

Matthew G. Bevin
Governor

Charles G. Snavely
Secretary
Energy and Environment Cabinet



Commonwealth of Kentucky
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Michael J. Schmitt
Chairman

Robert Cicero
Vice Chairman

Daniel E. Logsdon Jr.
Commissioner

August 30, 2016

PARTIES OF RECORD

Re: Case No. 2016-00274

Attached is a copy of a memorandum which is being filed in the record of the above-referenced case. If you have any comments you would like to make regarding the contents of the memorandum please do so within five days of receipt of this letter.

If you have any questions, please contact Nancy Vinsel, Commission Staff Attorney, at 502-782-2582.

Sincerely,

A handwritten signature in blue ink that reads "Talina R. Mathews".

Talina R. Mathews
Executive Director

NJV/ph

Attachments

INTRA-AGENCY MEMORANDUM

KENTUCKY PUBLIC SERVICE COMMISSION

TO: Case File

FROM: Nancy J. Vinsel, Staff Attorney *njv*

DATE: August 30, 2016

RE: Case No. 2016-00274
Electronic Joint Application of Kentucky Utilities Company and Louisville Gas and Electric Company for Approval of an Optional Solar Share Program Rider

Pursuant to an Order issued on August 19, 2016, an informal conference was held on August 29, 2016, at the Commission's offices in Frankfort, Kentucky. A list of the attendees is attached hereto.

The purpose of the informal conference was to provide Kentucky Utilities Company ("KU") and Louisville Gas and Electric ("LG&E"), (jointly "KU/LG&E") the opportunity to make a presentation on the proposed solar share program. KU/LG&E representatives distributed a handout which explained the basis for customer interest in developing new renewable energy facilities, how much and what level of customer interest exists for the proposed community solar facility, an overview of the proposed community solar facilities, the parameters for the proposed solar share program, the design of and rate calculation for the proposed solar share program rider, and a sample bill for a customer participating in the solar share program. A copy of the handout is attached.

Commission Staff asked about the site selection factors, which KU/LG&E representatives explained included pricing; visibility to interstates, and thus the public; and performance considerations, including a south-facing location without shading from trees or neighboring buildings and access to distribution and transmission facilities. The Simpsonville location was further chosen as it sits close to territorial boundaries of LG&E and KU, thereby giving customers of both utilities the opportunity to view the site. Commission Staff asked about the possibility of future development creating shade issues, to which KU/LG&E representatives stated that the interstate that runs on the southern edge of the property creates a buffer that prevents future development.

Commission Staff asked a clarifying question regarding the slight differences in the proposed solar share credit among the various rate classes. KU/LG&E representatives confirmed that the different proposed shared solar credits reflect the allocation of costs in the most current cost of service study.

Commission Staff asked why KU/LG&E did not consider using the newly operational solar facility at KU's E.W. Brown Generating Station in Mercer County, Kentucky ("Brown solar facility") as a community solar facility. KU/LG&E representatives stated that the Brown solar facility, as approved by the Commission, is designed to be a universal solar facility available to the entire system with costs recovered in base rates, while the proposed project is designed on a subscription basis responsive to customers willing to pay a premium for solar energy. KU/LG&E representatives explained the economic development considerations behind the proposed project, stating that major companies are taking leadership positions promoting additional renewable energy resources, especially pursuing active investment in the creation of tangible renewable energy resources rather than pursuing passive investment in non-tangible resources, such as the purchase of renewable energy certificates ("RECs") from existing resources. KU/LG&E representatives also discussed the economic development aspect of corporate location and retention strategy, in particular that corporate site location considerations for new, expanding, and existing facilities include the availability of renewable energy resources.

In response to KU/LG&E representatives' discussion of their plan to retire subscribed RECs in KU/LG&E's names, Commission Staff asked about the overlapping interest in purchasing RECs through the Green Energy Rider programs and subscribing to community solar facilities, especially as reflected in the survey results. KU/LG&E representatives stated that the survey did not reference RECs or customer participation in the Green Energy Rider programs, but that the Green Energy Rider and solar share programs are different product offerings that serve different customer needs. The Green Energy Rider programs are passive investment of a fixed monthly amount that does not necessarily directly support the development of additional renewable energy resources. The addition of the solar share program would expand the options available to residential and business customers that are interested in investing in renewable energy. The growing preference for active investment in new tangible projects, such as community solar facilities, over passive investment in RECs was reiterated. KU/LG&E stated their belief that some customers will participate in both programs and that there will not be a significant number of customers switching from the Green Energy Rider program to the solar share program.

There being no further discussions, the informal conference was adjourned.

Attachments:

Sign-in sheet

KU/LG&E handout

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC JOINT APPLICATION OF KENTUCKY)
UTILITIES COMPANY AND LOUISVILLE GAS AND) CASE NO.
ELECTRIC COMPANY FOR APPROVAL OF AN) 2016-00274
OPTIONAL SOLAR SHARE PROGRAM RIDER)

Informal Conference – August 29, 2016

Please sign in:

NAME	REPRESENTING
Nancy Vinsel	PSC - Legal
MaryBeth Purvis	PSC-FA
David Huff	LGE - KU
Rick Lovekamp	LGE/KU
Quang D Nguyen	PSC
Robert M. Corroy	LGE/KU
Sara Veeneman	LGE/KU
Duncan Crosby	SKO for LGE-KU
JEFF JOHNSON	PSC
Andrea Schroeder	LGE/KU
John P. Malloy	LGE/KU
Chris Whelan	PSC-FA
Kurt Bohne	KUC - Telephonic
Mary Whitaker	PSC-FA



PPL companies

**Joint Application of LG&E and KU for
Approval of an Optional Solar Share
Program Rider
Case No. 2016-00274**

*Informal Conference
August 29, 2016*



Agenda

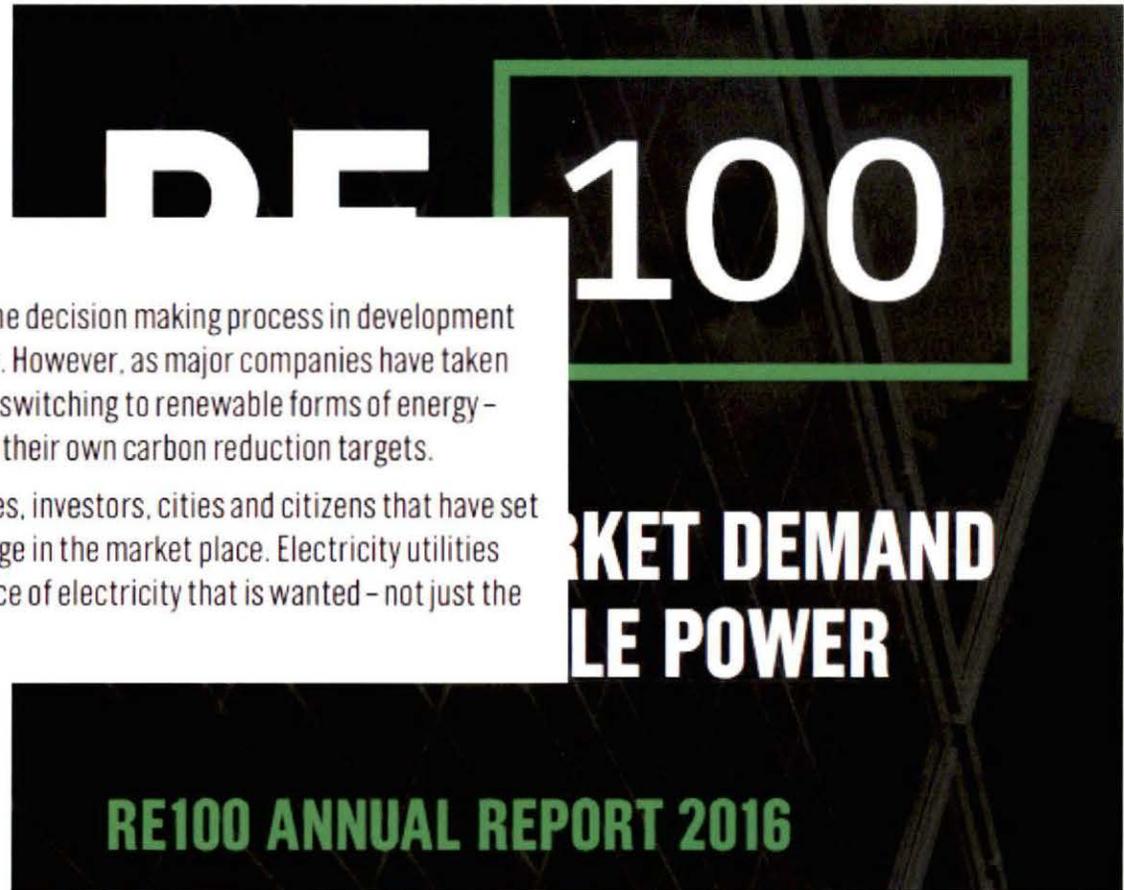
- Customer Interest
 - *RE100 - Growing Customer Desire for Renewable Options*
 - *Solar Share Program Support*
 - *LG&E/KU Customer Solar Survey*
- Structure of Program
 - *Facility*
 - *Program Parameters*
 - *Solar Share Rider*
 - *Billing Summary*

RE100 – Growing Market Demand for Renewable Power

INCREASED DEMAND FOR RENEWABLES

Electricity users have not typically been part of the decision making process in development of new infrastructure or new grid based capacity. However, as major companies have taken a leadership position on climate change they are switching to renewable forms of energy – including electricity. This will help them to reach their own carbon reduction targets.

There are now an increasing number of companies, investors, cities and citizens that have set renewable power targets and this is driving change in the market place. Electricity utilities and policymakers now need to consider the source of electricity that is wanted – not just the quantity, location or timing.



Source: RE100 Growing Market Demand For Renewable Power Annual Report 2016
http://media.virbcdn.com/files/f9/d6e716c56a9b3312-RE100AnnualReport2016_v17.pdf

Supporters of Solar Share Program

Public Authorities

- Kentucky Governor Matt Bevin
- Lexington Mayor Gray
- Jeffersontown Mayor Dieruf

Economic Development

- KY Cabinet for Economic Development
- KY Association For Economic Development
- Cumberlands Workforce Development Area
- Kyndle
- World Trade Center Kentucky
- Greater Louisville Inc.
- Lexington Chamber of Commerce
- The Housing Partnership Inc.
- KY Chamber of Commerce
- Muhlenburg Alliance for Progress
- Bluegrass Tomorrow Inc.

Companies and Property Management

- Brown Forman
- Midwest Clean Energy Enterprise
- Louisville Regional Airport
- Commonwealth Commercial Real Estate
- Caveland Environmental Authority
- Stephen Gault Company
- The Lock Box
- St Paul School
- Cushman & Wakefield

Individuals

- Tonita Goodwin
- Connie Lawson

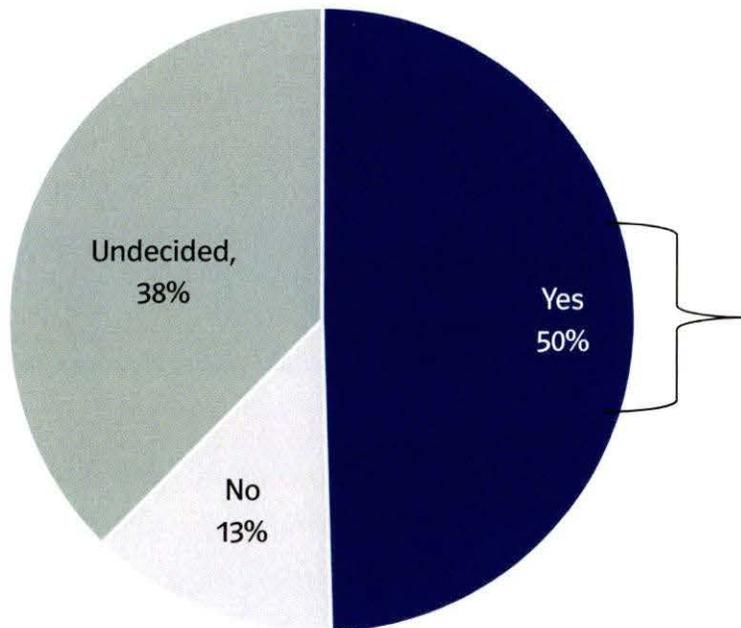
LG&E/KU Customer Solar Survey

- LG&E/KU Proprietary Customer Panel
 - *766 LG&E Customers*
 - *778 KU Customers*
- Online Survey
 - *Conducted May 24 - June 8, 2016*
 - *Approximately 3.5 minutes*
- 67% Response Rate
 - *1,035 completed surveys*
 - *32 incomplete surveys*

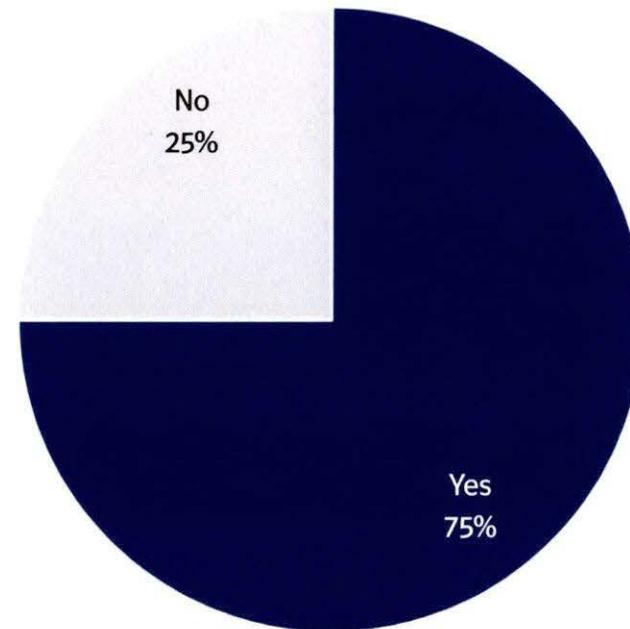
Likelihood to Participate in LG&E/KU Solar Offerings

50% (n=513) of customers stated they would likely participate in a solar program offered by LG&E/KU. 75% of those likely to participate (n=385) are willing to pay the one-time enrollment fee.

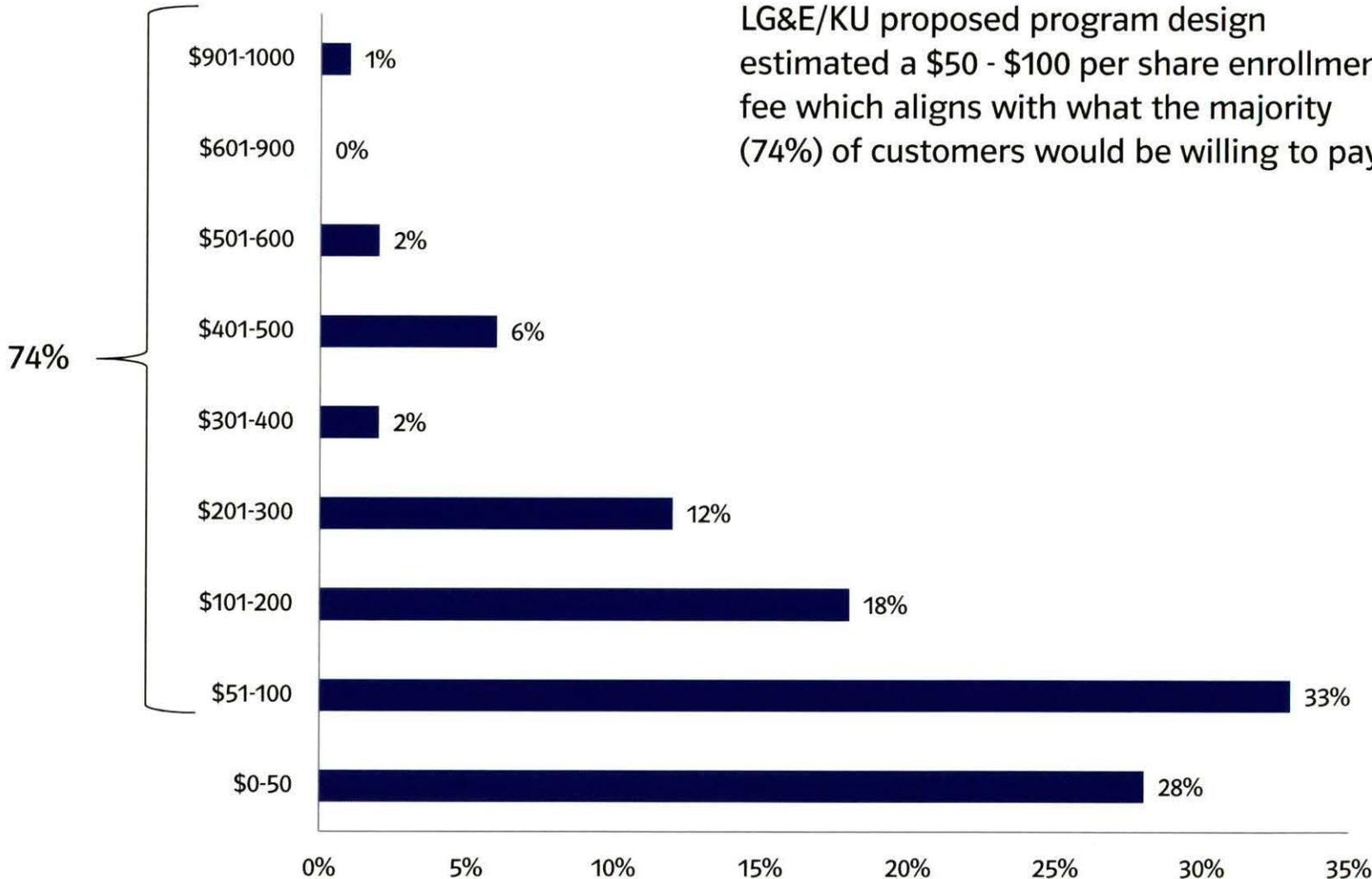
**Likelihood to Participate
LG&E/KU Solar Offering**



**Willingness to Pay
One-time Enrollment Fee**

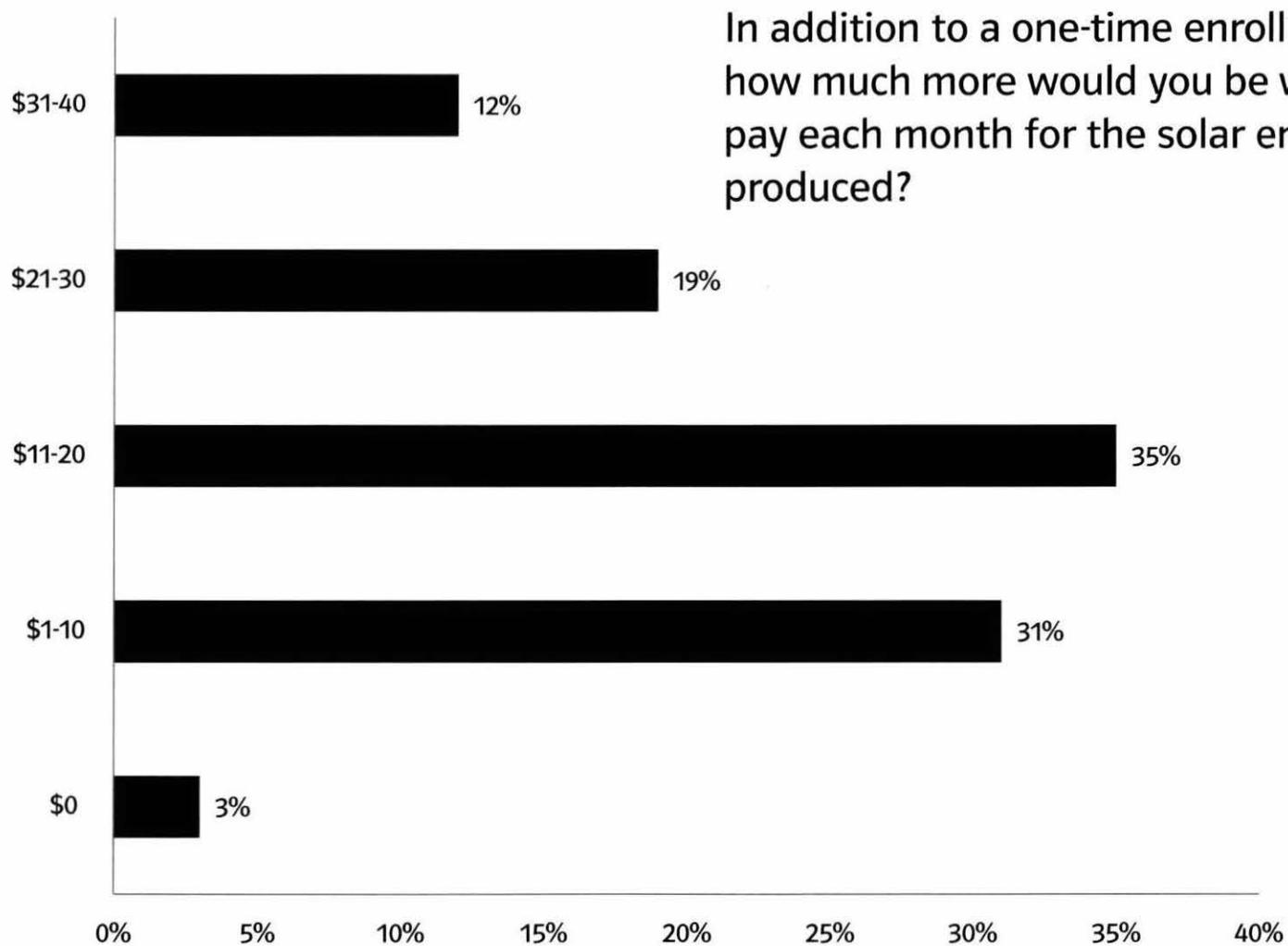


Acceptable One-time Fee



LG&E/KU proposed program design estimated a \$50 - \$100 per share enrollment fee which aligns with what the majority (74%) of customers would be willing to pay.

Tolerance for additional monthly expense for LG&E/KU Solar Program



Subscribing LG&E/KU Solar Shares

Now that you know each share of the solar facility would represent roughly 27 kilowatt-hours and a typical residential household uses approximately 1,000 kilowatt-hours each month, how many shares of solar energy would you be willing to purchase through a subscription?

	LG&E/KU	KU	LG&E
1-2 shares ~5% monthly consumption	18%	21%	15%
3-4 shares ~10% monthly consumption	34%	31%	36%
8-10 shares ~25% monthly consumption	24%	26%	22%
15-20 shares ~50% monthly consumption	24%	22%	27%



LG&E and KU Solar Share Facility Simpsonville, KY – Phase 1



Photos representational only





LG&E and KU Solar Share Facility Simpsonville, KY – Future Plan



Photos representational only



Solar Share Facilities

- Utility owned
- Each Solar Share Facility will have approximately 500 kW DC capacity
 - *Companies seeking to build up to 8 Solar Share Facilities, a total approximate capacity of 4 MW DC*
 - *Solar Share Facility No. 1, site-related facilities, and site improvements will be \$2.0 million*
 - *The total capital cost allocated to Solar Share Facility No. 1 is \$1.06 million (does not include applicable tax credits)*
 - *Total investment for the 4 MW-DC is estimated at \$9.8 million*
- Each Solar Share Facility will be built only when it and all then-existing Solar Share Facilities are fully subscribed

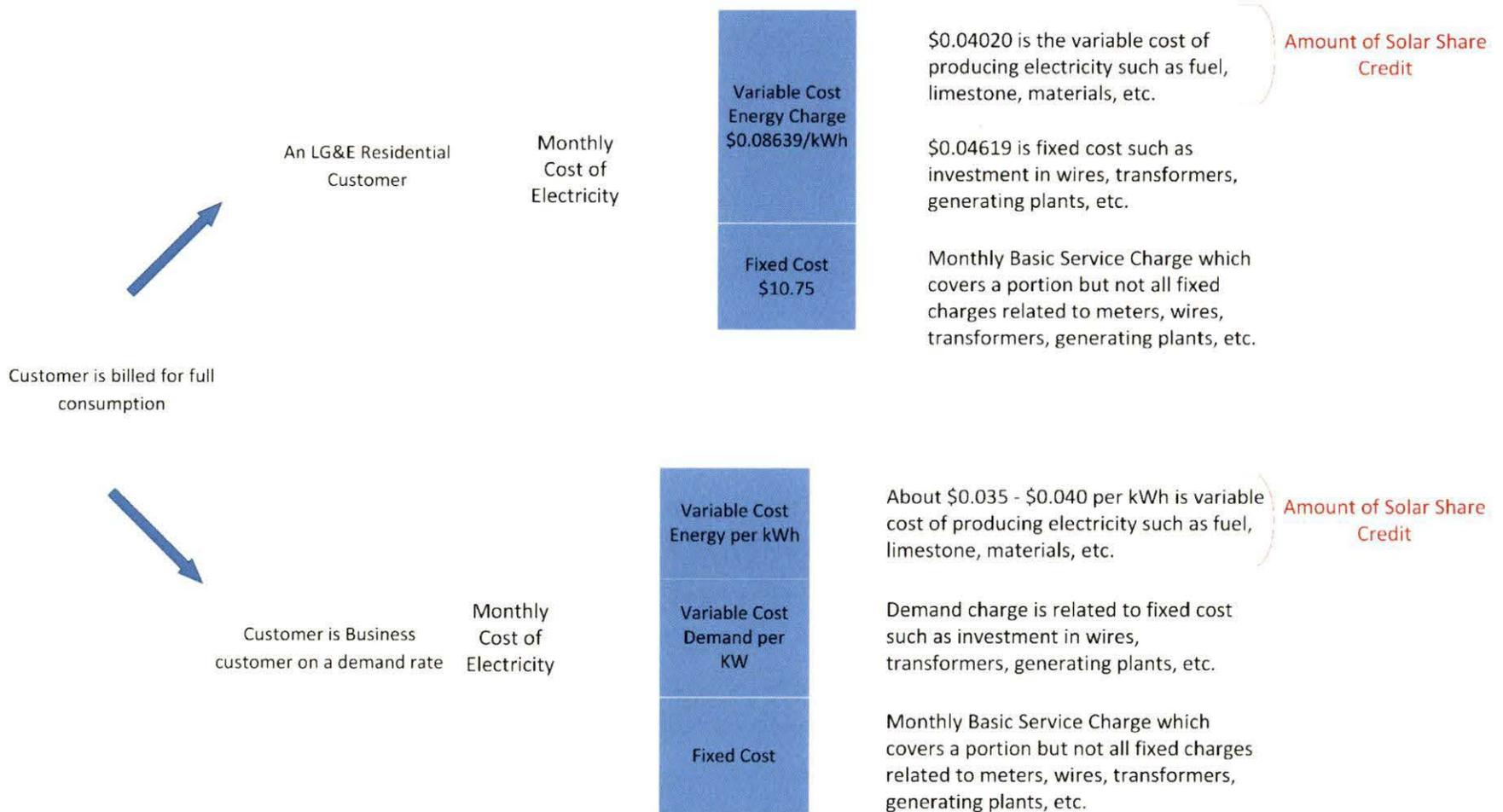
Solar Share Program Parameters

- Available to all non-transmission and non-lighting customers
- Customers may subscribe as much capacity as desired in quarter-kW (250 W) increments with only two limits:
 - *Single customers are limited to no more than 500 kW total subscription across all Solar Share Facilities*
 - *No single customer may subscribe more than 50% of a Solar Share Facility (250 kW)*
- Customers subscribing 50 kW or more are required to sign a 5 year contract
- Customers subscribing to less than 50 kW have a 12 month commitment (can make an increase at any time but can only make a decrease once each 12 months); each change restarts 12-month commitment

Solar Share Program Rider

- Solar Share Program Rider (Rider SSP) charges and credits:
 - *An up-front, non-refundable \$40 per 250 W increment - to offset administrative costs*
 - *Monthly fee of \$6.29 per 250 W (quarter-kW) increment*
 - *Subscribers receive a credit for their share of actual generation monthly at the variable cost of production based upon their specific tariff (3.5 - 4 cents per kWh)*
 - *Subscribers billing under FAC will be adjusted corresponding to number of kWh to which Solar Energy Credit applies*
- Net metering will be applied to bills prior to applying Solar Share Program credits and charges
- Credits limited each month to subscriber's net energy consumption; excess credits do not carry month-to-month

Solar Share Credit Based on Variable Cost of Production



Shared Solar Program (SSP) Rider Rates

Rate Schedule		LG&E			KU		
		Solar Credit	Tariff Variable Cost (Energy Charge)	Diff.	Solar Credit	Tariff Variable Cost (Energy Charge)	Diff.
Residential	RS	0.04020	0.08639	0.04619	0.03477	0.08870	0.05393
	VFD	0.04020	0.08639	0.04619	0.03477	0.08870	0.05393
	RTOD-E (On Peak)	0.04020	0.06128	0.02108	0.03477	0.05740	0.02263
	(Off Peak)	0.04020	0.23263	0.19243	0.03477	0.27646	0.24169
	RTOD-D	0.04020	0.04565	0.00545	0.03477	0.04370	0.00893
All Electric Schools	AES				0.03497	0.08369	0.04872
General Service	GS	0.04021	0.09650	0.05629	0.03504	0.10426	0.06922
Power Service Secondary	PSS	0.04071	0.04071	0.00000	0.03572	0.03572	0.00000
Power Service Primary	PSP	0.03925	0.03925	0.00000	0.03446	0.03446	0.00000
Time-of-Day Secondary	TODS	0.04049	0.04049	0.00000	0.03527	0.03527	0.00000
Time-of-Day Primary	TODP	0.03824	0.03824	0.00000	0.03432	0.03432	0.00000

Solar Share Billing Example



a PPL company

BILLING SUMMARY

Previous Balance	185.14
Payment(s) Received	-185.14
Balance as of 4/7/16	\$0.00
Current Electric Charges	54.03
Current Gas Charges	53.62
Current Taxes and Fees	0.94
Total Current Charges as of 4/7/16	\$108.59
Other Charges (See Other Charges on back)	40.47
Total Amount Due	\$149.06

Mailed 4/8/16 for Account

AMOUNT DUE
\$149.06

Account Name:
Service Address:

Online Payments:
Telephone Payments:

Customer Service:

Walk-in Center:

CURRENT CHARGES

ELECTRIC	Rate: Residential Electric Service
Basic Service Charge	10.75
Energy Charge (\$0.08076 x 454 kWh)	36.67
Electric DSM (\$0.00520 x 454 kWh)	2.36
Electric Fuel Adjustment (\$0.00224 x 454 kWh)	1.02
Environmental Surcharge (5.860% x \$50.80)	2.98
Home Energy Assistance Fund Charge	0.25
Total Charges	\$54.03

Other Charges

Solar Capacity Charge (\$6.29 x 8 qtr-kW)	50.32
Solar Energy Credit (-\$0.04020 x 232 kWh)	-9.33
Solar Offset to FAC Charge (-\$0.00224 x 232 kWh)	-0.52
Total Other Charges Due	\$40.47

BILLING INFORMATION



Other Solar Share Program Benefits

- Subscribed RECs will be retired in Companies' name
 - *May help meet future federal or state renewable energy requirements*
- Excess energy, unsubscribed energy, and revenue from sales of unsubscribed RECs benefit all customers

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