## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:	
JOINT APPLICATION OF KENTUCKY	)
UTILITIES COMPANY AND LOUISVILLE	)
GAS AND ELECTRIC COMPANY FOR	) CASE NO. 2016-00274
APPROVAL OF AN OPTIONAL SOLAR	)
SHARE PROGRAM RIDER	j

#### **RESPONSE OF**

# KENTUCKY UTILITIES COMPANY and LOUISVILLE GAS AND ELECTRIC COMPANY

TO

COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION DATED SEPTEMBER 16, 2016

FILED: SEPTEMBER 26, 2016

COMMONWEALTH OF KENTUCKY	)	
	)	SS:
COUNTY OF JEFFERSON	)	

The undersigned, **John P. Malloy**, being duly sworn, deposes and says that he is Vice President, Customer Services for Kentucky Utilities Company and Louisville Gas and Electric Company and an employee of LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and bekief.

John P. Malloy

Subscribed and sworn to before me, a Notary Public in and before said County

and State, this \_\_\_\_day of \_\_\_

\_ 2010.

Notary Public

My Commission Expires:

JUDY SCHOOLER

Notary Public, State at Large, KY My commission expires July 11, 2018

Notary ID # 512743

COMMONWEALTH OF KENTUCKY	)	
	)	SS:
COUNTY OF JEFFERSON	)	

The undersigned, **David E. Huff**, being duly sworn, deposes and says that he is Director of Customer Energy Efficiency & Smart Grid Strategy for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

David E. Huff

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 4 day of 4 day of 2016.

Notary Public (SEAL)

My Commission Expires:

JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

COMMONWEALTH OF KENTUCKY	)	
	)	SS:
COUNTY OF JEFFERSON	)	

The undersigned, **Rick E. Lovekamp**, being duly sworn, deposes and says that he is Manager – Regulatory Affairs/Tariffs for LG&E and KU Services Company, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

Rick E. Lovekamp

Subscribed and sworn to before me, a Notary Public in and before said County and State, this Low day of September 2016.

Heldy Schooler Notary Public

My Commission Expires:

JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

COMMONWEALTH OF KENTUCKY	)	
	)	SS:
COUNTY OF JEFFERSON	)	

The undersigned, **William Steven Seelye**, being duly sworn, deposes and states that he is the Managing Partner with The Prime Group, LLC, and that he has personal knowledge of the matters set forth in the responses for which he is identified as the witness, and the answers contained therein are true and correct to the best of his information, knowledge and belief.

William Steven Seelye

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 16th day of 2016.

Jeerly Schoole (SEAL) Votary Public

My Commission Expires:

JUDY SCHOOLER
Notary Public, State at Large, KY
My commission expires July 11, 2018
Notary ID # 512743

#### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Question No. 1**

Witness: Rick E. Lovekamp / David E. Huff

- Q-1. Refer to the Companies' response to Commission Staff's Initial Request for Information ("Staff's First Request"), Item 2.
  - a. Confirm that a change to the Solar Capacity Charge could occur only in a base rate case proceeding. If this cannot be confirmed, state the type of proceeding in which the Companies would request a change.
  - b. Explain how a customer subscribing to less than 50 kW will be made aware that the Solar Capacity Charge can change within the 12-month subscription period.

#### A-1.

- a. The Companies would agree that changes to the Solar Capacity Charge would occur only in the context of a base rate case proceeding.
- b. All customers subscribing to the Solar Share Program will be informed that the Solar Capacity Charge may change over time, including during their 12-month subscription period through the Companies' marketing and communications materials about the program. The Companies will include this notice along with the other pertinent information about the program such as the non-refundable subscription fee. The Companies place the utmost importance on positive customer experience and will endeavor to assure interested customers understand all aspects of the program before committing to participate. Any actual change that would occur in that time period will be part of a base rate case. Notice of such filing will be provided in accordance with the regulatory filing requirements.

#### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Question No. 2**

Witness: David E. Huff

- Q-2. Refer to the Companies' response to Staff's First Request, Item 8.
  - a. The attachment to the response is redacted; however, the Companies' confidential filing does not include the attachment to this response. Provide the confidential version of the attachment.
  - b. The last sentence of the response states that the amount of Ongoing Costs in Exhibit 5 of the Application includes additional costs for unplanned maintenance. Explain how the amount of additional unplanned maintenance was determined.

#### A-2.

- a. The confidential attachment was inadvertently omitted from the Companies' confidential filing. The confidential attachment was provided to the Commission on September 19, 2016 under seal pursuant to the petition for confidential protection filed on September 6, 2016 in this case.
- b. The Companies relied upon their own experience and the experience of solar providers to provide a reasonable estimate of unplanned maintenance expense. Further the amount of unplanned maintenance expense is sufficient to replace most single components, on an annual basis, not covered under warranty such as the weather station, networking equipment, security equipment, single distribution panels, etc.

## Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### Question No. 3

Witness: David E. Huff

- Q-3. Refer to the Companies' response to Staff's First Request, Item 23.a. By month, provide the kWh expected to be provided by a quarter kW capacity subscription.
- A-3. Please see below.

Month	kWh	# of 250 W shares	kWh per 250 W share
January	37269	2000	18.6
February	49229	2000	24.6
March	55711	2000	27.9
April	64123	2000	32.1
May	76176	2000	38.1
June	75060	2000	37.5
July	72648	2000	36.3
August	73271	2000	36.6
September	64128	2000	32.1
October	55117	2000	27.6
November	41636	2000	20.8
December	36770	2000	18.4
Annual	701138	2000	350.6

## Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Question No. 4**

Witness: David E. Huff

- Q-4. Refer to the Companies' response to Staff's First Request, Item 25, attachment, page 3 of 49, Section 1.2. The section indicates that the Solar Share Facility is to serve only non-residential customers. State whether this was the Companies' intention when the request for proposals was issued.
- A-4. Yes. Initially, the request for proposals was to obtain a contract that could serve our business customers' needs. As residential and business customers' interest increased the Companies realized that the same contractor could build a community solar project because technically it is the same as a similarly sized business solar project.

### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

**Question No. 5** 

Witness: David E. Huff

- Q-5. Refer to the Companies' response to Staff's First Request, Item 30. State whether a customer would be refunded the Subscription Fee if the next Solar Share Facility never became fully subscribed.
- A-5. No, because the subscription fee helps offset administrative costs. The Companies will incur administrative costs regardless of whether the next Solar Share Facility is built.

## Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Question No. 6**

Witness: Rick E. Lovekamp

- Q-6. Refer to the Companies' response to Staff's First Request, Item 34.
  - a. State how frequently the Companies will examine the allocation of the Solar Share Facilities cost.
  - b. Explain the effect it would have on each of the Companies when the allocation between the Companies changes.

#### A-6.

- a. The Companies will examine the allocation of each Solar Share Facility once it is fully subscribed to align with the allocation of customers subscribed.
- b. The associated capital for each Solar Share Facility would be increased or decreased based on the subscription allocation versus the initial customer allocation of 56% KU and 44% LG&E.

#### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Ouestion No. 7**

Witness: W. Steven Seelye

- Q-7. Refer to the Companies' response to Staff's First Request, Item 37, and to the Application, the Direct Testimony of Steven S. Seelye and Exhibit WSS-3.
  - a. The response to Item 37 states that the rate schedules not represented in Exhibit WSS-3 have three-part rates consisting of a customer charge, energy charge, and demand charge, and therefore it was not necessary to calculate the variable cost component for these classes. Notwithstanding that response, provide a revised Exhibit WSS-3 which includes the classes eligible for the Solar Share Program that are not represented in the exhibit.
  - b. Exhibit WSS-3 states that the source for the exhibit is the cost-of-service studies filed in the Companies' most recent base rate cases, adjusted for the revenue requirement authorized in those cases. Provide the adjusted cost-of-service studies in Excel spreadsheet format with the formulas intact and unprotected.
  - c. Mr. Seelye's testimony at page 3 states that the Solar Energy Credit is "based on the variable cost of production." Explain in general why there is a difference in the variable costs of production among the rate classes.

#### A-7.

- a. See attachment provided in Excel format. The calculated Unit Costs for all rate classes eligible for the Solar Share Program are shown on row 18 of the attachment. Please note that for the rate schedules with three-part rates consisting of a customer charge, energy charge, and demand charge, the calculated Unit Cost may differ from the Solar Energy Credit for those same rate schedules. As previously stated, the energy charges set forth in the tariff will be used as the credit for rate schedules with three-part rates because essentially no demand costs are recovered through the energy charges for those rates; therefore it is appropriate to set the Solar Energy Credit equal to the energy charge for those rates.
- b. See attachments provided in Excel format.

c. The differences in variable costs by rate class are a result of the expense adjustments shown on row 11 and the miscellaneous revenues shown on rows 13 and 14, in Attachment to Question No. 7a, being allocated to the rate classes on the basis of total expenses or total revenue and then subsequently functionally assigned as variable on the basis of the relationship of the variable costs to total cost. This process results in a slight difference in variable cost for each rate class. If these items were excluded from the revenue requirement calculation, the variable cost components would be the same for all rate classes for each individual company. However, it is necessary to account for these adjustments so that total energy-related, demand-related and customer-related cost components tie back to the revenue requirements for each rate schedule. It should also be noted that schedules served at primary voltage will be lower because of lower line loss percentages.

## Attachment in Excel

The attachment(s) provided in separate file(s) in Excel format.

#### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Ouestion No. 8**

Witness: David E. Huff / Rick E. Lovekamp / W. Steven Seelye

- Q-8. Refer to the Companies' response to Staff's First Request, Item 38. The response states that approximately \$1 million in unallocated capital will eventually be allocated to subsequent Solar Share Facilities.
  - a. Confirm that the \$1 million referenced in the response appears in the Application, Exhibit 5, as the subtotal of the third horizontal block of numbers in the exhibit (in the middle of the page) and is titled "Costs Incurred at 1st Solar Share Facility." If this cannot be confirmed, state where in Exhibit 5 the costs are located.
  - b. State whether the allocation of the \$1 million in unallocated capital costs to subsequent Solar Share Facilities will occur in the context of a base rate case filing. If not, state the type of filing in which this allocation will occur.
  - c. Exhibit WSS-2 shows the Solar Capacity Charge calculation for Solar Share Facility No. 1. State whether it is anticipated that the Solar Capacity Charge will change as each of the eight facilities is completed. If so, provide a revised WSS-2 showing the effect on the Solar Capacity Charge as each of the eight facilities is completed.
  - d. If the anticipated impact of the future allocation of the \$1 million in unallocated capital costs is not reflected in the response to subpart c. above, provide the effect the future allocation will have on the Solar Capacity Charge.

#### A-8.

- a. The Companies confirm that the approximately \$1 million in unallocated capital is shown in the third horizontal block of numbers in the Application Exhibit 5. This block totals \$952,070 and the costs are allocated 1/8 to each Solar Share Facility in the columns to the right.
- b. Yes, the allocation of the approximately \$1 million in unallocated capital costs to subsequent Solar Share Facilities will occur in the context of base rate case filings.

c. No, the Solar Capacity Charge will not change as each facility is completed but only in general rate cases. However, it is anticipated that the blended cost of Solar Share program will change as each of the eight facilities is completed, but not just because of changes in the costs of the new facilities. As explained in response to Question No. 12, as with any other utility property, the revenue requirement for the facilities will be reduced as the plant is depreciated. The cost of new facilities will be added to existing facilities and accumulated depreciation will be calculated for the total cost group, as with any other utility property. This is similar to the approach taken for pricing of street lighting service, with the cost of new facilities blended with the cost of existing facilities for purposes of establishing the net cost rate base in general rate cases.

The future impact on the Solar Capacity Charge will depend on the timing of the construction of new facilities as well as the timing of rate case filings. The costs of new and older Solar Share facilities will be aggregated for purposes of calculating the Solar Capacity Charge in future rate case filings. Therefore, a Solar Capacity Charge will not be determined for each project.

The attached analysis is a hypothetical illustration of the effect on the third-year revenue requirement if the first 500 kW facility is installed in 2017 and the second facility is installed in 2018 and the third facility is installed in 2019, a year in which, for purposes of this analysis, rates are established in a hypothetical general rate case filing. (It is assumed for purposes of this analysis that all investment tax credits are extended.)

d. The allocation of the approximately \$1 million in unallocated capital costs is reflected in the response to part c listed above.

#### Kentucky Utilities Company and Louisvillle Gas & Electric Company

Monthly Carrying Charges During 2019 Based on Hypothetical Installation of Three Projects

	Ţ	Total KU & LG&E			2019 Carryi	ng C	harges		
	-		2017	2018	2019	•	KU		LG&E
1a	Additions to Cost of Solar Facilities	\$	987,292	\$ 1,025,452	\$ 1,025,452	•			
1	Cost of Solar Facilities	\$	987,292	\$ 2,012,744	\$ 3,038,196		\$ 3,038,196		
2a	Additions to Land Cost	\$	68,125	\$ 68,125	\$ 68,125				
2	Land Cost	\$	68,125	\$ 136,250	\$ 204,375		\$ 204,375		
3	Company Percentage						56%		44%
	Rate Base								
4	Land Cost		Accum Depr	Accum Depr	Accum Depr	Total	\$ 114,450	\$	89,925
5	Original Cost Investment in Solar		Project 1	Project 2	Project 3	Accum Depr	1,701,390		1,336,806
6	Accumulated Depreciation	\$	118,475	\$ 82,036	\$ 41,018	\$ 241,529	135,256		106,273
7	Accummulated Deferred Income Taxes (See Page 2)						355,126		279,028
8	Unamortized Investment Tax Credit (KU Only)						371,159		
9	Net Cost Rate Base (Line 4+ 5 less Sum of Lines 6 thru 8)						\$ 954,299	\$	1,041,431
	Carrying Charges								
10	Weighted Average Cost of Capital (See Page 3)						7.15%		7.08%
11	Return (Line 9 x Line 10)						\$ 68,273	\$	73,720
12	Income Taxes (See Page 3)						38,238		39,145
13	Amortization of ITC						-		(16,042)
14	Depreciation Expenses (Line 5 ÷ 25 Years)	\$	39,492	\$ 80,510	\$ 121,528		68,056		53,472
15	Operation & Maintenance Expenses						61,548		48,357
16	Property Taxes (0.15% x [Line 4 + 5 - Line 6])						2,521		1,981
17	Total Revenue Requirements (Carrying Costs) (Sum of Lines 11 thru 16)						\$ 238,636	\$	200,634
18	Total for LG&E and KU							\$	439,270
19	Quarter-kW Shares (500 kW x 4 Qtr-kW/kW)								6,000
20	Monthly Fixed Charge							\$	6.10

## Kentucky Utilities Company and Louisvillle Gas & Electric Company Income Taxes

		KU				LG&E											
				2017 Plant		2018	Plant	2019 Plant	Sum of			2017 Plant		2018 P	Plant	2019 Plant	Sum of
	Assumptions		Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	2019 Amounts		Yr 1	Yr 2	Yr 3	Yr 1	Yr 2	Yr 3	2019 Amounts
1	Federal Income Tax Rate		35.0%	35.0%	35.0%	35.0%	35.0%	35.0%			35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	
2	State Income Tax Rate		6.0%	6.0%	6.0%		6.0%				6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	
3	199 Deduction (KY Only)		6.0%	6.0%	6.0%		6.0%	6.0%			6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	
4	Composite		38.7%	38.7%	38.7%		38.7%				38.7%	38.7%	38.7%	38.7%	38.7%	38.7%	
5	Investment	\$	552,884	\$ 552,884	\$ 552,884	\$ 574,253	\$ 574,253	\$ 574,253		\$	434,409 \$	434,409 \$	434,409	451,199	\$ 451,199	\$ 451,199	
6	Investment Tax Credit (%)		30.00%			30.00%		30.00%			30.00%			30.00%		30.009	5
7	Investment Tax Credit (\$)	\$	165,865			\$ 172,276		\$ 172,276		\$	130,323		:	135,360		\$ 135,360	
8	Deferred Tax Basis Reduction (%)		50.00%			50.00%		50.00%			50.00%			50.00%		50.00%	5
9	Deferred Tax Basis Reduction (\$)	\$	82,933			\$ 86,138		\$ 86,138		\$	65,161		:	67,680		\$ 67,680	
10	Deferred Tax Basis	\$	469,951			\$ 488,115		\$ 488,115		\$	369,247		:	383,519		\$ 383,519	
	Federal Deferred Income Taxes																
11	Bonus Depreciation	\$	234,976			\$ 244,058		\$ 244,058		\$	184,624		:	191,760		\$ 191,760	
12	Basis for MACRS Depreciation	\$	234,976			\$ 244,058		\$ 244,058		\$	184,624		:	191,760		\$ 191,760	
13	MACRS Depreciation Rate		20%	32%	19%	20%	32%	20%			20%	32%	19%	20%	32%	209	5
14	MACRS Depreciation	\$	46,995	\$ 75,192	\$ 45,115	\$ 48,812	\$ 78,098	\$ 48,812		\$	36,925 \$	59,080 \$	35,448	38,352	\$ 61,363	\$ 38,352	
15	Total Tax Depreciation	\$			\$ 45,115		\$ 78,098	\$ 292,869		\$	221,548 \$	59,080 \$	35,448			\$ 230,111	
16	Book Depreciation	\$	22,115							\$	17,376 \$		17,376				
17	Federal Deferred Income Tax	\$	89,440	\$ 15,883	\$ 6,620	\$ 92,897	\$ 16,497	\$ 92,897		\$	70,274 \$	12,480 \$	5,201	72,990	\$ 12,962	\$ 72,990	
	State Deferred Income Taxes																
18	Basis for MACRS Depreciation	\$	469,951			, -	\$ 488,115			\$	369,247 \$	,	369,247	,-			
19	MACRS Depreciation Rate	_	20%	32%	19%		32%	20%		_	20%	32%	19%	20%	32%	209	•
20	Total Tax Depreciation	\$	-		\$ 90,231			\$ 97,623		\$	73,849 \$	118,159 \$	70,895				
21	Book Depreciation	\$	22,115				\$ 22,970	\$ 22,970		\$	17,376 \$	17,376 \$	17,376			,	
22	State Deferred Income Taxes	\$	4,312	\$ 7,696	\$ 4,087	\$ 4,479	\$ 7,994	\$ 4,479		\$	3,388 \$	6,047 \$	3,211	3,519	\$ 6,281	\$ 3,519	
	ITC Deferred Income Tax Effect																
23	Investment Tax Credit Basis	Ś	165,865			\$ 172,276		\$ 172,276									
24	Life of Investment	Ÿ	25			25		25									
25	Amortiziation of ITC	\$	6,635	\$ 6,635	\$ 6,635		\$ 6,891										
26	ITC Effect of Basis Reduction	Ÿ	0,033	, 0,033	9 0,033	9 0,031	9 0,031	9 0,031		\$	130,323			135,360		\$ 135,360	
27	Depreciation									Ÿ	4.00%		,	4.00%		4.00%	
28	Deferred Income Tax Effect	Ś	1,283	\$ 1,283	\$ 1,283	\$ 1,332	\$ 1,332	\$ 1,332		Ś	1.008 \$	1,008 \$	1,008		\$ 1,047	\$ 1,047	
29	Total Accumulated Deferred Income Taxes	Ś		\$ 119,897			\$ 124,531		\$ 355,126	Ś	74,670 \$	94,205 \$	103,625				
		<u> </u>	,	,	,,	+,	+,	+	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	, +	0.,200 +		11,001	, ,,,,,,,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7 2.0,020
	Rate Base Adjustment For ITC Amortization (KU Only)																
30	ITC Effect of Basis Reduction		32,068			\$ 33,307		\$ 33,307		\$	25,196		:	26,170		\$ 26,170	
31	Investment Tax Credit Net		133,798			\$ 138,969		\$ 138,969		\$	105,127			109,190		\$ 109,190	
32	Amortization of Net ITC	\$	6,634.6			\$ 6,891.0		\$ 6,891									
33	Unamortized ITC (for KU)	\$	127,163	\$ 120,528	\$ 113,894	\$ 132,078	\$ 125,187	\$ 132,078	\$ 371,159								
34	Rate Base	\$	346,720	\$ 306,377	\$ 278,907	\$ 358,647	\$ 316,745	\$ 358,647	\$ 954,299	\$	372,337 \$	335,426 \$	308,629	385,569	\$ 347,232	\$ 385,569	\$ 1,041,431
	Income Taxes																
35	Return on Equity		18,328	16,195	14,743	18,958	16,743	18,958			19,332	17,415	16,024	20,019	18,028	20,019	
36	ITC Deferred Income Tax Effect	\$	1,283	\$ 1,283	\$ 1,283	\$ 1,332	\$ 1,332	\$ 1,332		\$	1,008 \$	1,008 \$	1,008	1,047	\$ 1,047		
37	Income Taxes	\$	13,646	\$ 12,301	\$ 11,386	\$ 14,124	\$ 12,728	\$ 14,124	\$ 38,238	\$	13,831 \$	12,623 \$	11,745	14,327	\$ 13,073	\$ 14,327	\$ 39,145

## Kentucky Utilities Company and Louisvillle Gas & Electric Company

Weighted Cost of Capital

Kentucky Utilities Company						
			Weighted			
			Cost of			
Component of Capital	Percent	Rate	Capital			
Debt	47.14%	3.96%	1.87%			
Preferred Equity	0.00%	0.00%	0.00%			
Common Equity	52.86%	10.00%	5.29%			
			7.15%			

Louisville Gas & Electric Company						
			Weighted			
			Cost of			
Component of Capital	Percent	Rate	Capital			
Debt	48.08%	3.92%	1.89%			
Preferred Equity	0.00%	0.00%	0.00%			
Common Equity	51.92%	10.00%	5.19%			
			7.08%			

## Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Question No. 9**

Witness: David E. Huff

Q-9. Refer to the Companies' response to Staff's First Request, Item 40. Provide the demographics for the residential customers who completed the Companies' customer survey.

A-9.

	Total study completes n=1,035		Total study completes n=1,035
Own/Rent		Education	
Own	87%	Some high school	0%
Rent	13%	High school grad or equivalent	9%
Household Income		Some college or technical school	22%
Income <\$40k	21%	College graduate	38%
Income \$40K or more	79%	Graduate/post-graduate school	30%
Age		Current Employment Situation	
18-24	1%	Working full-time	60%
25-34	13%	Working part-time	8%
35-49	25%	Parent/Caregiver/Student	5%
50-64	36%	Retired	25%
65+	26%	Unemployed	2%

#### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Question No. 10**

Witness: John P. Malloy

- Q-10. Describe what notice was provided, if any, to persons who own property in close proximity to or adjacent to the proposed site location regarding the proposed solar project.
  - a. If notice was provided, provide a copy of the notice or notices.
  - b. If any meetings were held with property owners, provide a list of attendees and meeting notes.
  - c. If no notice was provided, explain why notice was not provided to persons who own property in close proximity to or adjacent to the proposed site location.
- A-10. Please find attached as a single attachment the following documents:
  - 1. The letter the Companies mailed on August 4, 2016 to persons who own property in close proximity to or adjacent to the proposed site location as pages 1 and 2. This notice informed them of the meeting in Simpsonville on August 23, 2016 from 6 to 7:30 PM.

Additionally, in August Company representatives met with and shared renderings and a copy of the letter that was sent out to the adjoining property owners with the following public officials.

- a. Paul Hornback State Senator
- b. Brad Montell State Representative
- c. Steve Eden Mayor of Simpsonville
- d. Tom Hardesty Mayor of Shelbyville
- e. Rob Rothenburger Shelby County Judge Executive
- f. Ryan Libkie Planning and Zoning
- 2. The Companies mailed the letter to the 20 customers shown graphically on page 3 and as a list on page 4.
- 3. Pages 5 and 6 are posters which were used at the meeting to discuss specifics of the site development and landscaping plans.
- 4. Pages 7 and 8 are Questions and Answers which were available at the meeting for attendees to take with them as a hand-out.

5. Pages 9 and 10 are the sign-in sheets which show the names of the attendees. Pursuant to 807 KAR 5:001, Section 4(10)(a), the email addresses and phone numbers have been redacted.

No other notes of the meeting were made or kept.



#### PPL companies

[Address]

August 3, 2016

Dear <Insert Name>,

LG&E and KU filed a request on August 2 with the Kentucky Public Service Commission to develop a subscription-based Solar Share Program and community-type solar facility along Interstate 64 near Simpsonville. While the KPSC considers our request, we wanted to share this news with you and other nearby neighbors adjacent to the site.

We're hosting an informational open house for property neighbors at the City of Simpsonville's Community Room, located at 108 Old Veechdale Road, on Tuesday, August 23, from 6 - 7:30 p.m.

LG&E and KU representatives will be on site to provide additional information and answer questions you may have about the project. Refreshments will be provided.

Below is additional information about our proposed plans we'd like to provide you in the meantime.

The 35-acre site, located near Conner Station Road, is large enough to accommodate a 4-megawatt (DC) solar field, which would total about 12,000 panels. If approved, LG&E and KU would build, own and operate the new facility. We have included plans to enhance the landscaping and aesthetics to help blend the facility into the beauty of the surrounding area.

The facility would be constructed in 500-kilowatt sections, and construction on the first section would only begin after it is 100-percent subscribed by customers. Each additional section would require 100 percent subscription before construction would begin on that section.

We continue to see an increased interest from our customers for renewable energy, and our proposed subscription-based Solar Share Program would provide our residential, business and industrial customers the opportunity to share in local solar energy and receive solar energy credits generated from the facility.

Louisville Gas and Electric Company and Kentucky Utilities Company Emerging Technologies Department

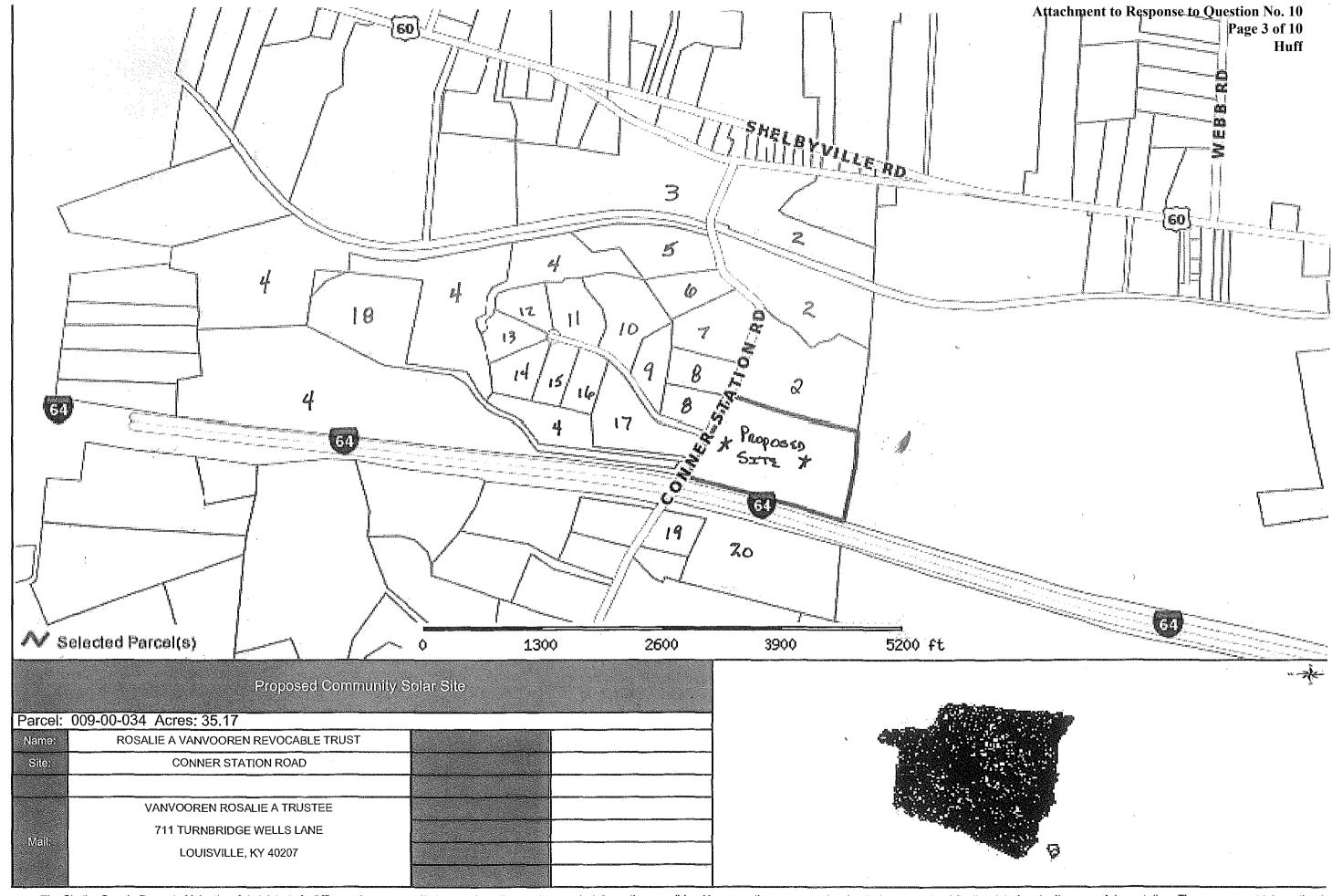
220 W. Main Street P.O. Box 32010 Louisville, Ky. 40232 www.lge-ku.com

David Huff Director of Customer Energy Efficiency and Smart Grid Strategy While it's still early in the process, we assure you, as a neighbor adjacent to our proposed facility, we will make every effort to keep you informed throughout the process, and, if approved, as the project advances.

You can visit our website at *lge-ku.com/solar-share* throughout the course of the project for updates. Please don't hesitate to contact us by email at solar@lge-ku.com or by phone at **502-627-2500** if you have any questions or need additional information. A representative from LG&E and KU will respond to you as quickly as possible.

Sincerely,

David Huff



The Shelby County Property Valuation Administrator's Office makes every effort to produce the most accurate information possible. No warranties, expressed or implied, are provided for the data herein, its use or interpretation. The assessment information is from the last certified taxroll. All data is subject to change before the next certified taxroll. PLEASE NOTE THAT THE PROPERTY APPRAISER MAPS ARE FOR ASSESSMENT PURPOSES ONLY NEITHER SHELBY COUNTY NOR ITS EMPLOYEES ASSUME RESPONSIBILITY FOR ERRORS OR OMISSIONS ---THIS IS NOT A SURVEY---

Date printed: 08/02/16 : 11:50:43

#### Owner

Allen Living Trust

Albert and Cheryl Baker

Steven Bauman and Mary Harris

Stephen and Kathleen Bennett

Helge Bjorvik and Ryan Kelly

Jesse and Glenda Cook

Gilbert and Bonni Downs

Lionel and Georgia Ferreira

Lawrence and Delores Gatewood

Lauren Hilton

Gerald and Sharon Karem

Reverend Thomas C. Kelly, Roman Catholic Archbishop of Louisville

Geoffrey and Debra McDonald

Charles and Susan Metzger

William and Mary Jane Sledge

Joseph and Anne Solomon

Stephen and Priscilla Solomon

Joseph E. and Patricia B. Wheeler, Wheeler Declaration of Living Trust

Whitney Young Manpower Center

Ronald and Patricia Yankey









# Constructing LG&E and KU's Solar Share Facility

LG&E and KU plan to build, own and operate the Solar Share Facility that will be built in 500 kilowatt sections based on customer interest. Construction will begin once a 500 kilowatt section is 100 percent subscribed. Likewise, construction on the next section and those following will require 100 percent subscription before each section is built.

The 35-acre site, located near Conner Station Road, is large enough to accommodate a 4-megawatt (DC) solar field, which would total about 12,000 panels.

# What can you expect during the construction process?

- Each construction phase is expected to take between 1-4 months.
- Once construction begins, heavy equipment such as mini excavators, skid steers and telehandlers, as well as work vehicles, will be traveling in and out of the area during the construction phases.
- An RBI hydraulic impact hammer post-driving machine will be used during normal business hours for about one week per construction phase to install the posts used to mount the solar panels. The machine noise is estimated to reach a level of 80 decibels from about 300 feet away, which is comparable to city traffic from inside a car.
- We will take precautions to minimize road restrictions or traffic disruptions.
- Depending on weather conditions, steps will be taken to mitigate potential dust, dirt and mud along the roadways.
- We have included plans in the project to enhance the landscaping and aesthetics to help blend the facility into the beauty of the surrounding area.
- We will have onsite measures to deter theft and vandalism.



**PPL** companies

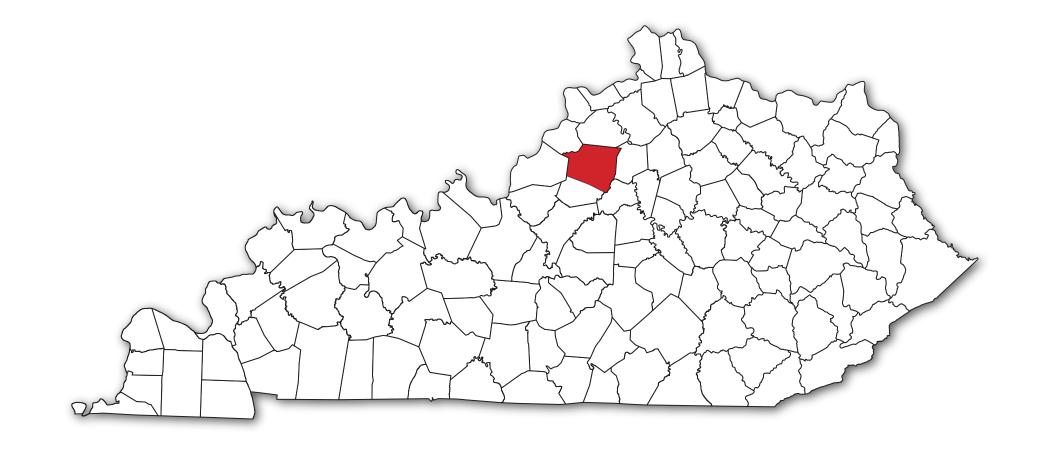
# LG&E and KU Solar Share Facility — Simpsonville, Ky.





Louisville Gas and Electric Company and Kentucky Utilities Company have requested permission from the Kentucky Public Service Commission to develop a "community" solar facility in Shelby County.







#### What to Expect about LG&E and KU's Solar Share Facility

- Q. Why did LG&E and KU propose a community solar project?
- A. Our customers are interested in renewable energy, and our subscription-based Solar Share Program will provide our residential, business and industrial customers the opportunity to share in local solar energy and receive solar energy credits generated from the facility.
- Q. Why did LG&E and KU select this location?
- A. The 35-acre site is an ideal location because it's in our KU service territory and near LG&E along Interstate 64. It is large enough to accommodate a 4-megawatt (DC) solar field, which would total about 12,000 panels.
- Q. When will work begin?
- A. It's difficult to say at this time, but we will notify you at least 30 days before construction begins. The facility will be constructed in 500-kilowatt sections, and construction on the first section will only begin after it is 100-percent subscribed by customers. Each additional section will require 100 percent subscription before construction would begin on that section. Each construction phase is expected to take up to 4 months.
- Q. What type of equipment will be used during construction?

Once construction begins, equipment such as mini excavators, skid steers and telehandlers, as well as work vehicles, will be traveling in and out of the area during the construction phases.

An RBI hydraulic impact hammer post-driving machine will be used during normal business hours for about one week per construction phase to install the posts used to mount the solar panels. The machine noise is estimated to reach a level of 80 decibels from about 300 feet away, which is comparable to city traffic from inside a car.

- Q. Will steps be taken to address safety concerns?
- A. At LG&E and KU, safety is our priority. All contractors receive safety training. We will assure that the work site is monitored and maintained in a professional and safe manner.
- Q. Will traffic be blocked on my street or will there be limited access to my home or property?
- A. There may be times during construction when access is disrupted while trucks and equipment are traveling to and from the site. We will take action to minimize the length of time access will be limited.
- Q. Will construction impact the roadways?
- A. As with large-scale projects like this, equipment and vehicles will be traveling in and out of the area for extended periods of time. At times, they may need to access the rights-of-way along the roadway or LG&E and KU's power lines. Depending on weather conditions, steps will be taken to mitigate potential dust, dirt and mud along the roadways. We do not anticipate damage will occur to the road or surrounding areas. We will restore the area if damage does occur.
- Q. Will my electric service be interrupted as work is being done?
- A. There should be no reason to interrupt your electric service as crews work to install the solar facility. If you do experience an electric service interruption, report it to LG&E and KU just as you would report any service interruption.
- Q. Who will own the facility once the panels are installed?
- A. LG&E and KU would build, own and operate the new facility.
- Q. What will LG&E and KU do to preserve the landscape once the project is complete?
- A. We have included plans in the project to enhance the landscaping and aesthetics to blend the facility into the beauty of the surrounding area.
- Q. What if I have questions about the project?
- A. Please feel free to contact LG&E and KU at any time throughout the project. Visit our website at lge-ku.com/solar-share for additional information and project updates. You can also call and leave a message on our dedicated Solar Share Project telephone line at 502-627-2500 or send an email to solar@lge-ku.com. A representative of LG&E and KU will respond to you quickly.

NAME	PHONE NUMBER	EMAIL ADDRESS
JERRY KAREM  GENE BAKER  Mary B. Harris		
GENE BAKER		
Mary B. Harris		
Joe d'élonon		
-		

NAME	PHONE NUMBER	EMAIL ADDRESS
Laurie Hilton		
Devon Reis		
Katie Bennett (Jeff)		
Bonni Downs		
Gil Donns		
7 (AV)		
	!	

#### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

#### **Question No. 11**

Witness: David E. Huff

- Q-11. State whether any transmission and distribution ("T&D") upgrades will be necessary in connection to the Solar Share Facility.
  - a. If so, provide details of the upgrade and explain if the T&D costs are accounted for in Exhibit 5 of the Application.
  - b. If not, state whether the Solar Share customers will be responsible for the additional T&D costs through a revised monthly Solar Capacity Charge or if cost will be paid by the Companies' customer base.
- A-11. Yes. T&D upgrades will be necessary to serve the Solar Share Facility.
  - a. The conductor on the existing circuit from the site to US-60 and back to the Simpsonville substation will need to be upgraded from single-phase to three-phase and to a heavier-gauge wire. Transmission poles along US-60 will need to be replaced to accommodate the heavier distribution conductor but no other transmission upgrades are necessary. A new air break switch and transformer located on the solar facility site are additional distribution equipment needed for interconnection with the facility.

The costs for distribution and transmission changes are accounted for in Application Exhibit 5 and allocated to Solar Share Facility costs.

In Application Exhibit 5, in the third block down on the left-hand side there is an entry for Distribution Operations "Upgrade circuit from site to US-60, Air Break Switch, Regulators, 1.5 MW XFMR (Incl. 20% Contingency)" with a cost of \$202,005.

In the fourth block down there is an entry for "Distribution Operations Upgrade Circuit from US-60 to Simpsonville Sub, Install New Reclosers (Includes 20% Contingency)" with a cost of \$267,118.

In the fifth block down there is an entry for "Transmission related upgrade costs" with a cost of \$1,080,000. This cost is for the replacement of transmission poles as described above.

b. Not applicable.

#### Response to Commission Staff's Second Request Dated September 16, 2016

Case No. 2016-00274

**Question No. 12** 

Witness: Rick E. Lovekamp / W. Steven Seelye

- Q-12. Provide the calculation for the number of years it will take to pay for each fully subscribed Solar Share Facility at a monthly Solar Capacity Charge of \$6.29. Explain if the Companies will reduce the monthly facility charge once the investment is paid for.
- A-12. The \$6.29 monthly Solar Capacity Charge was calculated using a standard revenue requirement approach. The revenue requirement includes the return on plant, operation and maintenance expenses, property taxes, income taxes and depreciation expenses for the project. The depreciation expenses were determined using an estimated average service life (ASL) of 25 years. Therefore, the revenue requirement calculation assumes that it will take 25 years to fully depreciate (or "pay off") each facility.

Yes, barring any unforeseen cost increases, the Companies will reduce the monthly facility charge as the investment is depreciated (or fully depreciated after 25 years) in general rate cases. For example, when the rate is determined in future rate case filings, the revenue requirement for the facilities (of various vintages) would be determined based on the aggregated net depreciated cost of all Solar Share facilities for the test period of the rate case, as with any other service. See Response to Question No. 8(c).