.

Issue: Purchase of a wind generation facility and generation tie line.

2016

Public Utility Commission of Colorado Docket No. 16AL-0048E: In the Matter of Advice Letter No. 1712-Electric Filed by Public Service Company of Colorado to Replace Colorado PUC No. 7-Electric Tariff with Colorado PUC No. 8-Electric Tariff.

Issue: General rate case, Phase II

Public Utility Commission of Colorado Docket No. 16A-0055E: In the Matter of the Application of Public Service Company of Colorado for Approval of its Solar*Connect Program.

Issue: Implement a voluntary solar program offering participating customers the ability to offset their current supply of energy from the Public Service system with solar energy produced at a dedicated facility or facilities.

New Mexico Public Regulation Commission Docket No. 16-00276-UT: In the Matter of the Application of Public Service Company of New Mexico for Revision of its Retail Electric Rates Pursuant to Advice Notice No. 533.

Issue: General rate case

INDUSTRY TRAINING

- 2020 Practical Regulatory Training for the Electric Industry, Center for Public Utilities, New Mexico State University College of Business
- 2020 IPU Accounting and Ratemaking Course, Michigan State University
- 2016 Western NARUC Utility Rate School
- EUCI Courses on the utility industry, cost allocation, and rate design.

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, A)	
CERTIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY TO DEPLOY ADVANCED)	CASE NO. 2020-00350
METERING INFRASTRUCTURE,)	
APPROVAL OF CERTAIN REGULATORY)	
AND ACCOUNTING TREATMENTS, AND)	
ESTABLISHMENT OF A ONE-YEAR)	
SURCREDIT)	

EXHIBIT LVP-2 OF

LISA V. PERRY

ON BEHALF OF

WALMART INC.

Calculation of Revenue Requirement Impact of LG&E's Proposed Increase in ROE

(1) Schedule J-1 LG&E Requested Rate of Return on Capitalization 7.17%

1) Calculate Rate of Return Using Proposed Capital Structure/Current ROE (9.73%)

			Percent of Total		
		Capital Component	Capital	Cost	Weighted Cost
(2)	Revised Schedule J-1.1/J-1.2	Short-term Debt	1.26%	0.46%	0.01%
(3)	Revised Schedule J-1.1/J-1.2	Long-term Debt	45.55%	4.04%	1.84%
(4)	Revised Schedule J-1.1/J-1.2	Common Equity	53.19%	9.73%	5.18%
(5)	(2)+(3)+(4)	Rate of Return at Current ROE (9.73%)			7.02%

2) Calculate Revenue Requirement Impact at the Proposed ROE (10.00%)

(6)	Revised Schedule J-1.1/J-1.2	Rate Base		\$ 3,449,573,908
(7)	= (5)	Rate of Return (ROE = 9.73%)		7.02%
(8)	(6) x (7)	Adjusted Income Requirement (ROE = 9.73%)		\$ 242,208,486
(9)	Schedule C-1	LG&E's Proposed Income Requirement		\$ 248,313,187
(10)	(9) - (8)	Difference in Income Requirement		\$ 6,104,701
(11)	Schedule H-1	Conversion Factor		1.337837
(12)	(10) x (11)	Difference in Revenue Requirement		\$ 8,167,095
(13)	Schedule M-2.1	Requested Revenue Requirement Increase		\$ 131,248,802
(14)	(12) / (13)	Percent of Increase from ROE Increase		6.22%

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, A)	
CERTIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY TO DEPLOY ADVANCED)	CASE NO. 2020-00350
METERING INFRASTRUCTURE,)	
APPROVAL OF CERTAIN REGULATORY)	
AND ACCOUNTING TREATMENTS, AND)	
ESTABLISHMENT OF A ONE-YEAR)	
SURCREDIT)	

EXHIBIT LVP-3 OF

LISA V. PERRY

ON BEHALF OF

WALMART INC.

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2017 to Present

State	Utility	Parent Company	Ticker	Docket	Requested ROE	Order Date	Vertically Integrated (V) / Distribution Only (D)	Approved ROE	Difference	ROE Fully Litigated or Settled	Approved WACC	Approved Equity Ratio	Equity Contribution
									(8) - (5)				(8) X (13)
Wyoming	MDU Resources Group Inc.	MDU		2004-117-ER-16	10.10%	1/18/2017	V	9.45%	(65)	Settled	7.25%	50.99%	4.82%
New York	Consolidated Edison Co. of NY	ED		16-E-0060	9.75%	1/24/2017	D	9.00%	(75)	Settled	6.82%	48.00%	4.32%
Michigan	DTE Electric Co.	DTE		U-18014	10.50%	1/31/2017	V	10.10%	(40)	Fully Litigated	5.55%	37.49%	3.79%
Maryland	Delmarva Power & Light Co.	EXC		9424	10.60%	2/15/2017	D	9.60%	(100)	Fully Litigated	6.74%	49.10%	4.71%
New Jersey	Rockland Electric Company	ED		ER-16050428	10.20%	2/22/2017	D	9.60%	(60)	Settled	7.47%	49.70%	4.77%
Arizona	Tucson Electric Power Co.	FTS		E-01933A-15-0322	10.35%	2/24/2017	V	9.75%	(60)	Settled	7.04%	50.03%	4.88%
Michigan	Consumers Energy Co.	CMS		U-17990	10.70%	2/28/2017	V	10.10%	(60)	Fully Litigated	5.94%	40.75%	4.12%
Minnesota	Otter Tail Power Co.	OTTR		E-017/GR-15-1033	10.05%	3/2/2017	V	9.41%	(64)	Fully Litigated	7.51%	52.50%	4.94%
Oklahoma	Oklahoma Gas & Electric Co.	OGE		PUD 201500273	10.25%	3/20/2017	V	9.50%	(75)	Fully Litigated	7.69%	53.31%	5.06%
Florida	Gulf Power Co.	NEE		160186-EI	11.00%	4/4/2017	V	10.25%	(75)	Settled	N/A	N/A	N/A
New Hampshire	Liberty Utilities Granite St	AQN		DE-16-383	10.30%	4/12/2017	D	9.40%	(90)	Settled	7.64%	50.00%	4.70%
New Hampshire	Unitil Energy Systems Inc.	UTL		DE-16-384	10.30%	4/20/2017	D	9.50%	(80)	Settled	8.34%	50.97%	4.84%
Missouri	Kansas City Power & Light	EVRG		ER-2016-0285	9.90%	5/3/2017	V	9.50%	(40)	Fully Litigated	7.43%	49.20%	4.67%
Minnesota	Northern States Power Co.	XEL		E-022/GR-15-826	10.00%	5/11/2017	V	9.20%	(80)	Settled	7.08%	52.50%	4.83%
Arkansas	Oklahoma Gas & Electric Co.	OGE		16-052-U	10.25%	5/18/2017	V	9.50%	(75)	Settled	5.42%	36.38%	3.46%
Delaware	Delmarva Power & Light Co.	EXC		16-0649	10.60%	5/23/2017	D	9.70%	(90)	Settled	N/A	N/A	N/A
North Dakota	MDU Resources Group Inc.	MDU		PU-16-666	10.00%	6/16/2017	V	9.65%	(35)	Settled	7.36%	51.40%	4.96%
Kentucky	Kentucky Utilities Co.	PPL		2016-00370	10.23%	6/22/2017	V	9.70%	(53)	Settled	N/A	N/A	N/A
Kentucky	Louisville Gas & Electric Co.	PPL		2016-00371	10.23%	6/22/2017	V	9.70%	(53)	Settled	N/A	N/A	N/A
District of Columbia	Potomac Electric Power Co.	EXC		FC-1139	10.60%	7/24/2017	D	9.50%	(110)	Fully Litigated	7.46%	49.14%	4.67%
Arizona	Arizona Public Service Co.	PNW		E-01345A-16-0036	10.50%	8/15/2017	V	10.00%	(50)	Settled	7.85%	55.80%	5.58%
New Jersey	Atlantic City Electric Co.	EXC		ER-17030308	10.10%	9/22/2017	D	9.60%	(50)	Settled	7.60%	50.47%	4.85%
Texas	Oncor Electric Delivery Co.	SRE		46957	10.25%	9/28/2017	D	9.80%	(45)	Settled	7.44%	42.50%	4.17%
Maryland	Potomac Electric Power Co.	EXC		9443	10.10%	10/20/2017	D	9.50%	(60)	Fully Litigated	7.43%	50.15%	4.76%
California	Pacific Gas & Electric Co.	PCG		Advice No. 5148-E	10.25%	10/26/2017	V	10.25%	-	Settled	7.69%	52.00%	5.33%
California	San Diego Gas & Electric Co.	SRE		Advice No. 3120-E	10.20%	10/26/2017	V	10.20%	-	Settled	7.55%	52.00%	5.30%
California	Southern California Edison Co.	EIX		Advice No. 3665-E	10.30%	10/26/2017	V	10.30%	-	Settled	7.61%	48.00%	4.94%
Florida	Tampa Electric Co.	EMA		20170210-EI	N/A	11/6/2017	V	10.25%	N/A	Settled	N/A	N/A	N/A
Alaska	Alaska Electric Light Power	AVA		U-16-086	13.80%	11/15/2017	V	11.95%	(185)	Settled	8.91%	58.18%	6.95%
Massachusetts	NSTAR Electric Co.	ES		17-05	10.50%	11/30/2017	D	10.00%	(50)	Fully Litigated	7.33%	53.34%	5.33%
Massachusetts	Western Massachusetts Electric	ES		17-05	10.50%	11/30/2017	D	10.00%	(50)	Fully Litigated	7.26%	54.51%	5.45%
Washington	Puget Sound Energy Inc.	UE		UE-170033	9.80%	12/5/2017	V	9.50%	(30)	Settled	7.60%	48.50%	4.61%
Illinois	Ameren Illinois	AEE		17-0197	8.40%	12/6/2017	D	8.40%	-	Fully Litigated	7.04%	50.00%	4.20%
Illinois	Commonwealth Edison Co.	EXC		17-0196	8.40%	12/6/2017	D	8.40%	-	Fully Litigated	6.47%	45.89%	3.85%
Wisconsin	Northern States Power Co. - WI	XEL		4220-UR-123	10.00%	12/7/2017	V	9.80%	(20)	Fully Litigated	7.56%	51.45%	5.04%
Texas	El Paso Electric Co.	EE		46831	10.50%	12/14/2017	V	9.65%	(85)	Settled	7.73%	48.35%	4.67%
Texas	Southwestern Electric Power Co.	AEP		46449	10.00%	12/14/2017	V	9.60%	(40)	Fully Litigated	7.18%	48.46%	4.65%
Oregon	Portland General Electric Co.	POR		UE 319	9.75%	12/18/2017	V	9.50%	(25)	Settled	7.35%	50.00%	4.75%
New Mexico	Public Service Co. of NM	PNM		16-00276-UT	10.13%	12/20/2017	V	9.58%	(55)	Settled	7.23%	49.61%	4.75%
Vermont	Green Mountain Power Corp	AVU		17-3112-INV	9.50%	12/21/2017	V	9.10%	(40)	Settled	6.87%	48.60%	4.42%
Idaho	Avista Corp.	AVA		AVU-E-17-01	9.90%	12/28/2017	V	9.50%	(40)	Settled	7.61%	50.00%	4.75%

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2017 to Present

State	Utility	Parent Company Ticker	Docket	Requested ROE	Order Date	Vertically Integrated (V) / Distribution Only (D)	Approved ROE	Difference	ROE Fully Litigated or Settled	Approved WACC	Approved Equity Ratio	Equity Contribution
								(8) - (5)				(8) X (13)
Nevada	Nevada Power Co.	BRK.A	17-06003	10.10%	12/29/2017	V	9.50%	(60)	Fully Litigated	8.00%	49.99%	4.75%
Kentucky	Kentucky Power Co.	AEP	2017-00179	10.31%	1/18/2018	V	9.70%	(61)	Settled	6.44%	41.68%	4.04%
Oklahoma	Public Service Co. of OK	AEP	PUD 201700151	10.00%	1/31/2018	V	9.30%	(70)	Fully Litigated	6.88%	48.51%	4.51%
Iowa	Interstate Power & Light Co.	LNT	RPU-2017-0001	10.57%	2/2/2018	V	9.98%	(59)	Settled	7.49%	49.02%	4.89%
North Carolina	Duke Energy Progress Inc.	DUK	E-2, Sub 1142	10.75%	2/23/2018	V	9.90%	(85)	Settled	7.09%	52.00%	5.15%
Minnesota	ALLETE (Minnesota Power)	ALE	E-015/GR-16-664	10.15%	3/12/2018	V	9.25%	(90)	Fully Litigated	7.06%	53.81%	4.98%
New York	Niagara Mohawk Power Corp.	NG	17-E-0238	9.79%	3/15/2018	D	9.00%	(79)	Settled	6.53%	48.00%	4.32%
Michigan	Consumers Energy Co.	CMS	U-18322	10.50%	3/29/2018	V	10.00%	(50)	Fully Litigated	5.89%	40.89%	4.09%
Michigan	Indiana Michigan Power Co.	AEP	U-18370	10.60%	4/12/2018	V	9.90%	(70)	Fully Litigated	5.76%	36.38%	3.60%
Kentucky	Duke Energy Kentucky Inc.	DUK	2017-00321	10.30%	4/13/2018	V	9.73%	(57)	Fully Litigated	6.83%	49.25%	4.79%
Connecticut	Connecticut Light and Power	ES	17-10-46	10.50%	4/18/2018	D	9.25%	(125)	Settled	7.09%	53.00%	4.90%
Michigan	DTE Electric Co.	DTE	U-18255	10.50%	4/18/2018	V	10.00%	(50)	Fully Litigated	5.34%	36.84%	3.68%
Washington	Avista Corp.	AVA	UE-170485	9.90%	4/26/2018	V	9.50%	(40)	Fully Litigated	7.50%	48.50%	4.61%
Indiana	Indiana Michigan Power Co.	AEP	44967	10.60%	5/30/2018	V	9.95%	(65)	Settled	5.51%	35.73%	3.56%
Maryland	Potomac Electric Power Co.	EXC	9472	10.10%	5/31/2018	D	9.50%	(60)	Settled	7.03%	50.44%	4.79%
New York	Central Hudson Gas & Electric	FTS	17-E-0459	9.50%	6/14/2018	D	8.80%	(70)	Settled	6.44%	48.00%	4.22%
Hawaii	Hawaiian Electric Co.	HE	2016-0328	10.60%	6/22/2018	V	9.50%	(110)	Settled	7.57%	57.10%	5.42%
North Carolina	Duke Energy Carolinas LLC	DUK	E-7, Sub 1146	10.75% †	6/22/2018	V	9.90%	(85)	Settled	7.35%	52.00%	5.15%
Maine	Versant Power		2017-00198	9.50%	6/28/2018	D	9.35%	(15)	Fully Litigated	7.18%	49.00%	4.58%
Hawaii	Hawaii Electric Light Co	HE	2015-0170	10.60%	6/29/2018	V	9.50%	(110)	Settled	7.80%	56.69%	5.39%
District of Columbia	Potomac Electric Power Co.	EXC	FC-1150	10.10%	8/8/2018	D	9.53%	(57)	Settled	7.45%	50.44%	4.81%
Delaware	Delmarva Power & Light Co.	EXC	17-0977	10.10%	8/21/2018	D	9.70%	(40)	Settled	6.78%	50.52%	4.90%
Rhode Island	Narragansett Electric Co.	NG	4770 (electric)	10.10%	8/24/2018	D	9.28%	(82)	Settled	6.97%	50.95%	4.73%
New Mexico	Southwestern Public Service Co	XEL	17-00255-UT	10.25%	9/5/2018	V	9.10%	(115)	Fully Litigated	7.24%	53.97%	4.91%
Wisconsin	Wisconsin Power and Light Co	LNT	6680-UR-121 (Elec)	10.00%	9/14/2018	V	10.00%	-	Settled	7.08%	52.00%	5.20%
Wisconsin	Madison Gas and Electric Co.	MGEE	3270-UR-122 (Elec)	9.80%	9/20/2018	V	9.80%	-	Settled	7.10%	56.06%	5.49%
North Dakota	Otter Tail Power Co.	OTTR	PU-17-398	10.30%	9/26/2018	V	9.77%	(53)	Settled	7.64%	52.50%	5.13%
Ohio	Dayton Power and Light Co.	AES	15-1830-EL-AIR	10.50%	9/26/2018	D	9.999% *	(50)	Settled	7.27%	47.52%	4.75%
Kansas	Westar Energy Inc.	EVRG	18-WSEE-328-RTS	9.85%	9/27/2018	V	9.30%	(55)	Settled	7.06%	51.24%	4.77%
Pennsylvania	UGI Utilities Inc.	UGI	R-2017-2640058	11.25%	10/4/2018	D	9.85%	(140)	Fully Litigated	7.48%	54.02%	5.32%
New Jersey	Public Service Electric Gas	PEG	ER18010029	10.30%	10/29/2018	D	9.60%	(70)	Settled	6.99%	54.00%	5.18%
Indiana	Indianapolis Power & Light Co.	AES	45029	10.32%	10/31/2018	V	9.99%	(33)	Settled	6.59%	39.67%	3.96%
Illinois	Ameren Illinois	AEE	18-0807	8.69%	11/1/2018	D	8.69%	-	Fully Litigated	6.99%	50.00%	4.35%
Illinois	Commonwealth Edison Co.	EXC	18-0808	8.69%	12/4/2018	D	8.69%	-	Fully Litigated	6.52%	47.11%	4.09%
Kansas	Kansas City Power & Light	EVRG	18-KCPE-480-RTS	9.85%	12/13/2018	V	9.30%	(55)	Settled	7.07%	49.09%	4.57%
Oregon	Portland General Electric Co.	POR	UE-335	9.50%	12/14/2018	V	9.50%	-	Settled	7.30%	50.00%	4.75%
Ohio	Duke Energy Ohio Inc.	DUK	17-0032-EL-AIR	10.40%	12/19/2018	D	9.84%	(56)	Settled	7.54%	50.75%	4.99%
Texas	Texas-New Mexico Power Co.	PNM	48401	10.50%	12/20/2018	D	9.65%	(85)	Settled	7.89%	45.00%	4.34%
Vermont	Green Mountain Power Corp.		18-0974-TF	9.30%	12/21/2018	D	9.30%	-	Fully Litigated	5.26%	49.85%	4.64%
Michigan	Consumers Energy Co.	CMS	U-20134	10.75%	1/9/2019	V	10.00%	(75)	Settled	N/A	N/A	N/A
West Virginia	Appalachian Power Co.	AEP	18-0646-E-42T	10.22%	2/27/2019	V	9.75%	(47)	Settled	7.28%	50.16%	4.89%

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2017 to Present

State	Utility	Parent Company Ticker	Docket	Requested ROE	Order Date	Vertically Integrated (V) / Distribution Only (D)	Approved ROE	Difference	ROE Fully Litigated or Settled	Approved WACC	Approved Equity Ratio	Equity Contribution
								(8) - (5)				(8) X (13)
New Jersey	Atlantic City Electric Co.	EXC	ER18080925	10.10%	3/13/2019	D	9.60%	(50)	Settled	7.08%	49.94%	4.79%
New York	Orange & Rockland Utilities Inc.	ED	18-E-0067	9.75%	3/14/2019	D	9.00%	(75)	Settled	6.97%	48.00%	4.32%
Oklahoma	Public Service Company of OK	AEP	PUD201800097	10.30%	3/14/2019	V	9.40%	(90)	Settled	6.97%	N/A	N/A
Maryland	Potomac Edison Co.	FE	9490	10.80%	3/22/2019	D	9.65%	(115)	Fully Litigated	7.15%	52.82%	5.10%
Kentucky	Kentucky Utilities Co.	PPL	2018-00294	10.42%	4/30/2019	V	9.73%	(69)	Settled	N/A	N/A	N/A
Kentucky	Louisville Gas & Electric Co.	PPL	2018-00295	10.42%	4/30/2019	V	9.73%	(69)	Settled	N/A	N/A	N/A
South Carolina	Duke Energy Carolinas LLC	DUL	2018-319-E	10.50%	5/1/2019	V	9.50%	(100)	Fully Litigated	7.16%	53.00%	5.04%
Michigan	DTE Electric Co.	DTE	U-20162	10.50%	5/2/2019	V	10.00%	(50)	Fully Litigated	5.48%	37.94%	3.79%
South Carolina	Duke Energy Progress LLC	DUK	2018-318-E	10.50%	5/8/2019	V	9.50%	(100)	Fully Litigated	6.99%	53.00%	5.04%
South Dakota	Otter Tail Power Co.	OTTR	EL18-021	10.30%	5/14/2019	V	8.75%	(155)	Fully Litigated	7.09%	52.92%	4.63%
Hawaii	Maui Electric Company Ltd	HE	2017-0150	10.60%	5/16/2019	V	9.50%	(110)	Settled	7.43%	57.02%	5.42%
Michigan	Upper Peninsula Power Co.		U-20276	10.50%	5/23/2019	V	9.90%	(60)	Settled	6.91%	N/A	N/A
Maryland	Potomac Electric Power Co.	EXC	9602	10.30%	8/12/2019	D	9.60%	(70)	Fully Litigated	7.45%	50.46%	4.84%
Vermont	Green Mountain Power Corp.		19-1932-TF	9.16%	8/29/2019	V	9.06%	(10)	Fully Litigated	6.85%	49.46%	4.48%
Wisconsin	Northern States Power Co - WI	XEL	4220-UR-124	N/A Ω	9/4/2019	V	10.00%	N/A	Settled	7.74%	52.52%	5.25%
Massachusetts	Massachusetts Electric Co.	NG	DPU-18-150	10.50%	9/30/2019	D	9.60%	(90)	Fully Litigated	7.56%	53.49%	5.14%
Montana	Northwestern Corp.	NWE	D2018.2.12	10.65%	10/29/2019	V	9.65%	(100)	Settled	6.92%	49.38%	4.77%
Wisconsin	Wisconsin Electric Power Co.	WEC	05-UR-109	10.35%	10/31/2019	V	10.00%	(35)	Settled	7.49%	54.46%	5.45%
Wisconsin	Wisconsin Public Service Corp.	WEC	6690-UR-126	10.35%	10/31/2019	V	10.00%	(35)	Settled	7.22%	51.96%	5.20%
Louisiana	Entergy New Orleans LLC	ETR	UD-18-07	10.50%	11/7/2019	V	9.35%	(115)	Fully Litigated	7.09%	50.00%	4.68%
Idaho	Avista Corp.	AVA	AVU-E-19-04	9.90%	11/29/2019	V	9.50%	(40)	Settled	7.35%	50.00%	4.75%
Illinois	Commonwealth Edison Co.	EXC	19-0387	8.91%	12/4/2019	D	8.91%	-	Fully Litigated	6.51%	47.97%	4.27%
Indiana	Northern Indiana Public Service Co.	NI	45159	10.80%	12/4/2019	V	9.75%	(105)	Settled	6.52%	47.86%	4.67%
Illinois	Ameren Illinois	AEE	19-0436	8.91%	12/16/2019	D	8.91%	-	Fully Litigated	6.71%	50.00%	4.46%
Georgia	Georgia Power Co.	SO	42516	10.90%	12/17/2019	V	10.50%	(40)	Fully Litigated	N/A	56.00%	5.88%
Maryland	Baltimore Gas and Electric Co.	EXC	9610	10.30%	12/17/2019	D	9.70%	(60)	Settled	6.94%	N/A	N/A
California	Pacific Gas & Electric Co.	PCG	A-19-04-015	12.00%	12/19/2019	V	10.25%	(175)	Fully Litigated	7.81%	52.00%	5.33%
California	San Diego Gas & Electric Co.	SRE	A-19-04-017	12.38%	12/19/2019	V	10.20%	(218)	Fully Litigated	7.55%	52.00%	5.30%
California	Southern California Edison Co.	EIX	A-19-04-014	11.45%	12/19/2019	V	10.30%	(115)	Fully Litigated	7.68%	52.00%	5.36%
Arkansas	Southwestern Electric Power Co.	AEP	19-008-U	10.50%	12/20/2019	V	9.45%	(105)	Settled	4.93%	33.71%	3.19%
Nevada	Sierra Pacific Power Co.	BRK.A	19-06002	10.21%	12/24/2019	V	9.50%	(71)	Settled	6.75%	50.92%	4.84%
Iowa	Interstate Power & Light Co.	LNT	RPU-2019-0001	10.25% \yen	1/8/2020	V	10.02% \yen	(23)	Settled	7.23%	51.00%	5.11%
New York	Consolidated Edison Co. of NY	ED	19-E-0065	9.75%	1/16/2020	D	8.80%	(95)	Settled	6.61%	48.00%	4.22%
New Jersey	Rockland Electric Company	ED	ER19050552	9.60%	1/22/2020	D	9.50%	(10)	Settled	7.11%	48.32%	4.59%
Michigan	Indiana Michigan Power Co.	AEP	U-20359	10.50%	1/23/2020	V	9.86%	(64)	Settled	6.08%	46.56%	4.59%
California	PacifiCorp	BRK.A	A-18-04-002	10.60%	2/6/2020	V	10.00%	(60)	Fully Litigated	N/A	51.96%	5.20%
Colorado	Public Service Company of Colorado	XEL	19AL-0268E	10.20%	2/11/2020	V	9.30%	(90)	Fully Litigated	6.97%	55.61%	5.17%
Texas	Centerpoint Energy	CNP	49421	10.40%	2/14/2020	D	9.40%	(100)	Settled	6.51%	42.50%	4.00%
Maine	Central Maine Power Co.	IBE	2018-00194	10.00%	2/19/2020	D	8.25%	(175)	Fully Litigated	6.30%	50.00%	4.13%
North Carolina	Virginia Electric & Power Co.	D	E-22 Sub 562	10.75%	2/24/2020	V	9.75%	(100)	Settled	7.20%	52.00%	5.07%
Texas	AEP Texas Inc.	AEP	49494	10.50%	2/27/2020	D	9.40%	(110)	Settled	6.45%	42.50%	4.00%

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2017 to Present

State	Utility	Parent Company Ticker	Docket	Requested ROE	Order Date	Vertically Integrated (V) / Distribution Only (D)	Approved ROE	Difference	ROE Fully Litigated or Settled	Approved WACC	Approved Equity Ratio	Equity Contribution
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(11)	(12)	(13)	(14)
								(8) - (5)				(8) X (13)
Indiana	Indiana Michigan Power Co.	AEP	45235	10.50%	3/11/2020	V	9.70%	(80)	Fully Litigated	5.61%	37.55%	3.64%
Washington	Avista Corp.	AVA	UE-190334	9.90%	3/25/2020	V	9.40%	(50)	Settled	7.21%	48.50%	4.56%
Massachusetts	Fitchburg Gas & Electric Light	UTL	DPU 19-130	10.50%	4/17/2020	D	9.70%	(80)	Settled	7.99%	52.45%	5.09%
Kentucky	Duke Energy Kentucky Inc.	DUK	2019-00271	9.80%	4/27/2020	V	9.25%	(55)	Fully Litigated	6.41%	48.23%	4.46%
Michigan	DTE Electric Co.	DTE	U-20561	10.50%	5/8/2020	V	9.90%	(60)	Fully Litigated	5.46%	38.32%	3.79%
New Mexico	Southwestern Public Service Co	XEL	19-00170-UT	10.10%	5/20/2020	V	9.45%	(65)	Settled	7.19%	54.77%	5.18%
Indiana	Duke Energy Indiana, LLC	DUK	45253	10.40%	6/29/2020	V	9.70%	(70)	Fully Litigated	5.71%	40.98%	3.98%
New Hampshire	Liberty Utilities Granite St	AQN	DE-19-064	10.00%	6/30/2020	D	9.10%	(90)	Settled	7.60%	52.00%	4.73%
Missouri	Empire District Electric Co.	AQN	ER-2019-0374	9.95%	7/1/2020	V	9.25%	(70)	Settled	6.77%	46.00%	4.26%
Washington	Puget Sound Energy Inc.		UE-190529	9.50%	7/8/2020	V	9.40%	(10)	Fully Litigated	7.39%	48.50%	4.56%
Maryland	Delmarva Power & Light Co.	EXC	9630	10.30%	7/14/2020	D	9.60%	(70)	Fully Litigated	6.84%	50.53%	4.85%
Hawaii	Hawaii Electric Light Co	HE	2018-0368	10.50%	7/28/2020	V	9.50%	(100)	Settled	7.52%	56.83%	5.40%
California	Liberty Utilities (CalPeco Electric)	AQN	A-18-12-001	10.30%	8/27/2020	V	10.00%	(30)	Fully Litigated	7.63%	52.50%	5.25%
Vermont	Green Mountain Power Corp.		20-1407-TF	8.20%	8/27/2020	V	8.20%	-	Fully Litigated	6.43%	49.87%	4.09%
Texas	Southwestern Public Service Co	XEL	49831	10.10%	8/27/2020	V	9.45%	(65)	Settled	7.13%	54.62%	5.16%
Hawaii	Hawaiian Electric Co.	HE	2019-0085	10.50%	10/22/2020	V	9.50%	(100)	Settled	7.37%	56.83%	5.40%
New Jersey	Jersey Central Power & Light Co.	FE	ER20020146	10.15%	10/28/2020	D	9.60%	(55)	Settled	7.40%	51.44%	4.94%
New York	NY State Electric & Gas Corp	IBE	19-E-0378	9.50%	11/19/2020	D	8.80%	(70)	Settled	6.10%	48.00%	4.22%
New York	Rochester Gas & Electric Corp	IBE	19-E-0380	9.50%	11/19/2020	D	8.80%	(70)	Settled	6.62%	48.00%	4.22%
Virginia	Appalachian Power Co.	AEP	PUR-2020-00015	9.90%	11/24/2020	V	9.20%	(70)	Fully Litigated	N/A	N/A	N/A
Wisconsin	Madison Gas and Electric Co.	MGEE	3270-UR-123 (Elec)	9.80%	11/24/2020	V	9.80%	-	Settled	6.95%	55.00%	5.39%
Illinois	Ameren Illinois	AEE	20-0381	8.38%	12/9/2020	D	8.38%	-	Fully Litigated	6.39%	50.00%	4.19%
Illinois	Commonwealth Edison Co.	EXC	20-0393	8.38%	12/9/2020	D	8.38%	-	Fully Litigated	6.28%	48.16%	4.04%
Nevada	Nevada Power Co.	BRK.A	20-06003	10.08%	12/10/2020	V	9.40%	(68)	Settled	7.14%	N/A	N/A
Washington	PacifiCorp	BRK.A	UE-191024	10.20%	12/14/2020	V	9.50%	(70)	Settled	7.17%	49.10%	4.66%
New Hampshire	Public Service Co. of NH	ES	DE-19-057	10.40%	12/15/2020	D	9.30%	(110)	Settled	6.87%	54.40%	5.06%
Maryland	Baltimore Gas and Electric Co.	EXC		10.10%	12/16/2020	D	9.50%	(60)	Fully Litigated	6.75%	52.00%	4.94%
Michigan	Consumers Energy Co.	CMS	U-20697	10.50%	12/17/2020	V	9.90%	(60)	Fully Litigated	5.67%	N/A	N/A
Oregon	PacifiCorp	BRK.A	UE 374	9.80%	12/18/2020	V	9.50%	(30)	Fully Litigated	7.14%	50.00%	4.75%
Arizona	Tucson Electric Power Co.	FTS	E-1933A-19-0028	10.00%	12/22/2020	V	9.15%	(85)	Fully Litigated	7.04%	53.08%	4.86%
Wisconsin	Wisconsin Power and Light Co	LNT	6680-UR-122 (Elec)	N/A	12/23/2020	V	10.00%	N/A	Fully Litigated	7.26%	52.53%	5.25%
Utah	PacifiCorp	BRK.A	20-035-04	9.80%	12/30/2020	V	9.65%	(15)	Fully Litigated	7.34%	52.50%	5.07%
Kentucky	Kentucky Power Co.	AEP	C-2020-00174	10.00%	1/13/2021	V	9.30%	(70)	Fully Litigated	6.19%	43.25%	4.02%

Entire Period

# of Decisions			156									
Average	(All Utilities)			10.18%			9.56%	(62)		7.00%	49.54%	4.73%
Average	(Distribution Only)			9.94%			9.31%	(63)		7.01%	49.67%	4.62%
Average	(Vertically Integrated Only)			10.31%			9.69%	(62)		7.00%	49.46%	4.79%
Median	(All Utilities)			10.25%			9.56%			7.10%	50.00%	4.76%

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2017 to Present

State	Utility	Parent Company Ticker	Docket	Requested ROE	Order Date	Vertically Integrated (V) / Distribution Only (D)	Approved ROE	Difference	ROE Fully Litigated or Settled	Approved WACC	Approved Equity Ratio	Equity Contribution
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(11)	(12)	(13)	(14)
								(8) - (5)				(8) X (13)
Maximum	(All Utilities)			13.80%			11.95%			8.91%	58.18%	6.95%
Minimum	(All Utilities)			8.20%			8.20%			4.93%	33.71%	3.19%
Kentucky			8	10.21%			9.61%	(61)		6.47%	45.60%	4.33%
Settled				10.26%			9.62%	(63)		7.13%	49.90%	4.79%
Fully Litigated				10.08%			9.47%	(61)		6.83%	49.07%	4.64%
2017												
# of Decisions			42									
Average	(All Utilities)			10.22%			9.68%	(54)		7.30%	49.44%	4.77%
Average	(Distribution Only)			10.04%			9.43%	(61)		7.31%	49.52%	4.66%
Average	(Distribution Only, exc. IL FRP)			10.32%			9.60%	(72)		7.41%	49.81%	4.78%
Average	(Vertically Integrated Only)			10.31%			9.80%	(50)		7.29%	49.40%	4.83%
2018												
# of Decisions			38									
Average	(All Utilities)			10.14%			9.55%	(59)		6.92%	48.99%	4.67%
Average	(Distribution Only)			9.96%			9.38%	(58)		6.96%	49.91%	4.68%
Average	(Distribution Only, exc. IL FRP)			10.14%			9.47%	(66)		6.99%	50.11%	4.75%
Average	(Vertically Integrated Only)			10.27%			9.68%	(60)		6.89%	48.32%	4.67%
2019												
# of Decisions			33									
Average	(All Utilities)			10.43%			9.64%	(79)		7.02%	50.33%	4.85%
Average	(Distribution Only)			9.95%			9.37%	(58)		7.05%	50.38%	4.70%
Average	(Distribution Only, exc. IL FRP)			10.29%			9.53%	(77)		7.19%	50.94%	4.84%
Average	(Vertically Integrated Only)			10.59%			9.73%	(86)		7.01%	50.32%	4.90%
2020												
# of Decisions			42									
Average	(All Utilities)			10.00%			9.39%	(62)		6.82%	49.77%	4.67%
Average	(Distribution Only)			9.83%			9.10%	(73)		6.79%	49.22%	4.48%
Average	(Distribution Only, exc. IL FRP)			10.05%			9.21%	(84)		6.86%	49.24%	4.54%
Average	(Vertically Integrated Only)			10.10%			9.55%	(56)		6.84%	50.12%	4.78%
2021												
# of Decisions			1									
Average	(All Utilities)			10.00%			9.30%	(70)		6.19%	43.25%	4.02%
Average	(Distribution Only)			None			None	-		None	None	None
Average	(Distribution Only, exc. IL FRP)			None			None	-		None	None	None
Average	(Vertically Integrated Only)			10.00%			9.30%	(70)		6.19%	43.25%	4.02%

Reported Authorized Returns on Equity, Electric Utility Rate Cases Completed, 2017 to Present

State	Utility	Parent Company Ticker	Docket	Requested ROE	Order Date	Vertically Integrated (V) / Distribution Only (D)	Approved ROE	Difference	ROE Fully Litigated or Settled	Approved WACC	Approved Equity Ratio	Equity Contribution
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(11)	(12)	(13)	(14)
								(8) - (5)				(8) X (13)

Source: S&P Global Market Intelligence

Last Updated: 2/25/2021

* Due to Rounding, the ROE Award is reported as 10.00 on the S&P Global Website.

‡ S&P incorrectly reports this value as 9.9%

Ω Utility did not file a full rate case, approved ROE based on a settlement

¥ Weighted to include ratemaking-principles rate base and ROE

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, A)	
CERTIFICATE OF PUBLIC CONVENIENCE)	
AND NECESSITY TO DEPLOY ADVANCED)	CASE NO. 2020-00350
METERING INFRASTRUCTURE,)	
APPROVAL OF CERTAIN REGULATORY)	
AND ACCOUNTING TREATMENTS, AND)	
ESTABLISHMENT OF A ONE-YEAR)	
SURCREDIT)	

EXHIBIT LVP-4 OF

LISA V. PERRY

ON BEHALF OF

WALMART INC.

Calculation of Revenue Requirement Impact of LG&E's Proposed ROE vs. ROE Awarded to KPCO in 2021

(1) Schedule J-1 LG&E Requested Rate of Return on Capitalization 7.17%

1) Calculate Rate of Return Using the National Average ROE (9.55%)

		Percent of Total			
		Capital Component	Capital	Cost	Weighted Cost
(2)	Revised Schedule J-1.1/J-1.2	Short-term Debt	1.26%	0.46%	0.01%
(3)	Revised Schedule J-1.1/J-1.2	Long-term Debt	45.55%	4.04%	1.84%
(4)	Revised Schedule J-1.1/J-1.2	Common Equity	53.19%	9.30%	4.95%
(5)	(2)+(3)+(4)	Rate of Return at KPCO's Awarded ROE (9.30%)			6.79%

2) Calculate Revenue Requirement Impact at the Proposed ROE

(6)	Revised Schedule J-1.1/J-1.2	Rate Base	\$	3,449,573,908
(7)	= (5)	Rate of Return (ROE = 9.30%)		6.79%
(8)	(6) x (7)	Adjusted Income Requirement (ROE = 9.30%)	\$	234,318,724
(9)	Schedule C-1	LG&E's Proposed Income Requirement	\$	248,313,187
(10)	(9) - (8)	Difference in Income Requirement	\$	13,994,463
(11)	Schedule H-1	Conversion Factor		1.337837
(12)	(10) x (11)	Difference in Revenue Requirement	\$	18,722,311
(13)	Schedule M-2.1	Requested Revenue Requirement Increase	\$	131,248,802
(14)	(12) / (13)	Percent of Increase from ROE Increase		14.26%