COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION OF THE APPLICATION OF)
THE FUEL ADJUSTMENT CLAUSE OF) CASE NO.
KENTUCKY UTILITIES COMPANY FROM) 2017-00003
NOVEMBER 1, 2014 THROUGH OCTOBER 31, 2016)

RESPONSE OF KENTUCKY UTILITIES COMPANY TO COMMISSION STAFF'S POST HEARING REQUEST FOR INFORMATION IN COMMISSION'S ORDER DATED APRIL 21, 2017

FILED: May 1, 2017

VERIFICATION

COMMONWEALTH OF KENTUCKY)) SS: **COUNTY OF JEFFERSON**

The undersigned, **Charles R. Schram**, being duly sworn, deposes and says that he is Director — Power Supply, 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.

Chulo Redun

Charles R. Schran

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

and State, this 1st day of May 2017.

Juldy Schooler (SEAL)

Notary Public

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

VERIFICATION

COMMONWEALTH OF KENTUCKY)) SS: COUNTY OF JEFFERSON)

The undersigned, **Derek Rahn**, being duly sworn, deposes and says that he is Manager - Revenue Requirement 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.

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Derek Rahn

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

and State, this 15 day of May 2017.

Judy Schooler (SEAL)

Notary Public

MyDYosaniosipe Expires: Notary Public, State at Large, KY My commission expires July 11, 2018 Notary ID # 512743

KENTUCKY UTILITIES COMPANY

Response to Commission Staff's Post Hearing Request for Information in Commission's Order Dated April 21, 2017

Case No. 2017-00003

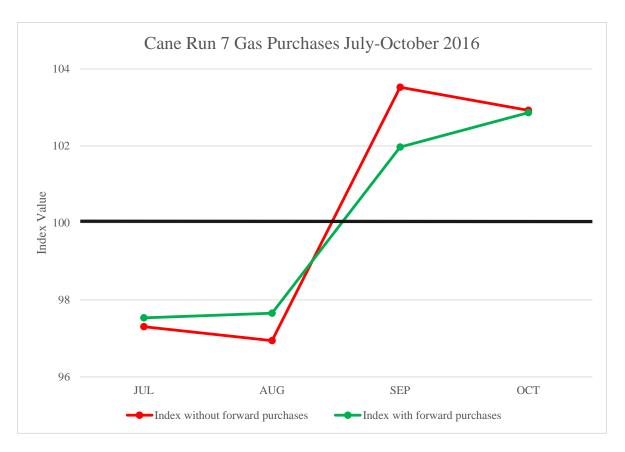
Question No. 1

Witness: Charles R. Schram

- Q-1. Refer to KU's response to the Commission's February 6, 2017 Request for Information, Item 29. The response states that, beginning July 2016, a portion of the gas used to operate Cane Run unit 7 was purchased on a forward basis. Provide the amount paid under the forward basis versus what would have been paid if a forward basis had not been used.
- A-1. The information requested is contained in the table below. The monthly price of the Cane Run 7 forward purchases is the same for each day of the respective month. The expected price without forward purchases reflects the average spot price for the remainder of Cane Run 7's natural gas supply during the month. The blended price is the weighted average of Cane Run 7's forward and spot gas prices.

Forward gas purchases for CR7 (\$/MMBtu)								
2016 Month	Forward Purchase Price	Expected Price without Forward Purchases	Blended Price with Forward Purchases					
JUL	\$2.5150	\$2.6902	\$2.6548					
AUG	\$2.5850	\$2.6801	\$2.6580					
SEP	\$2.5012	\$2.8622	\$2.7756					
OCT	\$2.6825	\$2.8456	\$2.7999					

KU discussed the fuel strategy for Cane Run 7 with Commission staff during two informal conferences, on January 28, 2016 and August 11, 2016. The fuel strategy's goals are to maintain a reliable fuel supply and reduce customer bill volatility related to fuel costs. An illustration of the reduction in gas price volatility for the July 2016 forward gas purchases was provided in the August 11, 2016 presentation. The graph below illustrates the monthly reduction in price volatility across the four month period of July through October 2016 as a result of the forward gas purchases for Cane Run 7's fuel supply. Each month's results are indexed to the 4 month weighted averages. Values closer to 100 reflect less volatility.



KENTUCKY UTILITIES COMPANY

Response to Commission Staff's Post Hearing Request for Information in Commission's Order Dated April 21, 2017

Case No. 2017-00003

Question No. 2

Witness: Derek Rahn

- Q-2. If a final Order is issued in KU's current base rate proceeding before a final Order is issued in this proceeding, provide an updated response to the Commission's February 6, 2017 Request for Information, Item 16, to show the effect of KU's proposed decrease in base fuel costs on base rates.
- A-2. See attached. In developing the attachment, the Company utilized the rates developed and presented in the Stipulation and Recommendation filed in Case No. 2016-00370 on April 19, 2017.

Kentucky Utilities Company Revised Tariffs STIPULATION filed

		STIPULATION filed									
		4	/19/2017								
		Base Rates		Ex	isting Fuel	Exi	isting Base	Re	vised Fuel	Revised Base	
Tariff		Energy, Fuel and		Cor	Component of Rate Exc		Excluding	Co	mponent of	Rates including	
Sheet No.	Rate Schedule		ECR		ase Rates	F	Fuel Base	В	ase Rates	Fue	el and ECR
5	RS	\$	0.09163	\$	0.02892	\$	0.06271	\$	0.02609	\$	0.08880
6	RTOD-Energy										
	Off Peak	\$	0.06015	\$	0.02892	\$	0.03123	\$	0.02609	\$	0.05732
	On Peak	\$	0.27646	\$	0.02892	\$	0.24754	\$	0.02609	\$	0.27363
6.1	RTOD - Demand	\$	0.04579	\$	0.02892	\$	0.01687	\$	0.02609	\$	0.04296
7	VFD	\$	0.09163	\$	0.02892	\$	0.06271	\$	0.02609	\$	0.08880
10	GS	\$	0.10465	\$	0.02892	\$	0.07573	\$	0.02609	\$	0.10182
12	AES	\$	0.08333	\$	0.02892	\$	0.05441	\$	0.02609	\$	0.08050
15	PS										
	Secondary	\$	0.03571	\$	0.02892	\$	0.00679	\$	0.02609	\$	0.03288
	Primary	\$	0.03472	\$	0.02892	\$	0.00580	\$	0.02609	\$	0.03189
20	TODS	\$	0.03528	\$	0.02892	\$	0.00636	\$	0.02609	\$	0.03245
22	TODP	\$	0.03432	\$	0.02892	\$	0.00540	\$	0.02609	\$	0.03149
25	RTS	\$	0.03355	\$	0.02892	\$	0.00463	\$	0.02609	\$	0.03072
30	FLS										
	Primary	\$	0.03432	\$	0.02892	\$	0.00540	\$	0.02609	\$	0.03149
	Transmission	\$	0.03331	\$	0.02892	\$	0.00439	\$	0.02609	\$	0.03048
37	LE	\$	0.07328	\$	0.02892	\$	0.04436	\$	0.02609	\$	0.07045
38	TE	\$	0.09037	\$	0.02892	\$	0.06145	\$	0.02609	\$	0.08754
79	SPS	\$	0.03572	\$	0.02892	\$	0.00680	\$	0.02609	\$	0.03289
	(TOD	.	0.00550	<i>.</i>	0.0000	¢	0.00.000	¢	0.00	<i>•</i>	0.00000
80	STOD	\$	0.03572	\$	0.02892	\$	0.00680	\$	0.02609	\$	0.03289
01	007										
81	OSL	¢	0.02571	¢	0.00000	¢	0.00670	¢	0.02600	¢	0.02200
	Secondary	\$	0.03571	\$	0.02892	\$	0.00679	\$	0.02609	\$	0.03288
	Primary	\$	0.03472	\$	0.02892	\$	0.00580	\$	0.02609	\$	0.03189

KENTUCKY UTILITIES COMPANY LIGHTING SCHEDULES; ALL RATES PER UNIT PER MONTH

			Kwh per	Fuel Factor Increase \$/kWh	Annual Increase per year	Monthly Increase	Tarifi STIPULATION	f		
Page	Sch	edule			year	(0.00283)			filed 4/19/2017	Revised
35	LS	Lighti	ng Service							
		Overhead	-							
		Rate		Approximate						
		Code	Type of Fixture sure Sodium	Approximate Lumens	kW Per Light					
		462	Cobra Head	5,800	0.083	332 kWh/year	(0.94)	(0.08)	9.86	9.
			Cobra Head	5,800	0.083	332 kWh/year	(0.94)	(0.08)	13.56	13
			Cobra Head	9,500	0.117	468 kWh/year	(1.32)	(0.11)	10.35	10
			Cobra Head	9,500	0.117	468 kWh/year	(1.32)	(0.11)	14.25	14
			Cobra Head Cobra Head	22,000	0.242 0.242	968 kWh/year	(2.74)	(0.23)	16.08	15
			Cobra Head	22,000 50,000	0.242	968 kWh/year 1,884 kWh/year	(2.74) (5.33)	(0.23) (0.44)	20.28 25.61	20 25
			Cobra Head	50,000	0.471	1,884 kWh/year	(5.33)	(0.44)	28.46	23
			Directional Directional	9,500	0.117 0.242	468 kWh/year	(1.32)	(0.11)	10.19	10
		488 489	Directional	22,000 50,000	0.242	968 kWh/year 1,884 kWh/year	(2.74) (5.33)	(0.23) (0.44)	15.42 21.95	15 21
		100								
			Open Bottom	9,500	0.117	468 kWh/year	(1.32)	(0.11)	8.87	8
		Metal Hali 451	ide Directional	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	22.80	22
		Light Emi	tting Diode (LED)							
			Cobra Head	8,179	0.080	320 kWh/year	(0.91)	(0.08)	14.92	14
			Cobra Head	14,166	0.134	536 kWh/year	(1.52)	(0.13)	18.09	17
		392	Cobra Head	23,214	0.228	912 kWh/year	(2.58)	(0.22)	27.63	27
5.1	LS	Lighti	ng Service							
		LED (cont								
		393	Open Bottom	5,007	0.050	200 kWh/year	(0.57)	(0.05)	9.94	9
		Undergrou	and Service							
		Rate		Approximate						
			Type of Fixture	Lumens	kW Per Light					
			sure Sodium				(0.0.1)	(0.00)		
			Colonial Colonial	5,800 9,500	0.083 0.117	332 kWh/year 468 kWh/year	(0.94) (1.32)	(0.08) (0.11)	12.63 12.96	12 12
		100	Colonna	7,500		100 1111 Jour	(1.52)	(0.11)	12.00	
			Acorn	5,800	0.083	332 kWh/year	(0.94)	(0.08)	17.23	17
			Acorn	5,800	0.083	332 kWh/year	(0.94)	(0.08)	24.58	24
			Acorn Acorn	9,500 9,500	0.117 0.117	468 kWh/year 468 kWh/year	(1.32) (1.32)	(0.11) (0.11)	17.69 25.17	17 25
		414 415	Victorian Victorian	5,800 9,500	0.083 0.117	332 kWh/year 468 kWh/year	(0.94) (1.32)	(0.08) (0.11)	34.09 34.41	34 34
		415	. second	2,500		100 K 1111 year		(0.11)	54.41	54
			Contemporary	5,800	0.083	332 kWh/year	(0.94)	(0.08)	17.12	17
			Contemporary	5,800	0.083	332 kWh/year	(0.94)	(0.08)	19.41	19
		497	Contemporary	9,500	0.117	468 kWh/year	(1.32)	(0.11)	17.00	16
		477	Contemporary	9,500	0.117	468 kWh/year	(1.32)	(0.11)	24.01	23
		498 478	Contemporary	22,000 22,000	0.242	968 kWh/year	(2.74)	(0.23)	19.84	19
		478 499	Contemporary Contemporary	22,000 50,000	0.242 0.471	968 kWh/year	(2.74)	(0.23)	30.92	30 23
		499 479	Contemporary	50,000	0.471	1,884 kWh/year 1,884 kWh/year	(5.33) (5.33)	(0.44) (0.44)	24.15 38.21	23 37
		300	Dark Sky	4,000	0.060	240 kWh/year	(0.68)	(0.06)	24.88	24
			Dark Sky	9,500	0.117	468 kWh/year	(1.32)	(0.00)	26.00	24
5.2	LS	Lighti	ng Service							
		Undergrou	and Service							
		Rate		Approximate						
		Code	Type of Fixture	Lumens	kW Per Light					
		Metal Hali 491	de Contemporary	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	24.68	24
			Contemporary	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	38.89	38
		Light Frei	tting Diode (LED)							
			Cobra Head	8 179	0.080	320 kWh/year	(0.91)	(0.08)	35.44	35

396 Cobra Head 397 Cobra Head

398 Cobra Head

399 Colonial, 4-Sided

8,179

14,166

23,214

5,665

0.080

0.134

0.228

0.068

320 kWh/year

536 kWh/year

912 kWh/year

272 kWh/year

(0.91)

(1.52)

(2.58)

(0.77)

(0.08)

(0.13)

(0.22)

(0.06)

35.44

38.61

48.14

37.51

35.36

38.48

47.92

37.45

Attachment to Response to Question No. 2 Page 3 of 4 Rahn

KENTUCKY UTILITIES COMPANY LIGHTING SCHEDULES; ALL RATES PER UNIT PER MONTH

					Kwh per	Fuel Factor Increase \$/kWh	Annual Increase per year	Monthly Increase	Tariff	
Page	Schedu	ıle			year	(0.00283)			STIPULATION filed 4/19/2017	Revised
36	RLS	Restri	cted Lighting Service							
	Ove	rhead	Service							
		Rate		Approximate						
			Type of Fixture	Lumens	kW Per Light					
	Hig	h Press	sure Sodium							
		461	Cobra Head	4,000	0.060	240 kWh/year	(0.68)	(0.06)	8.87	8.81
		471	Cobra Head	4,000	0.060	240 kWh/year	(0.68)	(0.06)	12.20	12.14
		409	Cobra Head	50,000	0.471	1,884 kWh/year	(5.33)	(0.44)	14.10	13.66
		426	Open Bottom	5,800	0.083	332 kWh/year	(0.94)	(0.08)	8.54	8.46
	Met	al Hali	ide							
		450	Directional	12,000	0.150	600 kWh/year	(1.70)	(0.14)	16.13	15.99
		454	Directional	12,000	0.150	600 kWh/year	(1.70)	(0.14)	20.89	20.75
		455	Directional	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	27.56	27.23
		452	Directional	107,800	1.080	4,320 kWh/year	(12.23)	(1.02)	47.70	46.68
		459	Directional	107,800	1.080	4,320 kWh/year	(12.23)	(1.02)	52.45	51.43
	Mer	cury V	/apor							
		446	Cobra Head	7,000	0.207	828 kWh/year	(2.34)	(0.20)	10.84	10.64
		456	Cobra Head	7,000	0.207	828 kWh/year	(2.34)	(0.20)	13.35	13.1
		447	Cobra Head	10,000	0.294	1,176 kWh/year	(3.33)	(0.28)	12.85	12.5
		457	Cobra Head	10,000	0.294	1,176 kWh/year	(3.33)	(0.28)	15.08	14.80
		448	Cobra Head	20,000	0.453	1,812 kWh/year	(5.13)	(0.43)	14.54	14.1
		458	Cobra Head	20,000	0.453	1,812 kWh/year	(5.13)	(0.43)	17.02	16.59
		404	Open Bottom	7,000	0.207	828 kWh/year	(2.34)	(0.20)	11.87	11.67
36.1	RLS	Restri	cted Lighting Service							
	Ove	rhead	Service (continued)							
		Rate		Approximate						
		Code	Type of Fixture	Lumens	kW Per Light					
	Inca	indesce	ent							
			Tear Drop	1,000	0.102	408 kWh/year	(1.15)	(0.10)	3.81	3.71
			Tear Drop	2,500	0.201	804 kWh/year	(2.28)	(0.19)	5.11	4.92
			Tear Drop	4,000	0.327	1,308 kWh/year	(3.70)	(0.31)	7.63	7.32
		425	Tear Drop	6,000	0.447	1,788 kWh/year	(5.06)	(0.42)	10.19	9.77
	Und	lergrou	and Service							
		Rate		Approximate						
	Met	Code al Hali	Type of Fixture	Lumens	kW Per Light					
			Directional	12,000	0.150	600 kWh/year	(1.70)	(0.14)	31.30	31.10
			Directional	32,000	0.350	1,400 kWh/year	(3.96)	(0.33)	37.01	36.68
			Directional	107,800	1.080	4,320 kWh/year	(12.23)	(1.02)		60.64
			Contemporary	12,000	0.150	600 kWh/year	(1.70)	(0.14)		17.31
		494		12,000	0.150	600 kWh/year	(1.70)	(0.14)		31.28
		493		107,800	1.080	4,320 kWh/year	(12.23)	(1.02)		50.30
			Contemporary	107,800	1.080	4,320 kWh/year	(12.23)	(1.02)	65.28	64.26
		h Press	sure Sodium							
	Hig	11 1 103.								
	Hig		Acorn	4,000	0.060	240 kWh/year	(0.68)	(0.06)	15.71	15.65

Attachment to Response to Question No. 2 Page 4 of 4 Rahn

KENTUCKY UTILITIES COMPANY LIGHTING SCHEDULES; ALL RATES PER UNIT PER MONTH

				Kwh per	Fuel Factor Increase \$/kWh	Annual Increase per year	Monthly Increase	Tariff	
Page	Schedule			year	(0.00283)			STIPULATION filed 4/19/2017	Revised
	46	6 Colonial	4,000	0.060	240 kWh/year	(0.68)	(0.06)	11.22	11.16
	41	2 Coach	5,800	0.083	332 kWh/year	(0.94)	(0.08)	34.09	34.01
	41	3 Coach	9,500	0.117	468 kWh/year	(1.32)	(0.11)	34.41	34.30
36.2	RLS Res	tricted Lighting Service	Approximate Lumens	kW Per Light					
Underground Service									
	360	Granville	16,000	0.181	724 kWh/year	(2.05)	(0.17)	11.22	11.05