

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**ELECTRONIC APPLICATION OF KENTUCKY)
UTILITIES COMPANY FOR AN ADJUSTMENT OF) CASE NO.
ITS ELECTRIC RATES AND FOR CERTIFICATES) 2016-00370
OF PUBLIC CONVENIENCE AND NECESSITY)**

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

March 3, 2017

1 00372, KU's 2009 base rate case, Case No. 2009-00548, and LG&E's 2009 base rate
2 case, Case No. 2009-00549.

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

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

11
12 **Overview and Recommendations**

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

14 A. My testimony addresses the appropriate level of major generation overhaul
15 expense to include in KU's revenue requirement.

16 **Q. Please summarize your conclusions and recommendations.**

17 A. For ratemaking purposes, it is preferable to use a normalization technique for
18 generation overhaul expense because the actual overhaul expense in a given test period
19 may not be representative of annual overhaul expense over time. For the purposes of this
20 case, I recommend that generation overhaul expense be based on the historical four-year
21 annual average for this expense for the years 2013 through 2016, with the exception of
22 the relatively new Cane Run Unit 7, for which a combination of historical and projected

1 expense would be used. This adjustment reduces the retail revenue requirement by
2 approximately \$2.9 million relative to KU's filed case.

3
4 **Generation Overhaul Expense**

5 **Q. What amount of generation overhaul expense is included in KU's proposed revenue**
6 **requirement?**

7 A. KU's proposed retail revenue requirement includes \$22.1 million of generation
8 overhaul expense for the Forecasted Test Period (twelve months ending June 30, 2018),
9 compared to \$15.4 million in the Base Period (twelve months ended February 28, 2017).¹
10 According to KU's Schedule D-1, KU's adjustments to the Base Period reflect major
11 planned overhauls for Trimble County Unit 2, Cane Run Unit 7, and EW Brown units in
12 the Forecasted Test Period.

13 **Q. Do you agree that KU's revenue requirement should be based on overhaul expenses**
14 **forecast to occur during the Forecasted Test Period?**

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

¹KU's responses to Kroger's Supplemental Requests for Information Q-9, Attachment 2016_Kroger_DR2_KU_Attach_to_Q9, "KU Juri" tab, and Q-10.

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

8 My calculation excludes the overhaul expense associated with Green River Units
9 3 and 4 and Haefling Unit 3 from the historical four-year average, because these units
10 retired in 2015 and 2014, respectively. By the same token, my calculation adds the
11 average annual overhaul expense for Cane Run Unit 7 for years 2016 through 2019,
12 because this unit began operating in mid-2015. My recommended overhaul expense for
13 Cane Run Unit 7 is based on the actual overhaul expense for 2016 and the forecast
14 overhaul expense for 2017 through 2019.

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

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

18 A. This adjustment reduces the retail revenue requirement by approximately \$2.9
19 million relative to KU's filed case.

20 **Q. Does this conclude your direct testimony?**

21 A. Yes.

Derivation of Kroger Recommended KU Generation Overhaul Expense

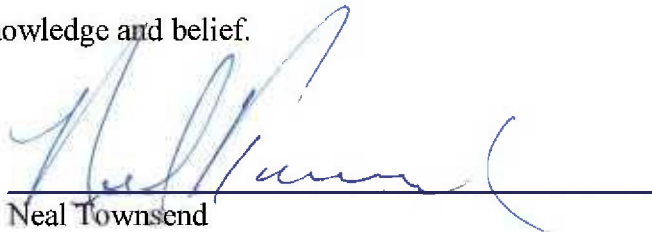
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
Line No.	Existing Generation - Kentucky-Allocated Overhaul Expense (\$)	2013 Actual	2014 Actual	2015 Actual	2016 Actual	Kroger Recommended 4-Yr Average	KU Proposed Amount
1	TRIMBLE COUNTY 2 - GENERATION	3,425	2,331,649	636,706	2,206,989	1,294,692	4,614,999
2	KU GENERATION - COMMON	0	0	0	0	0	0
3	GREEN RIVER UNIT 3		Unit Retired				0
4	GREEN RIVER UNIT 4		Unit Retired				0
5	E W BROWN UNIT 1	407,781	370,036	3,847,434	1,173,125	1,449,594	664,062
6	E W BROWN UNIT 2	1,163,547	1,120,422	75,989	529,817	722,444	5,002,166
7	E W BROWN UNIT 3	557,661	1,305,788	1,597,106	1,049,184	1,127,435	974,356
8	E W BROWN UNITS 1 & 2	22,510	523	2,156	3,625	7,204	0
9	E W BROWN UNITS 2 & 3	0	8,793	0	25,188	8,495	0
10	E W BROWN STEAM UNITS 1,2,3 SCRUBBER	3,474	153,162	0	285,730	110,592	263,815
11	GHEINT UNIT 1	2,327,334	2,347,207	9,138,641	1,963,170	3,944,088	2,523,202
12	GHEINT UNIT 2	656,145	1,656,169	4,432,532	2,328,485	2,268,333	3,176,329
13	GHEINT UNIT 3	1,005,757	4,172,381	3,251,442	2,971,027	2,850,152	1,321,712
14	GHEINT UNIT 4	979,433	7,705,554	158,784	2,403,811	2,811,895	369,470
15	GHEINT UNITS 1 & 2	20,421	9,425	4,660	20,994	13,875	0
16	GHEINT UNITS 3 & 4	1,845	6,211	818	6,195	3,767	0
17	PADDYS RUN GT 13	34,103	76,980	44,366	59,562	53,753	0
18	TRIMBLE COUNTY #5 COMBUSTION TURBINE	0	0	0	0	0	0
19	TRIMBLE COUNTY #7 COMBUSTION TURBINE	0	0	1,093	0	273	0
20	TRIMBLE COUNTY #8 COMBUSTION TURBINE	0	0	0	0	0	0
21	TRIMBLE COUNTY #9 COMBUSTION TURBINE	0	0	0	0	0	0
22	TRIMBLE COUNTY #10 COMBUSTION TURBINE	0	0	0	0	0	0
23	E W BROWN COMBUSTION TURBINE UNIT 5	0	0	12,158	0	3,039	0
24	E W BROWN COMBUSTION TURBINE UNIT 6	23,019	63,267	18,187	6,492	27,741	499,330
25	E W BROWN COMBUSTION TURBINE UNIT 7	(34,813)	130,959	(62,547)	29,506	15,776	26,011
26	E W BROWN COMBUSTION TURBINE UNIT 8	0	0	0	0	0	56,812
27	E W BROWN COMBUSTION TURBINE UNIT 9	244,891	16,498	0	0	65,347	0
28	E W BROWN COMBUSTION TURBINE UNIT 10	0	23,135	308,273	0	82,852	0
29	E W BROWN COMBUSTION TURBINE UNIT 11	0	0	0	0	0	299,790
30	E W BROWN CT UNIT 9 GAS PIPELINE	0	0	0	141,017	35,254	0
31	HAEFLING UNIT 1	6,033	65	0	0	1,525	15,732
32	HAEFLING UNIT 2	6,033	65	0	0	1,525	15,732
33	HAEFLING UNIT 3		Unit Retired				0
	<u>New Generation - Kentucky-Allocated Overhaul Expense (\$)</u>	<u>2016 Actual</u>	<u>2017 Plan</u>	<u>2018 Plan</u>	<u>2019 Plan</u>	<u>Kroger Recommended 4-Yr Average</u>	<u>KU Proposed Amount</u>
34	CANE RUN CC GT 2016	958,938	2,276,733	870,528	5,145,035	2,312,808	2,276,833
35	Total Generation (\$)					19,212,460	22,100,351
36	Kroger Recommended Adjustment (\$)						(2,887,891)

Data Source: KU's responses to Kroger's Supplemental Requests for Information Q-9, Attachment 2016_Kroger_DR2_KU_Attach_to_Q9, Q-10 and Q-11.

VERIFICATION

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

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



Neal Townsend

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

 (SEAL)

Notary Public

My Commission Expires:
April 10, 2019

