

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC JOINT APPLICATION)	
OF LOUISVILLE GAS AND)	
ELECTRIC COMPANY AND)	
KENTUCKY UTILITIES COMPANY)	
FOR APPROVAL OF A SOLAR)	
POWER CONTRACT AND TWO)	CASE NO. 2020-00016
RENEWABLE POWER)	
AGREEMENTS TO SATISFY)	
CUSTOMER REQUESTS FOR A)	
RENEWABLE ENERGY SOURCE)	
UNDER GREEN TARIFF OPTION 3)	

JOINT TESTIMONY OF
LONNIE E. BELLAR, CHIEF OPERATING OFFICER,
CHRISTOPHER M. GARRETT, CONTROLLER,
AND
ROBERT M. CONROY
VICE PRESIDENT, STATE REGULATION AND RATES
KENTUCKY UTILITIES COMPANY AND
LOUISVILLE GAS AND ELECTRIC COMPANY

Filed: September 18, 2020

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1 **INTRODUCTION**

2 **Q. Mr. Bellar, please state your name, position, and business address.**

3 A. My name is Lonnie E. Bellar. I am the Chief Operating Officer for Kentucky Utilities
4 Company (“KU”) and Louisville Gas and Electric Company (“LG&E”), (collectively,
5 the “Companies”) and an employee of LG&E and KU Services Company. My
6 business address is 220 West Main Street, Louisville, Kentucky 40202.

7 **Q. Please describe your educational and professional background.**

8 A. A complete statement of my work experience and education is attached to this
9 testimony as Appendix A.

10 **Q. Have you previously testified before this Commission?**

11 A. Yes. I have testified in numerous proceedings before the Commission. Most recently,
12 I testified in KU’s and LG&E’s 2018 base rate cases.¹

13 **Q. Mr. Garrett, please state your name, position, and business address.**

14 A. My name is Christopher M. Garrett. I am the Controller for the Companies and an
15 employee of LG&E and KU Services Company. My business address is 220 West
16 Main Street, Louisville, Kentucky 40202.

17 **Q. Have you previously testified before this Commission?**

18 A. Yes. I have testified in numerous proceedings before the Commission. Most recently,
19 I testified in KU’s and LG&E’s 2018 base rate cases.²

¹ *In the Matter of: Electronic Application of Kentucky Utilities Company for an Adjustment of Its Rates*, Case No. 2018-00294, Application Testimony (Sep. 28, 2018); *In the Matter of: Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates*, Case No. 2018-00295, Application Testimony (Sep. 28, 2018).

² *In the Matter of: Electronic Application of Kentucky Utilities Company for an Adjustment of Its Rates*, Case No. 2018-00294, Application Testimony (Sep. 28, 2018); *In the Matter of: Application of Louisville Gas and Electric Company for an Adjustment of Its Electric and Gas Rates*, Case No. 2018-00295, Application Testimony (Sep. 28, 2018).

1 **Q. Please describe your educational and professional background.**

2 A. A complete statement of my work experience and education is attached to this
3 testimony as Appendix B.

4 **Q. Mr. Conroy, please state your name, position, and business address.**

5 A. My name is Robert M. Conroy. I am the Vice President of State Regulation and Rates
6 for the Companies and an employee of LG&E and KU Services Company. My
7 business address is 220 West Main Street, Louisville, Kentucky 40202.

8 **Q. What is the purpose of your joint testimony?**

9 A. The purpose of our testimony is to address the issues the Commission raised in its
10 May 8 and June 18 orders in this proceeding, as well as issues discussed during the
11 recent August 25th informal conference. We believe there is a way to ensure that all
12 customers receive benefits under the 20-year agreement with Rhudes Creek Solar,
13 LLC for the purchase of the output of a 100 MW solar generation facility to be built
14 in Hardin County, Kentucky (“Solar PPA”), without subsidizing in any way the
15 benefits that Toyota Motor Manufacturing, Kentucky, Inc. (“Toyota”) and Dow
16 Silicones Corporation (“Dow”) will receive under the Solar PPA.

17 We present below an approach using existing After-the-Fact Billing (“AFB”)
18 and Fuel Adjustment Clause (“FAC”) processes, deferral accounting, and a new Solar
19 PPA Adjustment Clause to ensure that all customers receive benefits under the Solar
20 PPA.

21 **Q. In view of the relatively small size of the Solar PPA, why is it important to the**
22 **Companies’ customers and the Commonwealth?**

1 A. As the Companies stated in their application in this proceeding, national and local
2 customer demand for renewable energy has increased over the last several years.³
3 Consumers have become more environmentally conscious, and the businesses that
4 serve consumers have sought to demonstrate that they share their customers’
5 environmental concerns. The Companies created their Green Tariff, and particularly
6 Green Tariff Option #3, to allow their existing customers and businesses considering
7 locating in Kentucky to meet their renewable energy goals here. This gives existing
8 customers an incentive to remain in Kentucky and potentially to expand here, and it
9 gives businesses considering locating here a powerful additional reason to do so.
10 Green Tariff Option #3 allows large customers to meet their corporate renewable
11 energy goals with new renewable resources (also called “additionality”).

12 Therefore, the Solar PPA, though relatively small at 100 MW, is a step forward
13 for the Companies and their customers. It shows there is indeed demand from large
14 customers for what Green Tariff Option #3 offers, and it helps two major employers
15 in Kentucky—Toyota and Dow—achieve their goals and gives them additional
16 incentives to remain and expand in the Commonwealth.

17 **Q. Will the Companies’ proposed approach to the Solar PPA ensure customers pay**
18 **no more for energy with the Solar PPA in the aggregate than they would pay**
19 **without the Solar PPA?**

20 A. Yes. The Companies have always believed the Solar PPA would produce net benefits
21 to all native load customers in the aggregate over the 20-year term of the Solar PPA;
22 we would not have proposed it otherwise, and our current proposal is consistent with

³ See Application at 4.

1 our initial business position. The 20-year evaluation recognized that the energy may
2 not be economical every year, particularly in the early years, and demonstrated the net
3 benefits over the 20-year term of the Solar PPA.

4 But we also understand the Commission’s desire as expressed in its orders in
5 this proceeding to ensure that native load customers are not in effect subsidizing the
6 Solar PPA for the benefit of Toyota and Dow,⁴ as well as the Commission’s desire to
7 ensure customers are not harmed by the Solar PPA.⁵ For purposes of this case the
8 Companies’ shareholders are ensuring that customers will be no worse off with the
9 Solar PPA and will likely be better off; all of the upside will accrue to customers, and
10 the Companies will bear the downside risk over the 20-year term of the Solar PPA.

11 Again, the reason the Companies are willing to bear that risk is our confidence
12 that the Solar PPA will provide both environmental and economic benefits to the
13 Companies’ customers over the Solar PPA’s 20-year term. That was our reason for
14 proposing to have 25 MW of the Solar PPA serve native load customers, and it remains
15 our position today.

16 In doing so, the Companies wish to make clear that the approach we are now
17 proposing, i.e., the Companies will bear the downside risk without any return for
18 assuming such risk, though a valid solution for this initial case given the
19 Commission’s orders, should not be construed to be a change in position by the
20 Companies on their fundamental need to be fairly and reasonably compensated for
21 their prudent business decisions and risk of their business operations. The Companies

⁴ Commission’s May 8, 2020 Order at 21-22; Commission’s June 18, 2020 Order at 6-11.

⁵ Commission’s May 8, 2020 Order at 17-19; Commission’s June 18, 2020 Order at 2-5.

1 further believe this approach should not be the standard for future offerings; rather,
2 each should be evaluated on a case-by-case basis.

3 **COUPLING EXISTING AFB AND FAC PROCESSES WITH THE PROPOSED**
4 **SOLAR PPA ADJUSTMENT CLAUSE WILL ENSURE ALL CUSTOMERS**
5 **RECEIVE BENEFITS FROM THE SOLAR PPA**

6 **Q. How do the Companies propose to ensure customers will receive benefits from**
7 **the 25% of the Solar PPA that will serve native load?**

8 A. The Companies propose to ensure all customers will benefit from the Solar PPA by
9 making sure that, in the aggregate, they will not pay more for energy through the FAC
10 than they would have paid without the Solar PPA, and there is a high likelihood that
11 they will pay less when the economic benefit from selling Renewable Energy
12 Certificates (“RECs”) is included. The Companies propose to accomplish this using
13 existing AFB and FAC two-year review processes, as well as a new Solar PPA
14 Adjustment Clause that is similar in structure and function to the Companies’ existing
15 Off-System Sales Adjustment Clause. The purpose of the Solar PPA Adjustment
16 Clause is to track the economics of the Solar PPA across FAC two-year review cases
17 and present relevant data in connection with those reviews. This approach will protect
18 the integrity and finality of the FAC review processes while still accurately tracking
19 and reflecting Solar PPA benefits across the entire 20-year PPA term, all to ensure
20 customers will benefit from the Solar PPA in the aggregate.

21 **Q. Please briefly describe the AFB process.**

22 A. AFB is a computer program developed in 1998 at the time of LG&E-KU merger. A
23 principal benefit of LG&E-KU merger was joint integration of two generation
24 systems. AFB was developed to implement the provisions of the Power Supply
25 System Agreement to account for the joint dispatch of the Companies’ generation

1 systems. As discussed at the informal conference, the purpose of AFB is to determine
2 the split savings for Intra-Company Transactions reflecting the benefits of joint
3 dispatch and to determine the highest costs associated with off-system sales for
4 exclusion from FAC recovery. In other words, AFB is an accounting process using
5 actual data derived from how the generating system was dispatched in real time to
6 provide data inputs for the monthly FAC filings. Since the merger, the Companies
7 have used the AFB process consistently and continuously to produce the data included
8 in every FAC monthly filing. Importantly, AFB is not a dispatch or unit commitment
9 program and cannot be processed with and without the Solar PPA energy.

10 **Q. How will the existing AFB and FAC processes work together to ensure customers**
11 **benefit from the Solar PPA?**

12 A. Under the Companies' proposed approach, there are three values relevant to
13 determining the net benefits of the Solar PPA: (1) the cost of the energy from the Solar
14 PPA, (2) the revenue the Companies receive from selling the environmental attributes
15 of the solar energy in the form of RECs, and (3) the cost of the energy customers
16 would have paid absent energy from the Solar PPA ("avoided energy cost").

17 With regard to the cost of the energy from the Solar PPA, the Companies pay
18 a fixed price per MWh of solar energy delivered to their transmission system. The
19 Companies propose to recover the cost of the energy purchased under the Solar PPA
20 through their FAC monthly filings, just as they would with any other energy purchase.⁶

⁶ Toyota and Dow are purchasing 75% of the output of the Solar PPA facility. The energy costs associated with those purchases would not affect the Companies' FACs. Only the cost of 25% of the Solar PPA facility's output that would serve all native load customers would be recovered through the Companies' FACs.

1 With respect to the 25% portion of the Solar PPA energy that serves all native
2 load customers, the Companies will receive not only the energy itself but also the
3 environmental attributes of that energy. The Companies will seek to monetize those
4 attributes by selling them into existing REC markets.⁷ The Companies propose to
5 provide the revenues from REC sales to customers through the FAC. REC-sale
6 revenues will therefore benefit native-load customers by reducing the cost of energy
7 from the Solar PPA and creating a net cost of energy for evaluation.

8 To determine whether the Solar PPA is a net benefit to customers, it is
9 necessary to compare the net cost of energy from the Solar PPA to another value that
10 reasonably reflects the cost of energy customers would have paid without the Solar
11 PPA. The Companies believe the appropriate comparison is to the cost of energy from
12 the unit that would have supplied energy to native load customers in each hour if the
13 Solar PPA energy was not put onto the Companies' electric system. To obtain the
14 relevant comparison cost, the Companies propose to use the cost of energy from the
15 highest-cost unit stacked to native load using the AFB process in each hour in which
16 the Companies receive energy under the Solar PPA. That is the appropriate
17 comparison because if energy from the Solar PPA had not arrived in a given hour, the
18 energy cost that would have been billed to native load customers would have been
19 equal to or greater than that of the highest-cost unit actually dispatched and stacked to
20 native load using the AFB process.

21 A simplified illustration explains this approach. Assume an hour in which
22 there is 1,000 MW of native load demand, 25 MW of supply from the Solar PPA that

⁷ See, e.g., Direct Testimony of David S. Sinclair Exh. DSS-2 at 19-21.

1 serves native load, and two generating units with capacity of 500 MW each, one with
2 a variable energy cost of \$25/MWh and the other with a variable energy cost of
3 \$30/MWh. In that hour, 25 MWh of energy from the Solar PPA displaces 25 MWh
4 of energy that would have come from the higher-cost, \$30/MWh unit if the Solar PPA
5 energy had not arrived. Therefore, the appropriate basis for determining whether the
6 Solar PPA provided economic benefits to customers in that hour is by comparing the
7 net cost of Solar PPA energy (i.e., Solar PPA energy cost minus REC revenues) to the
8 cost of the same amount of energy that would have been produced by the highest-cost
9 unit actually dispatched and stacked to native load. In this particular example, if the
10 net cost of the Solar PPA energy in that hour was less than \$750 (25 MWh x
11 \$30/MWh), it was economical and beneficial to customers.

12 The principle at work in the greatly simplified example above is what the
13 Companies propose to do in each two-year FAC review process: compare the total net
14 cost of the Solar PPA billed to customers under the FAC (Solar PPA costs minus REC
15 revenues in the same period) to the total avoided cost of energy (derived by summing
16 the avoided energy cost for each hour in which the Companies received energy under
17 the Solar PPA).

18 **Q. Please explain the Companies' proposed Solar PPA Adjustment Clause and how**
19 **it will work with the FAC.**

20 A. The purpose of the proposed Solar PPA Adjustment Clause is to track the cumulative
21 economics of the Solar PPA across FAC two-year review cases and adjust the F(m)
22 component of the FAC following each two-year review case to ensure that native load

1 customers are never worse off than they would have been without the Solar PPA and
2 that they receive any net economic benefits across the 20-year PPA term.

3 The Companies propose to distribute any net uneconomical amount to
4 customers through the FAC in the first billing month following the Commission's final
5 order in a two-year FAC review proceeding. Similarly, the Companies propose to
6 collect any previously distributed amounts through the FAC in the first billing month
7 following the Commission's final order in a FAC two-year review proceeding finding
8 the Solar PPA was economical in that period. This process is further discussed with
9 detailed examples below.

10 This approach maintains the finality of FAC two-year review proceedings and
11 ensures customers can benefit from the Solar PPA while also making certain the
12 Companies can be made whole for distributed amounts if the Solar PPA proves to be
13 economical over time. This process is wholly consistent with the analysis presented
14 in the application to determine the economics of the Solar PPA over the 20-year term
15 of the agreement.

16 The structure of the proposed Solar PPA Adjustment Clause is similar to the
17 Companies' existing Off-System Sales Adjustment Clauses.⁸ As the proposed
18 adjustment clause tariff sheets attached hereto as Exhibits A (KU) and B (LG&E)
19 show, the Solar PPA Adjustment Clause creates an adjustment to F(m) in the FAC
20 that will appear in FAC Form A, as does the Off-System Sales Adjustment Clause
21 adjustment factor.

⁸ Kentucky Utilities Company, P.S.C. No. 19, Original Sheet No. 88; Louisville Gas and Electric Company, P.S.C. Electric No. 12, Original Sheet No. 88

1 **Q. Please provide an example of how the AFB, FAC, and new Solar PPA Adjustment**
 2 **Clause will work together to ensure customers will benefit from the Solar PPA.**

3 A. The following tables show how the AFB, FAC, and new Solar PPA Adjustment Clause
 4 will work together to ensure all customers receive benefits in the aggregate from the
 5 Solar PPA. We presented the same tables during the recent informal conference in
 6 this case.

7 Table 1 below shows a two-year FAC review period in which the cost of solar
 8 energy delivered and billed to native load customers under the FAC (\$1,383,000) nets
 9 against the REC revenues returned to customers through the FAC in that same period
 10 (\$249,000). This netting yields the amount customers would pay in total for Solar
 11 PPA energy through the FAC in that two-year period, called “Customer collections”
 12 (\$1,134,000):

13 **Table 1**

Benefit/(cost) of energy displaced by 25 MW of solar PPA (\$000)			
			Nov 2020 to Oct 2022
Example 1	REC Price =		\$5
Monthly FAC recovery			
	Solar PPA energy cost		1,383
	REC sales revenue		(249)
	Customer collections		1,134

14 } Monthly FAC filings include the energy cost of the PPA net of REC sales revenue

15 To determine whether the Solar PPA was a net benefit to customers in that
 16 two-year period, it is necessary to compare the “Customer collections” amount to the
 17 cost of energy from the highest-cost unit stacked to native load using the AFB process
 18 in each hour in which the Companies receive energy under the Solar PPA. In Table 2
 19 below, the total avoided energy cost is called “2-year Displaced energy cost”

1 (\$887,000), resulting in the Solar PPA being uneconomical for that period by
 2 \$247,000:

3 **Table 2**

Benefit/(cost) of energy displaced by 25 MW of solar PPA (\$000)			
			Nov 2020 to Oct 2022
Example 1	REC Price =		\$5
Monthly FAC recovery			
	Solar PPA energy cost		1,383
	REC sales revenue		(249)
	Customer collections		1,134
	2-year Displaced energy cost		887
	Net period benefit/(cost)		(247)

The sum of Solar PPA energy costs less REC sales revenue for the review period
 The sum of highest hourly unit cost in the AFB stack applied to solar volumes for the review period
 Measure of Economics or Un-Economics for the review period

4
 5 Using the hypothetical example shown in Table 2 above, the Companies would
 6 distribute \$247,000 to customers following the FAC two-year review case via an
 7 adjustment to F(m) calculated using the Solar PPA Adjustment Clause. The Solar
 8 PPA Adjustment Clause would also track the \$247,000 distribution for possible later
 9 recovery if the Solar PPA proved to be economical in later periods. This approach
 10 ensures that customers are made whole every two years whenever the Solar PPA
 11 proves to be uneconomical while also giving the Companies an opportunity to recover
 12 earlier distributed amounts if the Solar PPA becomes economical in later years,
 13 consistent with the 20-year evaluation of the Solar PPA agreement. This tracking for
 14 the November 2020 through October 2022 period is show in Table 3 below:

1

Table 3

Benefit/(cost) of energy displaced by 25 MW of solar PPA (\$000)			
			Nov 2020 to Oct 2022
Example 1	REC Price =		\$5
Monthly FAC recovery			
	Solar PPA energy cost		1,383
	REC sales revenue		(249)
	Customer collections		1,134
	2-year Displaced energy cost		887
	Net period benefit/(cost)		(247)
	Period (returned)/collected		(247)
	Cumulative Economics		(247)

Un-Economic value for the review period returned to customers

Accumulated benefits/(cost) for review over the 20-year period

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Continuing the hypothetical, assume in the next two-year period that the cost of energy supplied under the Solar PPA is \$3,114,000 and REC revenues are \$560,000, yielding a net amount billed to customers under the FAC of \$2,554,000. Further assume that the avoided energy cost is \$2,660,000. This results in the Solar PPA being economical in the November 2022 through October 2024 period by \$106,000, as shown in Table 4 below:

1

Table 4

Benefit/(cost) of energy displaced by 25 MW of solar PPA (\$000)			
		Nov 2020 to Oct 2022	Nov 2022 to Oct 2024
Example 1	REC Price =	\$5	\$5
Monthly FAC recovery			
	Solar PPA energy cost	1,383	3,114
	REC sales revenue	(249)	(560)
	Customer collections	1,134	2,554
	2-year Displaced energy cost	887	2,660
	Net period benefit/(cost)	(247)	106
	Period (returned)/collected	(247)	106
	Cumulative Economics	(247)	(141)

This review period shows customers received a benefit through the Monthly FAC
 Company collects a portion of the value returned to customers in prior review period
 Process continues for next two-year review period

2

3 In this example, the Companies would collect \$106,000 from customers through the
 4 Solar PPA Adjustment Clause’s adjustment to FAC billings in the first billing month
 5 following the FAC two-year review proceeding (“Period (returned)/collected”). This
 6 would also reduce the amount the Companies could collect under the Solar PPA
 7 Adjustment Clause in future periods from \$247,000 to \$141,000.

8 Note that the Companies would not collect the full \$247,000 returned to
 9 customers following the previous FAC two-year review case, but only the \$106,000
 10 by which customers benefitted in the November 2022 through October 2024 period.
 11 This ensures customers are never worse off than they would have been without the
 12 Solar PPA, while also helping the Companies to recover amounts previously
 13 distributed to hold customers harmless, consistent with the 20-year evaluation of the
 14 Solar PPA agreement.

1 Note also that across the two review periods in the hypothetical so far the Solar
2 PPA is net uneconomical by \$141,000 (see “Cumulative Economics” in Table 4
3 above), but customers have still been held harmless across all four years; in the
4 aggregate, they will not have paid more with the Solar PPA than they would have
5 without it.

6 In the next two-year period of the hypothetical (Table 5), customers receive
7 net economic benefits and the Companies are made whole. In the November 2024
8 through October 2026 period, Solar PPA costs are \$3,147,000 and REC revenues are
9 \$566,000, resulting in a net Solar PPA cost of \$2,582,000. Avoided energy cost is
10 \$2,853,000 for the same period, resulting a net benefit of the Solar PPA of \$271,000.
11 Of that amount, the Companies would collect \$141,000 through the FAC in the first
12 month following the FAC two-year review case (again through the Solar PPA
13 Adjustment Clause’s adjustment factor to the FAC), and customers would enjoy a net
14 cumulative benefit across the first three periods of \$130,000:

1

Table 5

Benefit/(cost) of energy displaced by 25 MW of solar PPA (\$000)				
		Nov 2020 to Oct 2022	Nov 2022 to Oct 2024	Nov 2024 to Oct 2026
Example 1	REC Price =	\$5	\$5	\$5
Monthly FAC recovery				
	Solar PPA energy cost	1,383	3,114	3,147
	REC sales revenue	(249)	(560)	(566)
	Customer collections	1,134	2,554	2,582
	2-year Displaced energy cost	887	2,660	2,853
	Net period benefit/(cost)	(247)	106	271
	Period (returned)/collected	(247)	106	141
	Cumulative Economics	(247)	(141)	130

This review period shows customers received a benefit through the Monthly FAC

Company collects a portion of the value returned to customers in prior review period

Process continues for next two-year review period

2

3 The Solar PPA Adjustment Clause would track the \$130,000 net benefit accumulated
 4 across the first three two-year periods.

5 In the final two-year period we will address in this hypothetical example
 6 (Table 6), there is another net benefit of the Solar PPA, this time \$356,000. Native
 7 load customers would receive the entirety of that benefit during the two-year period
 8 in the form of reduced FAC charges relative to what they would have paid absent the
 9 Solar PPA. The Solar PPA Adjustment Clause would continue to track the net
 10 economics across all periods (now a total net benefit of \$486,000) for use in future
 11 two-year FAC review proceedings:

1

Table 6

Benefit/(cost) of energy displaced by 25 MW of solar PPA (\$000)					
		Nov 2020 to Oct 2022	Nov 2022 to Oct 2024	Nov 2024 to Oct 2026	Nov 2026 to Oct 2028
Example 1	REC Price =	\$5	\$5	\$5	\$5
Monthly FAC recovery					
	Solar PPA energy cost	1,383	3,114	3,147	3,097
	REC sales revenue	(249)	(560)	(566)	(557)
	Customer collections	1,134	2,554	2,582	2,540
	2-year Displaced energy cost	887	2,660	2,853	2,896
	Net period benefit/(cost)	(247)	106	271	356
	Period (returned)/collected	(247)	106	141	-
	Cumulative Economics	(247)	(141)	130	486



Process continues for next two-year review period

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10 **Q. Please describe the regulatory accounting that will be associated with the**
 11 **Companies' proposed approach.**

12 A. Similar to the regulatory accounting approach the Companies currently use for other
 13 cost recovery mechanisms,⁹ the Companies propose to use regulatory liability

⁹ Including the Companies' FAC, environmental surcharge, off-system sales, gas supply clause, gas line tracker, and demand-side management cost-recovery mechanisms.

1 accounting to record amounts when the Solar PPA is net uneconomical (and therefore
2 will be returned to customers following two-year review proceedings). The regulatory
3 liability would be reduced as the amounts are returned to customers through the FAC.

4 The Companies further propose to use regulatory asset accounting to record
5 net benefits of the Solar PPA, though any such regulatory assets would be capped at
6 the balances of the associated regulatory liabilities recognized.

7 **Q. Will you please provide an example that demonstrates this regulatory accounting**
8 **approach?**

9 A. Yes. Assume in two-year Period 1 that the Solar PPA is uneconomical by \$200,000.
10 Over that period the Companies' associated total regulatory liability would be
11 \$200,000; the associated total regulatory asset would be zero. The Companies would
12 distribute \$200,000 to customers through the FAC in the first billing month following
13 the Commission's final order in that proceeding. That would reduce the regulatory
14 liability to zero, and the regulatory asset would remain zero. The Solar PPA
15 Adjustment Clause would track the net economics from Period 1 (a net detriment of
16 \$200,000 in this example) for use in future periods.

17 Next, assume the Solar PPA produces \$500,000 of net benefits in Period 2. As
18 the benefits accumulate over the period, the Companies' total associated regulatory
19 asset balance would increase to \$200,000 (i.e., net benefits produced in that period
20 capped by previous distributions to customers). Assuming the Commission agreed in
21 its two-year FAC review order that the net benefit for Period 2 was \$500,000, the
22 Companies would collect \$200,000 from customers through a Solar PPA Adjustment
23 Clause-driven adjustment to the FAC in the first billing month following the

1 Commission’s order. That would reduce the regulatory asset to zero, and the
2 regulatory liability would remain zero. The Solar PPA Adjustment Clause would
3 again track the net economics from Periods 1 and 2 (now a net benefit of \$300,000)
4 for use in future periods.

5 In Period 3, assume the Solar PPA is net uneconomical by \$100,000. Over
6 that period the regulatory liability balance would grow to \$100,000. The regulatory
7 asset balance would also grow to \$100,000, which is the amount of net benefits
8 accumulated in prior periods capped at the then-current regulatory liability balance.
9 In the Commission’s two-year FAC review, it would presumably determine that the
10 Solar PPA was uneconomical in Period 3 by \$100,000. But because the net cumulative
11 benefit of the Solar PPA was \$300,000 prior to Period 3, there would be no distribution
12 to customers through the FAC following the Commission’s final order. Instead, the
13 cumulative net benefit of the Solar PPA at the end of Period 3 would be reduced to
14 \$200,000, and the balances of the Solar PPA regulatory asset and liability would be
15 reduced to zero.

16 **Q. Why do the Companies believe it is appropriate to evaluate the costs and benefits**
17 **of the Solar PPA over a two-year period rather than a shorter interval?**

18 A. There are several reasons the Companies believe a two-year period is appropriate for
19 evaluating the costs and benefits of the Solar PPA. First, two years is a reasonable
20 period over which to evaluate and average the costs and benefits of the Solar PPA,
21 certainly as compared to a six-month interval. This is consistent with the
22 Commission’s May 8, 2020 order in this proceeding, in which the Commission stated,
23 “[T]he PPA, net of REC sales, should be reviewed over the entirety of a 2-year FAC

1 review. ... This type of treatment, particularly over such a long-period of time, is
2 reasonable given the relative complexities of integrating renewables, the levelized
3 price of the energy resulting from the PPA, and the economics of the project as
4 presented to the Commission.”¹⁰

5 Using a two-year review period will also increase administrative efficiency by
6 not adding to the items reviewed in the FAC six-month review cases. It will also
7 enhance bill stability by adjusting FAC charges under the Solar PPA Adjustment
8 Clause just once every two years instead of once every six months.

9 Finally, using a two-year review period for the Solar PPA accords well with
10 the FAC regulation itself, which envisions a more in-depth review of the FAC at two-
11 year intervals than at six-month intervals.¹¹ Thus, reviewing the necessary hourly
12 avoided energy cost calculations and comparing them to the net cost of the Solar PPA
13 is best suited for the more in-depth review of the FAC two-year review proceedings.

14 **Q. How do the Companies propose to provide revenues from REC sales to**
15 **customers?**

16 A. The Companies intend to provide REC-sale revenues to customers through the FAC
17 on a monthly basis. Returning REC-sale revenues through the FAC ensures customers
18 receive the benefit of the REC revenues that are generated from the energy produced,
19 and thus the costs incurred, from the Solar PPA as quickly as possible. In addition,
20 returning REC-sale revenues through the FAC is analogous to the concept stated in
21 the FAC regulation regarding cash and other discounts when calculating fossil fuel

¹⁰ Case No. 2020-00016, Order at 18-19 (May 8, 2020).

¹¹ 807 KAR 5:056 Sec. 3(4)(a).

1 costs for FAC purposes.¹² Therefore, it is both good for customers and consistent with
2 the Commission’s FAC regulation to provide REC-sale revenues to customers through
3 the FAC as an offset to the energy costs incurred.

4 **THE COMPANIES’ PROPOSED APPROACH IN THIS PROCEEDING IS NOT A**
5 **TEMPLATE FOR FUTURE RENEWABLE PPA ARRANGEMENTS UNDER**
6 **GREEN TARIFF OPTION #3**

7 **Q. Is the Companies’ proposed approach to the Solar PPA a template for all such**
8 **contracts into which the Companies might enter under their Green Tariff Option**
9 **#3?**

10 **A.** No, it is not. The Companies’ proposal is unique to the facts and circumstances of
11 this case. Changes in economics and regulatory matters, as well as the particulars of
12 a given renewable energy contract, will necessarily shape any future proposal.
13 Therefore, although we believe our proposal herein is a suitable solution for the facts
14 and circumstances surrounding the Solar PPA and the Commission’s orders to date in
15 this proceeding, we do not believe it should serve as precedent for how all future
16 renewable contracts under the Green Tariff (or otherwise) should be handled.

17 **GREEN TARIFF MODIFICATIONS REGARDING METER AGGREGATION**

18 **Q. The Commission granted reconsideration of the Order’s requirement regarding**
19 **aggregating consumption, clarifying, “[T]he intent of the aggregation is to allow**
20 **a single customer the ability to aggregate usage from multiple locations to meet**
21 **the minimum monthly billing load threshold for Green Tariff Option #3.”¹³ How**
22 **are the Companies complying with the clarified requirement?**

¹² 807 KAR 5:056 Sec. 1(6).

¹³ Order on Reconsideration at 17.

1 A. The Companies will file by October 1, 2020, a number of modifications to Green
2 Tariff Option #3, including modifications to address the Commission’s clarified
3 requirements regarding aggregate usage from multiple locations to meet the minimum
4 monthly billing load threshold. The revisions will also clarify that an Option #3
5 customer with multiple accounts may allocate renewable energy across its accounts as
6 agreed in the Renewable Power Agreement for the customer’s Option #3 service,
7 which would require Commission approval.

8 **CONCLUSION**

9 **Q. Why should the Commission approve the Companies’ proposed approach to the**
10 **Solar PPA?**

11 A. The Companies’ proposed approach to the Solar PPA is consistent with the
12 Companies’ original position in this proceeding—namely that the Solar PPA will
13 provide net benefits for all customers over the 20-year term of the contract—but also
14 complies with the Commission’s clearly stated direction that there should be no
15 subsidy of the Solar PPA by native load customers and that customers should be
16 assured of benefits. The Companies’ proposal does just that: it ensures native load
17 customers can only benefit from the Solar PPA; the Companies’ shareholders bear the
18 downside risk and receive no return. It also helps enhance economic development
19 potential, gives existing important customers strong incentives to remain and expand
20 in Kentucky, and increases the diversity of the Companies’ energy supply to help
21 hedge against future regulatory changes.

22 In sum, the Companies’ proposal fully addresses all of the concerns raised by
23 the Commission and ensures all customers will benefit. We therefore respectfully
24 recommend the Commission approve the Companies’ proposals stated herein,

1 including the proposed Solar PPA Adjustment Clause, the related Solar PPA deferral
2 accounting, and the AFB and FAC two-year review approach.

3 **Q. Does this conclude your testimony?**

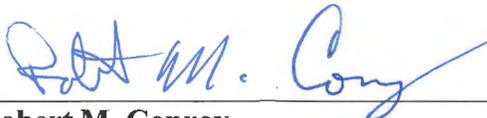
4 A. Yes.

5

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Robert M. Conroy**, being duly sworn, deposes and says that he is Vice President, State Regulation and Rates 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 foregoing testimony, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.



Robert M. Conroy

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 17th day of September 2020.



Notary Public

Notary Public, ID No. 603967

My Commission Expires:

11/11/2022

VERIFICATION

COMMONWEALTH OF KENTUCKY)
)
COUNTY OF JEFFERSON)

The undersigned, **Christopher M. Garrett**, being duly sworn, deposes and says that he is Controller 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 foregoing testimony, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

DocuSigned by:
Christopher M. Garrett
D68B2BAE00DD417...

Christopher M. Garrett

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 17th day of September 2020.

Judy Schook

Notary Public

Notary Public, ID No. 603967

My Commission Expires:

7/14/2022

APPENDIX A

Lonnie E. Bellar

Chief Operating Officer
Louisville Gas & Electric Company
Kentucky Utilities Company
220 West Main Street
Louisville, Kentucky 40202
Telephone: (502) 627-4830

Education

Bachelors in Electrical Engineering;
University of Kentucky, May 1987
Bachelors in Engineering Arts;
Georgetown College, May 1987
E.ON Academy, Intercultural Effectiveness Program: 2002-2003
E.ON Finance, Harvard Business School: 2003
E.ON Executive Pool: 2003-2007
E.ON Executive Program, Harvard Business School: 2006
E.ON Academy, Personal Awareness and Impact: 2006
Tuck Executive Education Program, Dartmouth University: 2015

Professional Experience

Louisville Gas & Electric Company

Kentucky Utilities Company

Chief Operating Officer	Mar. 2018 - Present
Sr. Vice President – Operations	Jan. 2017 – Mar. 2018
Vice President, Gas Distribution	Feb. 2013 – Jan. 2017
Vice President, State Regulation and Rates	Nov. 2010 – Jan. 2013

E.ON U.S. LLC

Vice President, State Regulation and Rates	Aug. 2007 – Nov. 2010
Director, Transmission	Sept. 2006 – Aug. 2007
Director, Financial Planning and Controlling	April 2005 – Sept. 2006
General Manager, Cane Run, Ohio Falls and Combustion Turbines	Feb. 2003 – April 2005
Director, Generation Services	Feb. 2000 – Feb. 2003
Manager, Generation Systems Planning	Sept. 1998 – Feb. 2000
Group Leader, Generation Planning and Sales Support	May 1998 – Sept. 1998

Kentucky Utilities Company

Manager, Generation Planning	Sept. 1995 – May 1998
Supervisor, Generation Planning	Jan. 1993 – Sept. 1995
Technical Engineer I, II and Senior, Generation System Planning	May 1987 – Jan. 1993

Professional Memberships

Institute of Electrical and Electronics Engineers

Civic Activities

E.ON U.S. Power of One Co-Chair – 2007
Kentucky Science Center – Board of Directors – 2008–2016
Metro United Way Campaign – 2008
UK College of Engineering Advisory Board – 2009 – Present
American Gas Association – Board of Directors – 2013 – Present
Southern Gas Association – Board of Directors – 2013 – Present
Greater Louisville, Inc. – Board of Directors, Executive Committee – 2016–Present;
Board Chair - 2020
LG&E/KU Power of One Co-Chair - 2018

APPENDIX B

Christopher M. Garrett

Controller
Louisville Gas and Electric Company
Kentucky Utilities Company
220 West Main Street
Louisville, Kentucky 40202
Telephone: (502) 627-3328

Previous Positions:

Director, Rates	Feb 2016 – Dec 2017
Director, Accounting and Regulatory Reporting	Dec 2012 – Jan 2016
Director, Financial Planning & Controlling	Feb 2010 – Nov 2012
Manager, Financial Planning	Nov 2007 – Feb 2010
Manager, Corporate Accounting	Jan 2006 – Oct 2007
Manager, Utility Tax	May 2002 – Jan 2006
Tax Analyst, various positions	Aug 1995 – May 2002

Education:

Eastern Kentucky University, Bachelor of Business Administration - Accounting, 1995
Graduated Magna Cum Laude
Certified Public Accountant, Kentucky, 1999

Professional Memberships:

American Institute of Certified Public Accountants (AICPA)
Kentucky Society of Certified Public Accountants (KSCPA)
Edison Electric Institute

Civic Activities:

The Louisville Free Public Library Foundation
St. Joseph School - Tuition Administration Committee

Adjustment Clause

SP

Solar PPA Adjustment Clause

APPLICABLE

In all territory served.

AVAILABILITY

Mandatory to all rate schedules that are subject to Adjustment Clause SP.

RATE

With regard to the Solar PPA approved in Case No. 2020-00016, the Solar PPA Adjustment Amount will be determined in each two-year FAC review proceeding. The Solar PPA Adjustment Amount will be zero (0) in all months except the first billing month following a final Commission order in such a two-year FAC review proceeding.

The Solar PPA Adjustment Amount will be calculated to ensure that customers are not harmed by, and will receive cumulative net benefits of, the Solar PPA over time, and to ensure that the Company is made whole for previous distributions to customers when justified by the economics of the two-year period under review and the net cumulative economics of the Solar PPA.

The Solar PPA Adjustment Amount will be added to F(m) in the first expense month FAC filing following the month in which the Commission issues an order in a two-year review case. The Solar PPA Adjustment Amount will then return to zero until the Commission issues a final order in the next two-year FAC review case.

The Solar PPA Adjustment Amount shall be filed with the Commission as part of the two-year FAC review process, along with all the necessary supporting data to justify the amount of the adjustment, which shall include data and information as may be required by the Commission.

DATE OF ISSUE: _____, 2020

DATE EFFECTIVE: With Service Rendered
On and After _____, 2020

ISSUED BY: /s/ Robert M. Conroy, Vice President
State Regulation and Rates
Lexington, Kentucky

**Issued by Authority of an Order of the
Public Service Commission in Case No.
2020-00016 dated _____, 2020**

Adjustment Clause

SP

Solar PPA Adjustment Clause

APPLICABLE

In all territory served.

AVAILABILITY

Mandatory to all rate schedules that are subject to Adjustment Clause SP.

RATE

With regard to the Solar PPA approved in Case No. 2020-00016, the Solar PPA Adjustment Amount will be determined in each two-year FAC review proceeding. The Solar PPA Adjustment Amount will be zero (0) in all months except the first billing month following a final Commission order in such a two-year FAC review proceeding.

The Solar PPA Adjustment Amount will be calculated to ensure that customers are not harmed by, and will receive cumulative net benefits of, the Solar PPA over time, and to ensure that the Company is made whole for previous distributions to customers when justified by the economics of the two-year period under review and the net cumulative economics of the Solar PPA.

The Solar PPA Adjustment Amount will be added to F(m) in the first expense month FAC filing following the month in which the Commission issues an order in a two-year review case. The Solar PPA Adjustment Amount will then return to zero until the Commission issues a final order in the next two-year FAC review case.

The Solar PPA Adjustment Amount shall be filed with the Commission as part of the two-year FAC review process, along with all the necessary supporting data to justify the amount of the adjustment, which shall include data and information as may be required by the Commission.

DATE OF ISSUE: _____, 2020

DATE EFFECTIVE: With Service Rendered
On and After _____, 2020

ISSUED BY: /s/ Robert M. Conroy, Vice President
State Regulation and Rates
Louisville, Kentucky

**Issued by Authority of an Order of the
Public Service Commission in Case No.
2020-00016 dated _____, 2020**