COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR AN ADJUSTMENT OF ITS ELECTRIC AND GAS RATES AND FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY	)))))	CASE NO. 2016-00371

PREFILED DIRECT TESTIMONY OF NEAL TOWNSEND ON BEHALF OF THE KROGER CO.

March 3, 2017

DIRECT TESTIMONY OF NEAL TOWNSEND

Introduction

Q. Please state your name and business address.

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

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

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

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

A. My testimony is being sponsored by The Kroger Co. ("Kroger"). Kroger is one of the largest retail grocers in the United States, and operates over thirty stores and other facilities in the territory served by Louisville Gas and Electric Company ("LG&E). These facilities purchase in excess of 90 million kilowatt-hours annually from LG&E.

Q. Please describe your professional experience and qualifications.

A. I have provided regulatory and technical support on a variety of energy projects at Energy Strategies since I joined the firm in 2001. Prior to my employment at Energy Strategies, I was employed by the Utah Division of Public Utilities as a Rate Analyst from 1998 to 2001. I have also worked in the aerospace, oil and natural gas industries.

Q. Have you previously testified before this Commission?

A. Yes. I filed testimony in LG&E's 2014 base rate case, Case No. 2014-00372, Kentucky Utilities Company's ("KU") 2014 base rate case, Case No. 2014-00371,

LG&E's 2009 base rate case, Case No. 2009-00549 and KU's 2009 base rate case, Case No. 2009-00548.

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

A. Yes. I have testified in utility regulatory proceedings before the Arkansas Public Service Commission, the Illinois Commerce Commission, the Indiana Utility Regulatory Commission, the Michigan Public Service Commission, the New Mexico Public Regulation Commission, the Public Utilities Commission of Ohio, the Public Utility Commission of Oregon, the Public Utility Commission of Texas, the Utah Public Service Commission, the Virginia Corporation Commission, and the Public Service Commission of West Virginia.

Overview and Recommendations

Q. What is the purpose of your testimony in this proceeding?

A. My testimony addresses the following issues:

(1) The appropriate level of major generation overhaul expense to include in LG&E's revenue requirement.

(2) The appropriate revenue allocation across customer classes, commonly referred to as "rate spread."

Q. Please summarize your conclusions and recommendations.

A. (1) For ratemaking purposes, it is preferable to use a normalization technique for generation overhaul expense because the actual overhaul expense in a given test period may not be representative of annual overhaul expense over time. For the purposes of this case, I recommend that generation overhaul expense be based on the historical four-year

annual average for this expense for the years 2013 through 2016, with the exception of the relatively new Cane Run Unit 7, for which a combination of historical and projected expense would be used. This adjustment reduces LG&E's revenue requirement by approximately $10.5 million relative to LG&E's filed case.

(2) LG&E's rate spread proposal results in significant cross-subsidies among customer classes. Notably, the Time-of-Day Secondary class is proposed to pay a subsidy that is more than 18% of its proposed rates, the greatest of any class as a percentage of proposed revenue. In my opinion, this is excessive and unreasonable. LG&E's rate spread should be modified so that the burden of paying for the proposed subsidies in rates is more equitably borne across the customer classes. Rather than the Time-of-Day Secondary class paying a disproportionately greater subsidy than the other commercial-type classes, the rate spread should be modified such that each of the commercial-type classes (General Service, Power Service – Secondary, Power Service – Primary, Time-of-Day Secondary) contributes to the subsidy as an *equal percentage* of its base rates. I make this recommendation subject to the constraints that no class would receive a rate decrease relative to current rates nor receive an increase that is more than 2.5% above the average retail increase.

Generation Overhaul Expense

Q. **What amount of generation overhaul expense is included in LG&E's proposed revenue requirement?**

A. LG&E's proposed revenue requirement includes $22.6 million of major generation overhaul expense for the Forecasted Test Period (twelve months ending June

30, 2018), compared to $13.7 million in the Base Period (twelve months ended February 28, 2017).[1] According to LG&E's Electric Operations Schedule D-1, LG&E's adjustments to the Base Period reflect major planned overhauls for Mill Creek, Trimble County Units 1 and 2, Cane Run Unit 7, and EW Brown Unit 6 in the Forecasted Test Period.

Q. Do you agree that LG&E's revenue requirement should be based on overhaul expenses forecast to occur during the Forecasted Test Period?

A. No. The overhaul schedule for a generating facility generally follows a multi-year cycle, as explained in LG&E's response to Kroger's Supplemental Request for Information Q-8. Consequently, for a given plant, a year in which expense for a planned overhaul is high may be followed by years of little or no expense. For ratemaking purposes, it is preferable to use a normalization technique for this expense item because the actual overhaul expense in a given test period may not be representative of annual overhaul expense over time.

A reasonable normalization technique for setting test year overhaul expense is to use an historical average over a multi-year period, rather than the expense experienced (or projected) for a single year. This approach smoothes out the otherwise volatile pattern of annual costs that is typical of generation overhaul expense. Once adopted, this approach should continue to be used in subsequent cases. For the purposes of this case, I recommend that generation overhaul expense be based on the historical four-year annual average for this expense for the years 2013 through 2016.

[1] LG&E's responses to Kroger's Supplemental Requests for Information Q-9, Attachment 2016_Kroger_DR2_LGE_Attach_to_Q9, "LGE" tab, and Q-10.

My calculation excludes the overhaul expense associated with Cane Run Units 4, 5, and 6 from the historical four-year average, because these coal units retired in 2015. By the same token, my calculation adds the average annual overhaul expense for Cane Run Unit 7 for years 2016 through 2019, because this unit began operating in mid-2015. My recommended overhaul expense for Cane Run Unit 7 is based on the actual overhaul expense for 2016 and the forecast overhaul expense for 2017 through 2019.

I have prepared a generation overhaul expense adjustment using this approach, which is presented in Exhibit NT-1.

Q. What is the revenue requirement impact of your recommended adjustment?

A. This adjustment reduces LG&E's revenue requirement by approximately $10.5 million relative to LG&E's filed case.

Rate Spread

Q. What general guidelines should be employed in spreading any change in rates?

A. In determining rate spread, or revenue allocation, it is important to align rates with cost causation to the greatest extent practicable. Properly aligning rates with the costs caused by each customer group is essential for ensuring fairness, as it minimizes cross subsidies among customers. It also sends proper price signals, which improves efficiency in resource utilization.

At the same time, it can be appropriate to mitigate the impact of moving immediately to cost-based rates for customer groups that would experience significant rate increases from doing so. This principle of ratemaking is known as "gradualism." When employing this principle, it is important to adopt a long-term strategy of moving in

the direction of cost causation, and to avoid schemes that result in permanent cross-subsidies from other customers.

Q. How does the spread of rates proposed by LG&E relate to class recovery of cost of service?

A. Two class cost-of-service studies were performed under the direction of LG&E that utilize different fixed production cost allocation methods: the modified Base-Intermediate-Peak ("BIP") method, used by LG&E and KU in the past, and the loss of load probability ("LOLP") method. Under both studies, rates of return at current rates vary widely among customer classes, ranging from 1.94% to 11.92% under the BIP method, and 2.04% to 17.55% under the LOLP method. Relative rates of return range from 0.39 to 2.42 under the BIP method, and from 0.41 to 3.57 under the LOLP method.

Despite these results, LG&E proposes rate increases within a fairly narrow band. With the exception Lighting Energy Service, which is not proposed to receive an increase by LG&E, classes are proposed to receive increases ranging from only approximately 1.0% above the system average increase to 1.8% below the system average increase of 8.52%.[2] The cost-of-service study results at current rates are summarized alongside LG&E's proposed rate increase percentages in Table NT-1, below.

[2] The system average increase of 8.52% includes LG&E's proposed change to Curtailable Service Rider revenue, consistent with LG&E's depiction in the Direct Testimony of William Steven Seelye, p. 8, Table 1. If the change to Curtailable Service Rider revenue (and Other Operating Revenue) is excluded, LG&E's proposed overall system average increase is 8.31%, and LG&E's proposed class rate increases range from 1.2% above to 1.6% below the system average increase.

Table NT-1
Class Rates of Return ("ROR") at Current Rates and
LG&E Proposed Rate Increases[3]

Rate Class	ROR on Rate Base		Relative ROR		LG&E Rev. Increase
	BIP	LOLP	BIP	LOLP	
Residential Service	2.65%	2.04%	0.54	0.41	9.54%
General Service	7.34%	8.65%	1.49	1.76	7.15%
Power Service - Secondary	8.84%	9.70%	1.80	1.97	7.05%
Power Service - Primary	6.49%	7.03%	1.32	1.43	8.25%
Time-of-Day Secondary	11.92%	11.90%	2.42	2.42	6.75%
Time-of-Day Primary	4.57%	5.39%	0.93	1.10	8.22%
Retail Transmission Service	3.48%	4.83%	0.71	0.98	8.45%
Lighting Energy Service	8.01%	17.55%	1.63	3.57	0.00%
Traffic Energy Service	7.62%	10.39%	1.55	2.11	6.76%
Lighting & Restricted Lighting Service	5.39%	6.01%	1.10	1.22	8.21%
Special Contracts	1.94%	2.47%	0.39	0.50	8.69%
Total All Classes	4.92%	4.92%	1.00	1.00	8.52%

After applying LG&E's proposed rate increases, wide disparities in class rates of return continue to exist. The rate of return for Time-of-Day Secondary Service after LG&E's proposed increase is significantly higher than any other class under both studies, with the exception of Lighting Energy Service, which is not proposed to receive a rate increase by LG&E. These results are summarized in Table NT-2, below.

[3] Data Source: Direct Testimony of William Steven Seelye, p. 8, Table 1. Relative rates of return calculated by dividing class rates of return on rate base by the Total All Classes rate of return on rate base. Residential Time of Day Service is included in Residential Service in Tables NT-1, NT-2, NT-3, and NT-4. Rate Fluctuating Load Service is not shown in the tables because no customers are currently served on the rate (no rate increase is proposed for the rate).

Table NT-2
Class Rates of Return at LG&E's Proposed Rates[4]

Rate Class	ROR on Rate Base		Relative ROR	
	BIP	LOLP	BIP	LOLP
Residential Service	4.92%	4.17%	0.67	0.57
General Service	9.86%	11.37%	1.35	1.56
Power Service - Secondary	11.35%	12.34%	1.55	1.69
Power Service - Primary	9.35%	10.00%	1.28	1.37
Time-of-Day Secondary	14.41%	14.39%	1.97	1.97
Time-of-Day Primary	7.25%	8.25%	0.99	1.13
Retail Transmission Service	6.34%	8.05%	0.87	1.10
Lighting Energy Service	7.98%	17.50%	1.09	2.39
Traffic Energy Service	10.24%	13.48%	1.40	1.84
Lighting & Restricted Lighting Service	6.85%	7.54%	0.94	1.03
Special Contracts	4.45%	5.13%	0.61	0.70
Total All Classes	7.31%	7.31%	1.00	1.00

The wide disparities in class rates of return are indicative of significant cross-subsidies among customer classes. The subsidies embedded in LG&E's rate spread proposal are shown in Table NT-3, below. This table also shows that there are wide disparities in terms of the *degree* of subsidies that different classes are called upon to pay. For example, the General Service class is proposed to pay a subsidy that ranges from 7% to 10% of its base rates, depending on the cost-of-service study that is used. Meanwhile, the Time-of-Day Secondary class is proposed to pay a subsidy that is more than 18% of its proposed rates, the greatest of any class as a percentage of proposed revenue. This means that the rates for Time-of-Day Secondary are proposed to be more than 22% above cost measured under *either* cost-of-service study.[5] In my opinion, this is excessive and unreasonable.

[4] Data Source: *Id.*, p. 103, Table 13.
[5] Time-of-Day Secondary's revenue at an equalized 7.31% rate of return is $73,535,607 under the BIP method, and $73,572,394 under the LOLP method.

Table NT-3
Subsidies Paid/(Received) at LG&E's Proposed Rate Spread
Under the BIP and LOLP Methods[6]

Rate Class	LG&E Proposed Revenue	Subsidy Paid/(Received) $[7]			Subsidy Paid/ -Received %[8]		
		BIP	LOLP	Average[9]	BIP	LOLP	Avg.
Residential Service	483,649,803	(45,042,494)	(62,831,179)	(53,936,836)	-9.3%	-13.0%	-11.2%
General Service	182,642,225	12,506,473	18,349,275	15,427,874	6.8%	10.0%	8.4%
Power Service - Secondary	176,526,765	19,074,122	22,558,536	20,816,329	10.8%	12.8%	11.8%
Power Service - Primary	13,570,842	750,338	951,297	850,818	5.5%	7.0%	6.3%
Time-of-Day Secondary	90,137,293	16,601,686	16,564,899	16,583,292	18.4%	18.4%	18.4%
Time-of-Day Primary	136,755,655	(269,337)	3,462,637	1,596,650	-0.2%	2.5%	1.2%
Retail Transmission	74,719,968	(2,013,675)	1,352,304	(330,685)	-2.7%	1.8%	-0.4%
Lighting Energy Service	244,537	3,324	31,520	17,422	1.4%	12.9%	7.1%
Traffic Energy Service	324,800	22,593	40,219	31,406	7.0%	12.4%	9.7%
Lght. & Restricted Lght.	25,309,553	(592,469)	271,950	(160,259)	-2.3%	1.1%	-0.6%
Special Contracts	11,167,899	(1,040,562)	(751,458)	(896,010)	-9.3%	-6.7%	-8.0%
Total All Classes	1,195,049,340	0	0	0	0.0%	0.0%	0.0%

Q. Do you have any recommended changes to LG&E's proposed rate spread?

A. Yes. LG&E's proposal for the Time-of-Day Secondary class to bear a grossly disproportionate share of the subsidy burden should be rejected. Instead, LG&E's rate spread should be modified so that the burden of paying for the proposed subsidies in rates is more equitably borne across the customer classes. To that end, I recommend that the cost of the proposed subsidies should be equalized (on a percentage basis) across each of the commercial-type classes (General Service, Power Service – Secondary, Power Service – Primary, Time-of-Day Secondary), based on the average of the BIP and LOLP cost-of-service study results. That is, rather than the Time-of-Day Secondary class paying a disproportionately greater subsidy than the other commercial-type classes, the

[6] Curtailable Service Riders and Other Operating Revenues are not depicted in Table NT-3.
[7] Subsidy Paid/(Received) $ represents the difference between LG&E's proposed revenues and revenues at an equalized rate of return at LG&E's proposed total revenue requirement.
[8] Subsidy Paid/-Received % calculated by dividing Subsidy Paid/Received $ by LG&E Proposed Revenue.
[9] Average column is the average of the BIP and LOLP study results.

rate spread should be modified such that each of these classes contributes to the subsidy as an *equal percentage* of its base rates. I make this recommendation subject to the constraints that no class would receive a rate decrease relative to current rates nor receive an increase that is more than 2.5% above the average retail increase.

Q. Have you prepared an alternative rate spread proposal that incorporates your recommendation?

A. Yes, I have. My recommended rate spread (at LG&E's requested revenue requirement) is presented in Exhibit NT-2 and is summarized in Table NT-4, below.

Table NT-4
Kroger Recommended Rate Spread
at LG&E's Requested Revenue Requirement

Rate Class	Current Revenue	Kroger Recommended Revenue Change $[10]	Kroger Recommended Revenue Change %	Subsidy Paid/ (Received) $ Average COS[11]	Subsidy Paid/ -Received % Average COS
Residential Service	441,518,068	42,131,735	9.54%	(53,936,836)	-11.15%
General Service	170,461,520	18,304,819	10.74%	21,551,988	11.42%
Power Service - Secondary	164,895,598	10,884,104	6.60%	20,069,266	11.42%
Power Service - Primary	12,536,325	1,355,554	10.81%	1,171,854	8.44%
Time-of-Day Secondary	84,439,205	0	0.00%	10,885,204	12.89%
Time-of-Day Primary	126,370,424	10,385,231	8.22%	1,596,650	1.17%
Retail Transmission	68,895,503	5,824,465	8.45%	(330,685)	-0.44%
Lighting Energy Service	244,537	0	0.00%	17,422	7.12%
Traffic Energy Service	304,220	20,580	6.76%	31,406	9.67%
Lght. & Restricted Lght.	23,389,325	1,920,228	8.21%	(160,259)	-0.63%
Special Contracts	10,274,768	893,131	8.69%	(896,010)	-8.02%
Total All Classes	1,103,329,493	91,719,847	8.31%	0	0.00%
Other Revenue Items [12]	17,449,801	1,897,880	10.88%		
Total	1,120,779,294	93,617,727	8.35%		

[10] Kroger's recommended rate spread alters the rate increase only for General Service, Power Service – Secondary, Power Service – Primary, and Time-of-Day Secondary, relative to LG&E's proposed rate spread.
[11] Average COS represents the average of the BIP and LOLP cost-of-service studies.
[12] Other Revenue Items consist of Curtailable Service Riders and Other Operating Revenues. Kroger is neither supporting nor opposing the revenue changes to the other revenue items.

Q. **In your recommended rate spread at LG&E's requested revenue requirement, shown above in Table NT-4, the Time-of-Day Secondary class would still pay a subsidy that is greater than the other commercial-type classes. Can you please explain why this occurs?**

A. As I stated above, I have constrained my recommended rate spread to ensure that no class would receive a rate decrease relative to current rates. If the percentage subsidy is completely equalized across the commercial-type classes, then the Time-of-Day Secondary class would receive a small rate decrease relative to current rates. While I believe that a rate decrease is reasonable and cost-justified for this class – indeed LG&E's cost-of-service studies demonstrate that a rate decrease of approximately 13% is warranted for Time-of-Day Secondary – for the purpose of this case I am recommending that no class receive a decrease.

Q. **Do you believe that a zero rate change for Time-of-Day Secondary is reasonable in light of the overall 8.3% rate increase being recommended by LG&E?**

A. Yes. As a threshold matter, I don't agree that the full rate increase being proposed by LG&E is warranted. But even if LG&E's overall proposed revenue increase were approved by the Commission, it would be entirely appropriate for Time-of-Day Secondary to receive no rate increase because the rates for this class are already so far above its costs. As shown in Table NT-4, even with a zero rate change, nearly 13% of the base rates for Time-of-Day Secondary would consist of subsidies paid to other classes. It is unreasonable for this class to receive any rate increase on top of this large subsidy it would be paying. Moreover, LG&E is already proposing that the Lighting

Energy Service class receive no increase. My recommended treatment of Time-of-Day Secondary is merely consistent with LG&E's proposal for Lighting Energy Service.

Q. What is your recommendation regarding rate spread if the Commission approves a revenue requirement that is lower than proposed by LG&E?

A. Consistent with my recommendation summarized in Table NT-4 above, at a lower revenue requirement, the Time-of-Day Secondary and Lighting Energy Service classes should receive no rate increase. Any reduced revenue requirement should be distributed among the remaining classes, with the percentage reduction (as applied to the percentage increases in Table NT-4) being greater for those classes that are significant subsidy payers.

Q. Does this conclude your direct testimony?

A. Yes.

Derivation of Kroger Recommended LG&E Generation Overhaul Expense

Line No.	(a) Existing Generation - Overhaul Expense ($)	(b) 2013 Actual	(c) 2014 Actual	(d) 2015 Actual	(e) 2016 Actual	(f) Kroger Recommended 4-Yr Average	(g) LG&E Proposed Amount
1	TRIMBLE COUNTY 1 - GENERATION	1,206,445	116,148	2,494,812	91,891	977,324	7,828,000
2	TRIMBLE COUNTY 2 - GENERATION	917	622,592	169,772	589,579	345,715	1,232,000
3	LGE GENERATION - COMMON	180,524	(285,368)	(90,334)	(6,644)	(50,455)	0
4	CANE RUN 4 - GENERATION		Unit Retired				0
5	CANE RUN 5 - GENERATION		Unit Retired				0
6	CANE RUN 6 - GENERATION		Unit Retired				0
7	MILL CREEK 1 - GENERATION	5,909,779	106,760	2,630,310	329,549	2,244,100	650,000
8	MILL CREEK 2 - GENERATION	14,477	2,270,400	2,980,592	3,150,973	2,104,111	7,209,000
9	MILL CREEK 3 - GENERATION	4,250,438	338,550	451,760	4,837,419	2,469,542	3,684,000
10	MILL CREEK 4 - GENERATION	1,291,894	6,942,118	685,751	3,643,371	3,140,784	750,000
11	MILL CREEK 1&2 SCRUBBER	0	0	0	41,480	10,370	0
12	PADDYS RUN GT 12	27,835	0	0	0	6,959	0
13	PADDYS RUN GT 13	44,243	99,436	57,388	76,976	69,511	182,000
14	TRIMBLE COUNTY #5 COMBUSTION TURBINE	0	0	0	0	0	0
15	TRIMBLE COUNTY #7 COMBUSTION TURBINE	0	0	737	0	184	0
16	TRIMBLE COUNTY #8 COMBUSTION TURBINE	0	0	0	0	0	0
17	TRIMBLE COUNTY #9 COMBUSTION TURBINE	0	0	0	0	0	0
18	TRIMBLE COUNTY #10 COMBUSTION TURBINE	0	0	0	0	0	0
19	E W BROWN COMBUSTION TURBINE UNIT 5	0	0	15,726	0	3,932	0
20	E W BROWN COMBUSTION TURBINE UNIT 6	16,232	44,418	12,786	4,560	19,499	290,700
21	E W BROWN COMBUSTION TURBINE UNIT 7	(24,548)	91,942	(43,973)	20,726	11,037	18,240

	New Generation - Overhaul Expense ($)	2016 Actual	2017 Plan	2018 Plan	2019 Plan	Kroger Recommended 4-Yr Average	LG&E Proposed Amount
22	CANE RUN CC GT 2016	314,243	735,000	281,000	1,557,000	721,811	735,000
23	**Total Generation ($)**					12,074,421	22,578,940
24	**Kroger Recommended Adjustment ($)**						(10,504,519)

Data Source: LG&E's responses to Kroger's Supplemental Requests for Information Q-9, Attachment 2016_Kroger_DR2_LGE_Attach_to_Q9, Q-10, and Q-11.

Comparison of LG&E's and Kroger's Recommended Rate Spread at LG&E's Requested Revenue Requirement

			LG&E Proposed Spread[1]					Kroger Recommended				
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
Line No.	Rate Class	Total Revenue at Current Rates[1]	Total Revenue at Proposed Rates	Proposed Change in Total Revenue	Proposed Percent Change in Total Revenue	Proposed Subsidy Paid/ (Received)[3]	Percent Subsidy Paid/ (Received)[4]	Total Revenue at Proposed Rates	Proposed Change in Total Revenue	Proposed Percent Change in Total Revenue	Proposed Subsidy Paid/ (Received)[3]	Percent Subsidy Paid/ (Received)[4]
1	Residential Service	441,462,416	483,588,845	42,126,429	9.54%	(53,936,836)	-11.15%	483,588,845	42,126,429	9.54%	(53,936,836)	-11.15%
2	Residential Time-of-Day Service	55,652	60,958	5,306	9.53%			60,958	5,306	9.53%		
3	General Service	170,461,520	182,642,225	12,180,705	7.15%	15,427,874	8.45%	188,766,339	18,304,819	10.74%	21,551,988	11.42%
4	Power Service-Secondary	164,895,598	176,526,765	11,631,167	7.05%	20,816,329	11.79%	175,779,702	10,884,104	6.60%	20,069,266	11.42%
5	Power Service-Primary	12,536,325	13,570,842	1,034,517	8.25%	850,818	6.27%	13,891,879	1,355,554	10.81%	1,171,854	8.44%
6	Time-of-Day Secondary Service	84,439,205	90,137,293	5,698,088	6.75%	16,583,292	18.40%	84,439,205	0	0.00%	10,885,204	12.89%
7	Time-of-Day Primary Service	126,370,424	136,755,655	10,385,231	8.22%	1,596,650	1.17%	136,755,655	10,385,231	8.22%	1,596,650	1.17%
8	Retail Transmission Service	68,895,503	74,719,968	5,824,465	8.45%	(330,685)	-0.44%	74,719,968	5,824,465	8.45%	(330,685)	-0.44%
9	Fluctuating Load Service	0	0	0	0.00%	0	0.00%	0	0	0.00%	0	0.00%
10	Lighting Energy Service	244,537	244,537	0	0.00%	17,422	7.12%	244,537	0	0.00%	17,422	7.12%
11	Traffic Energy Service	304,220	324,800	20,580	6.76%	31,406	9.67%	324,800	20,580	6.76%	31,406	9.67%
12	Lighting Service & Restricted Lighting Service	23,389,325	25,309,553	1,920,228	8.21%	(160,259)	-0.63%	25,309,553	1,920,228	8.21%	(160,259)	-0.63%
13	Special Contracts	10,274,768	11,167,899	893,131	8.69%	(896,010)	-8.02%	11,167,899	893,131	8.69%	(896,010)	-8.02%
14	Sub-Total	1,103,329,493	1,195,049,340	91,719,847	8.31%	(0)	0.00%	1,195,049,340	91,719,847	8.31%	(0)	0.00%
15	Other Revenue Items[2]											
16	Curtailable Service Riders	(4,334,522)	(2,414,251)	1,920,271	-44.30%			(2,414,251)	1,920,271	-44.30%		
17	Other Operating Revenue	21,784,323	21,761,932	(22,391)	-0.10%			21,761,932	(22,391)	-0.10%		
18	**Total**	**1,120,779,294**	**1,214,397,021**	**93,617,727**	**8.35%**	(0)	**0.00%**	**1,214,397,021**	**93,617,727**	**8.35%**	(0)	**0.00%**

Notes:

1. Data Source: LG&E Schedule M-2.1-E, p. 1 of 1.
2. Kroger is neither supporting nor opposing the revenue changes to the other revenue items.
3. The subsidy is based on a calculation that uses an average of the BIP and LOLP cost of service study results.
4. The percent subsidy is calculated by divided the Proposed Subsidy (Column [f] or [k]) by the Total Revenue at Proposed Rates (Column [c] or [h]).

VERIFICATION

STATE OF UTAH)
) SS:
COUNTY OF SALT LAKE)

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

Neal Townsend

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 1ST day of March, 2017.

(SEAL)
Notary Public

My Commission Expires:
April 10, 2019

Notary Public
Kimberlie A. Ignjatovic
Commission #682578
My Commission Expires
April 10, 2019
State of Utah