

School Pilot Tariffs Report No. 3

Report on the Load Characteristics for
the Optional Pilot Rates for Schools

Kentucky Utilities Company

Louisville Gas and Electric Company

December 21, 2018

Load Characteristics of the Optional Pilot Rates for Schools

Background

The parties in Kentucky Utilities Company's ("KU's") and Louisville Gas and Electric Company's ("LG&E's") (collectively "Utilities" or "each Utility" when referenced individually) last rate case, filed in Case Nos. 2016-00370 and 2016-00371, submitted a Stipulation and Recommendation ("Stipulation Agreement") agreeing to the implementation of Optional Pilot Rates for Schools. In the Stipulation Agreement, these discounted Optional Pilot Rates were available to participants until the total projected revenue impact (reduction in revenues) for each Utility reaches \$750,000.

The Stipulation Agreement provided for the creation of two Optional Pilot Rates for Schools for KU and LG&E: (1) School Power Service ("Rate SPS") and (2) School Time-of-Day Service ("Rate STOD"). Rate SPS is a multi-part rate consisting of a Basic Service Charge, Energy Charge and seasonally differentiated Demand Charge. Rate SPS was modelled after the Power Service ("Rate PS"), except Rate SPS offers discounted charges to schools taking service under the rate. Schools taking service under Rate SPS would be transferred from Rate PS. Rate STOD is a multi-part rate consisting of a Basic Service Charge, Energy Charge and time-differentiated Demand Charge. Rate STOD was modeled after Time of Day Secondary ("Rate TODS") and Time of Day Primary ("Rate TODP"), except Rate STOD offers discounted charges to schools in comparison to the Rates TODS and TODP. Schools taking service under STOD would be transferred from Rate TODS or TODP.

After a hearing concerning the Stipulation Agreement, in its Orders in Case Nos. 2016-00370 and 2016-00371, dated June 22, 2017, the Commission approved the Optional Pilot Rates for Schools, with the following requirements: (1) the Stipulation was to be modified to include non-public schools not covered by KRS 160.325; (2) the pilot rates would be available to new participants until the total projected revenue reduction reaches \$750,000 annually for each utility, compared to the projected annual revenues for the participating schools under the rates which the schools would otherwise be served; (3) a limit was placed on the amount of time the pilot rates would be in effect of three years, or until the Utilities file their next rate case;¹ and (4) beginning six months from the date of the Commission's rate case order, the Utilities were required to file a report with the Commission which set out details

¹ The Commission's Orders in Case Nos. 2016-00370 and 2016-00371 also provided as follows:

In the event that new base rates are not in effect by July 1, 2020, schools participating in the pilot tariffs should be returned to the tariffs under which they were formerly served. In addition, the Commission finds that KU should create a regulatory liability to record the difference between what the schools served under the pilot tariffs would have been billed under the pilot tariffs subsequent to July 1, 2020, and the amounts they are billed under the tariffs to which they are returned. The regulatory liability will be addressed in [the Utility's] next base rate proceeding.

Id. at p. 20.

concerning monthly load information, individually and in the aggregate, and indicating preliminary findings as conclusion regarding the schools’ load characteristics are reached.

This report represents the third report filed with the Commission regarding the load characteristics for the schools taking service under the Optional Pilot Rates. The first report was submitted to Commission on December 21, 2017. However, because each school’s transition to the School Pilot Rates took place in September and October 2017, no meaningful load data was available at that time. The second report looked at load data for each of the schools under the Pilot Rate from December 2017 through March 2018.

Description of Load Data

As summarized below, there are currently 233 public and private schools taking service under the Optional Pilot Rates for Schools:

Pilot School Rate Count				
Utility	Rate	Public	Private	Total
KU	School Power Service	69	8	77
	School Time of Day Service	76	0	76
	KU Total	145	8	153
LG&E	School Power Service	68	8	76
	School Time of Day Service	4	0	4
	LG&E Total	72	8	80
System	System Total	217	16	233

The Utilities have collected hourly load data for these customers. When this report was being prepared, complete hourly load data for all customers were available for the twelvemonth period of November 2017 through October 2018.

Appendix A of this report shows the average monthly energy usage, average monthly coincident peak (CP) demand, average monthly non-coincident (NCP) demand, coincident factor, CP load factor, and NCP load factor for each school taking service under KU’s Optional Pilot Rates for Schools. Appendix B shows the same information for each school taking service under LG&E’s Optional Pilot Rates for Schools. Each row of these reports corresponds to data for a single school taking service under the Optional Pilot Rates for Schools. The names of the individual school have been omitted from these reports.

The CP demands are important because they represent each school’s demand during the hour of KU and LG&E’s combined monthly system peak. Because KU and LG&E must install or purchase sufficient generation capacity to meet their combined system peak demands, CP demands are important determinants of the Utilities’ cost of providing service, particularly production demand-related costs. NCP demands represent the maximum monthly demand of each customer. NCP demands are important because KU and LG&E must install delivery capacity (transmission and distribution capacity) to serve each customer’s maximum demand. Both CP and NCP demands are utilized to allocate costs in KU and LG&E’s

class cost of service studies. *Coincidence factor* represents the ratio of the customer’s CP demand to its NCP demand and, therefore, provides a measure of whether a maximum demand occurs at the time of KU and LG&E’s combined system peak. In other words, coincidence factor provides information about the portion of a customer’s total demand that occurs at the time of the utility’s peak load. *Load factor* represents the ratio of a customer’s average kWh energy usage to its demand. In Appendix A and B, both CP and NCP load factors are shown. *CP load factor* represents the ratio of the customer’s average demand to the customer’s CP demand, and *NCP load factor* represents the ratio of the customer’s average demand to the customer’s NCP demand. Coincidence factors and load factors provide an indication of how cost of service might differ from one customer to another. For example, with everything else being equal, it would cost more to serve a customer with a high coincidence factor. Likewise, it costs more *ceteris paribus* to serve a customer with a low load factor than one with a high load factor.

Load Factor and Coincident Factor Analysis

The following table compares the average coincidence factors, CP load factors, and NCP load factors for the customers served under the Optional Rates for Schools to a random sample of customers taking service under KU’s standard rate schedules (Rate PS, Rate TODS, and Rate TODP).

Kentucky Utilities Company		
	Customers Taking Service Under the Pilot Rates for Schools	Sample of Customers Taking Service Under Standard Rates
Average Coincidence Factor	0.674012	0.707894
Average CP Load Factor	0.680610	0.744180
Average NCP Load Factor	0.458739	0.526757

As can be seen from the above table, the average coincidence factor for the customers taking service under the Pilot Rates for Schools is slight lower than the coincidence factor for the random sample of non-school customers taking service under KU’s standard rate schedule. The average CP and NCP load factors for the customers taking service under the Pilot Rates for Schools are also slightly lower than KU’s non-school customers.

Louisville Gas and Electric Company		
	Customers Taking Service Under the Pilot Rates for Schools	Sample of Customers Taking Service Under Standard Rates
Average Coincidence Factor	0.681444	0.733917
Average CP Load Factor	0.609078	0.663990
Average NCP Load Factor	0.415053	0.487314

As can be seen from the above table, the average coincidence factor for the customers taking service under the Pilot Rates for Schools is slightly lower than the coincidence factor for the random sample of non-school customers taking service under LG&E's standard rate schedule. The average CP and NCP load factors for the customers taking service under the Pilot Rates for Schools are also somewhat lower than LG&E's non-school customers.

Based on this data, there is not a significant difference between the coincidence factors and NCP load factors of customers taking service under the Pilot Rates for Schools and non-school customers taking service under Rates PS, TODS, and TODP. The Coincidence factors, NCP and CP load factors for the schools are lower than for the non-school customers. These results suggest that the schools have not likely modified their load patterns in response to taking service under the Pilot Rates.

LOLP Analysis

In addition to the results discussed in the previous section, the Utilities also evaluated the Loss of Load Probability ("LOLP") for customers taking service under the Pilot Rates for School's compared to that of the non-school customer group. The LOLP methodology mirrors the allocation method which was used in the Utilities' latest Cost of Service Study for allocation of Production-related demand costs. LOLP is a key measure used by KU and LG&E for planning generation resources. LOLP represents the probability that a utility system's total demand will exceed its generation capacity during a given hour. For each customer group, the LOLP was calculated as the hourly load-weighted LOLP for the customer group. LOLP, therefore, takes into consideration the magnitude of the load, installed generation capacity, forced outage rates, maintenance schedules, and ramp-up rates of generating units. LOLP can be calculated for any period – an hour, a day, a week, etc. Specifically, it is used to evaluate the level of reserve margins the Utilities target. Thus, LOLP can be a useful measure of determining whether a class of customers is likely contributing to KU and LG&E's need for additional generating capacity.

LOLP was calculated for each hour of the twelve-month period from November 2017 through October 2018 based on the hourly loads for that period and the characteristics of the Utilities' generating facilities, including capacity, forced outage rates, and maintenance schedules. Hourly loads for the customers taking service under the Pilot Rates for Schools and the non-school customer group were then weighted by the LOLP for each hour to determine LOLP weighted hourly load for each group of customers for both LG&E and KU.

The LOLP is not a directly comparable number from one class to another. To create a measure of LOLP that can be compared across classes of service we calculated two LOLP statistics; 1) LOLP per CP kW, and 2) LOLP per customer. These statistics will allow us to compare effect of LOLP between classes. We calculated the LOLP per CP kW for customers taking service under both Rate SPS and Rate STOD and compared them to the same calculations for non-school customers taking service under the PS and TOD rate schedules for each hour of the evaluation period. We also calculated the total LOLP per customer for each of the rate categories.

Kentucky Utilities LOLP per CP kW Summary		
	Power Service	TOD Service
Schools	0.003482	0.003575
Non - Schools	0.003630	0.003646

As can be seen from the table above, both the school and non-school sets of customers have similar LOLP per Coincident peak demand on KU’s system. The data suggests that from the perspective of production cost allocation, there would be little difference in the production cost allocated to each group and no reason to separate the schools into a different rate category.

Louisville Gas & Electric LOLP per CP kW Summary		
	Power Service	TOD Service
Schools	0.004007	0.004019
Non - Schools	0.003885	0.004371

The LOLP per CP kW for LG&E’s customers also show very similar results, indicating that it would be of little value to create separate rate categories for schools.

	Kentucky Utilities	Louisville Gas & Electric
	Total LOLP per Customer	Total LOLP per Customer
Schools	7.51	7.20
Non - Schools	7.64	7.06

Finally, as can be seen from the table above, the LOLPs per customer for customers taking service under the Pilot Rate for Schools are not materially different from those that take service under the Standard rate schedules. This would lend additional support for there being no meaningful difference between

those customers taking service under the Pilot Rate for Schools and customers under the Standard rate schedule for both PS and TOD.

Conclusion

The purpose of creating separate rate classes for groups of customers is to construct a class of customers that have similar load characteristics, and therefore, similar costs of providing service. The characteristics that drive the cost of providing service in a cost of service study are load factor, coincidence factor, and loss of load probability. When rate classes do not contain customers with similar load characteristics, the rate structure does not accurately reflect the cost of providing service to those customers who are dissimilar to the other members of the class. Therefore, it is important that utility rate classes contain reasonably similar customers, so the rates are fair and reasonable for all customers in the class. Conversely, if similar customers are charged different rates so that one group is advantaged over another, those rates are discriminatory because they are not based on the cost of providing service.

Examining the comparative load factors, coincidence factors, LOLP per CP kW, and LOLP per customer leads to the conclusion that the schools have very similar load characteristics, and therefore, very similar cost of service, as the other customers in the PS and TOD rate schedules. There is no evidence that creating a separate rate for schools would result in an improvement in fairness or equity of the rates for the schools or of the rates for the remaining non-school customers. Furthermore, given their similar load characteristics as non-school customers, the results of this analysis suggest that the schools have not likely modified their loads in response to taking service under the Pilot Rates.

In contrast to the similarities between the schools and other members of the PS and TOD rates, the same statistics show significant differences when comparing different classes to each other. The table below shows the LOLP per customer, LOLP per CP kW, NCP Load Factor, and 12 CP Load Factor for each class on LG&E's system. It is important to note the significant variability in many of these statistics from class to class compared with the variability in the same statistics between schools and non-schools in the PS and TOD classes. Significant variation in some, or all, of these statistics indicate the necessity for a separate rate schedule. The same variability is not present when comparing the schools to other customers served under Rates PS and TOD.

Louisville Gas and Electric Company					
Rate Class	LOLP Per Customer	LOLP Per CP kW	NCP Load Factor	12 CP Load Factor	
Residential Rate RS	0.228	0.008046	14.5%	53.3%	
General Service Rate GS	0.445	0.007336	25.1%	63.0%	
Power Service Primary	19.766	0.006800	32.0%	79.7%	
Power Service Secondary	7.792	0.006446	37.0%	68.1%	
TOD Primary	168.684	0.007026	40.3%	90.8%	
TOD Secondary	33.915	0.006649	39.5%	73.5%	
Retail Transmission Service	712.112	0.006005	47.9%	93.9%	
Special Contract	252.352	0.005826	32.8%	90.1%	
Street Lighting Rate (RLS & LS)	0.001	0.001462	42.4%	281.8%	
Lighting Energy Rate LE	0.017	0.001415	40.2%	272.7%	
Traffic Energy Rate TLE	0.028	0.005724	85.5%	95.3%	
Outdoor School Lighting	0.113	0.005412	2.7%	157.9%	

As can be seen from the above table, there are significant differences in the LOLP and load-factor statistics from one class to another. These differences do not exist between the customers served under School Power Service and Power Service, and between School Time-of-Day Service and Time-of-Day Service.

Below are the same statistics for the rate classes on KU's system:

Kentucky Utilities				
Rate Class	LOLP Per	LOLP Per	NCP	12 CP
	Customer	CP kW	Load Factor	Load Factor
Residential Rate RS	0.220	0.006051	16.3%	51.5%
General Service Rate GS	0.258	0.006777	18.1%	74.2%
All Electric Schools Rate AES	2.637	0.004442	23.0%	54.7%
Power Service Secondary Rate PSS	5.394	0.006578	29.6%	67.6%
Power Service Primary Rate PSP	8.083	0.005870	41.0%	69.7%
TOD Secondary Rate TODS	30.386	0.006136	43.3%	68.7%
TOD Primary Rate TODP	169.396	0.006088	45.2%	76.5%
Retail Transmission Service Rate RTS	575.438	0.006022	58.6%	84.4%
Fluctuating Load Service Rate FLS	6067.113	0.006014	45.5%	84.5%
Street Lighting Rate (RLS, LS)	0.001	0.001464	40.3%	279.7%
Lighting Energy Rate LE	0.032	0.001630	36.9%	295.0%
Traffic Energy Rate TE	0.016	0.005239	79.2%	93.2%
Outdoor Sports Lighting Rate OSL	0.340	0.003357	4.7%	84.6%

Again, this table indicates significant differences in the LOLP and load-factor statistics from one class to another. These same differences do not exist between the customers served under School Power Service and Power Service, and between School Time-of-Day Service and Time-of-Day Service.

The class statistics for LG&E and KU indicate that the load characteristics that would create significant cost differences in those rate classes are simply not present between schools and non-school customers in the PS and TOD rates. The data suggests that the PS and TOD rate classes are the appropriate classes under which the schools should be served.

APPENDIX A

Kentucky Utilities Company

Summary of Load Data for Customers Served under the Pilot Rates for Schools

November 2017 through October 2018

Utility	Rate Schedule	Public/Private	Average kWh	Average CP	Average NCP	Coincidence Factor	CP Load Factor	NCP Load Factor
KU	School Power Service	Public	59,337	124.9	228.7	0.545874	0.651358	0.355560
KU	School Power Service	Public	60,396	155.6	199.7	0.779067	0.532166	0.414594
KU	School Power Service	Public	62,378	152.2	192.0	0.792458	0.561865	0.445254
KU	School Power Service	Public	47,873	126.1	203.1	0.621028	0.520284	0.323111
KU	School Power Service	Public	48,654	84.8	142.3	0.596062	0.785945	0.468472
KU	School Power Service	Public	25,344	55.4	78.7	0.703313	0.627566	0.441375
KU	School Power Service	Public	97,050	178.7	214.8	0.831593	0.744570	0.619179
KU	School Power Service	Public	26,592	39.5	56.5	0.699569	0.922046	0.645035
KU	School Power Service	Public	33,155	83.3	127.1	0.655330	0.545693	0.357609
KU	School Power Service	Public	37,895	92.3	158.4	0.582808	0.562450	0.327800
KU	School Power Service	Public	79,713	131.5	210.0	0.626168	0.830841	0.520246
KU	School Power Service	Public	30,904	66.2	154.3	0.429051	0.639910	0.274554
KU	School Power Service	Public	50,261	128.2	214.7	0.596868	0.537474	0.320801
KU	School Power Service	Public	62,166	123.9	171.7	0.721454	0.687861	0.496260
KU	School Power Service	Public	58,838	120.2	179.2	0.671131	0.670717	0.450139
KU	School Power Service	Public	66,366	113.1	181.9	0.621982	0.804124	0.500151
KU	School Power Service	Public	41,446	116.2	178.0	0.653007	0.488661	0.319099
KU	School Power Service	Public	48,944	123.7	223.7	0.552717	0.542495	0.299846
KU	School Power Service	Public	43,719	96.2	163.5	0.587915	0.623196	0.366386
KU	School Power Service	Public	16,784	33.0	52.6	0.626418	0.697612	0.436997
KU	School Power Service	Public	8,659	15.8	27.5	0.575360	0.749176	0.431046
KU	School Power Service	Public	71,645	157.6	186.1	0.847126	0.622959	0.527725
KU	School Power Service	Public	32,920	86.0	156.8	0.548228	0.524861	0.287744
KU	School Power Service	Private	56,099	126.2	196.8	0.641351	0.609182	0.390699
KU	School Power Service	Public	47,940	73.1	124.4	0.587322	0.899140	0.528084
KU	School Power Service	Public	43,862	97.0	175.7	0.551880	0.619894	0.342107
KU	School Power Service	Public	43,047	109.2	156.8	0.696567	0.540344	0.376385
KU	School Power Service	Private	8,602	17.9	24.0	0.743411	0.659998	0.490649
KU	School Power Service	Public	47,711	113.3	192.1	0.589816	0.577108	0.340387
KU	School Power Service	Public	54,489	109.2	159.0	0.686814	0.683740	0.469603
KU	School Power Service	Public	60,321	179.5	241.6	0.743069	0.460546	0.342218
KU	School Power Service	Public	52,135	104.7	154.3	0.678450	0.682629	0.463130

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KU	School Power Service	Public	117,814	228.4	289.2	0.789761	0.707036	0.558390
KU	School Power Service	Public	47,463	103.9	165.6	0.627225	0.626272	0.392813
KU	School Power Service	Public	44,008	107.7	180.5	0.596868	0.559821	0.334139
KU	School Power Service	Public	49,821	114.9	130.2	0.882727	0.594359	0.524656
KU	School Power Service	Private	26,421	51.8	62.5	0.829064	0.699018	0.579531
KU	School Power Service	Public	58,184	106.5	150.2	0.708787	0.748882	0.530798
KU	School Power Service	Public	66,310	141.0	224.7	0.627291	0.644791	0.404472
KU	School Power Service	Public	48,327	104.9	147.2	0.712899	0.631273	0.450034
KU	School Power Service	Public	58,433	116.3	208.9	0.556390	0.688922	0.383309
KU	School Power Service	Public	47,537	137.8	213.4	0.645927	0.472775	0.305378
KU	School Power Service	Public	36,078	67.6	99.9	0.677117	0.731158	0.495079
KU	School Power Service	Public	31,811	80.3	126.9	0.632994	0.542744	0.343554
KU	School Power Service	Public	40,597	74.9	98.3	0.762061	0.743176	0.566346
KU	School Power Service	Public	26,640	63.1	82.5	0.765140	0.578236	0.442431
KU	School Power Service	Public	63,070	112.2	157.3	0.713354	0.770353	0.549535
KU	School Power Service	Public	81,575	144.1	206.5	0.697805	0.775955	0.541465
KU	School Power Service	Public	41,096	86.0	135.5	0.634789	0.654732	0.415617
KU	School Power Service	Public	45,488	92.2	149.0	0.618900	0.676165	0.418479
KU	School Power Service	Public	42,063	84.8	132.3	0.640843	0.680126	0.435854
KU	School Power Service	Public	13,940	48.9	54.7	0.894247	0.390557	0.349255
KU	School Power Service	Public	50,736	117.6	171.3	0.686297	0.591509	0.405951
KU	School Power Service	Public	22,316	56.6	93.9	0.602857	0.540109	0.325609
KU	School Power Service	Public	39,123	76.8	123.0	0.624414	0.698285	0.436019
KU	School Power Service	Public	53,585	122.1	229.4	0.532203	0.601451	0.320094
KU	School Power Service	Public	40,021	60.0	117.5	0.510876	0.913586	0.466729
KU	School Power Service	Public	79,343	134.8	177.9	0.757973	0.806661	0.611427
KU	School Power Service	Public	13,655	39.8	48.7	0.818227	0.469732	0.384348
KU	School Power Service	Public	43,037	86.0	129.9	0.661506	0.686273	0.453974
KU	School Power Service	Public	42,932	88.0	160.3	0.548875	0.668718	0.367043
KU	School Power Service	Public	77,240	156.4	205.6	0.760630	0.676806	0.514799
KU	School Power Service	Private	46,595	101.9	131.9	0.772367	0.626712	0.484052
KU	School Power Service	Public	41,993	84.4	124.9	0.676251	0.681579	0.460919

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Utility	Rate Schedule	Public/Private	Average kWh	Average CP	Average NCP	Coincidence Factor	CP Load Factor	NCP Load Factor
KU	School Power Service	Public	54,239	141.2	208.2	0.678020	0.526524	0.356994
KU	School Power Service	Public	74,524	146.5	212.6	0.689366	0.697062	0.480531
KU	School Power Service	Private	12,438	28.0	41.9	0.668776	0.608283	0.406805
KU	School Power Service	Private	57,107	124.2	172.0	0.722150	0.630256	0.455139
KU	School Power Service	Private	9,499	13.4	54.8	0.244526	0.971595	0.237580
KU	School Power Service	Public	46,805	125.2	187.3	0.668606	0.512207	0.342465
KU	School Power Service	Public	46,874	101.7	194.6	0.522567	0.631624	0.330066
KU	School Power Service	Public	72,824	174.3	234.2	0.744217	0.572636	0.426165
KU	School Power Service	Public	42,111	108.3	208.3	0.519787	0.533192	0.277147
KU	School Power Service	Public	45,713	94.8	189.9	0.499338	0.660871	0.329998
KU	School Power Service	Private	41,771	107.4	138.4	0.775777	0.533073	0.413546
KU	School Time-of-Day Service	Public	139,584	291.0	423.2	0.687711	0.657391	0.452095
KU	School Time-of-Day Service	Public	177,162	289.6	437.9	0.661302	0.838419	0.554448
KU	School Time-of-Day Service	Public	97,712	207.9	275.5	0.754634	0.644076	0.486041
KU	School Time-of-Day Service	Public	130,704	247.2	360.4	0.685921	0.724768	0.497133
KU	School Time-of-Day Service	Public	294,546	469.7	729.9	0.643474	0.859527	0.553083
KU	School Time-of-Day Service	Public	168,053	284.3	448.6	0.633831	0.810164	0.513507
KU	School Time-of-Day Service	Public	57,602	117.7	196.3	0.599750	0.670544	0.402159
KU	School Time-of-Day Service	Public	22,107	42.2	66.6	0.632958	0.718527	0.454797
KU	School Time-of-Day Service	Public	57,479	120.9	210.5	0.574491	0.651616	0.374348
KU	School Time-of-Day Service	Public	102,436	201.5	322.4	0.624964	0.696883	0.435527
KU	School Time-of-Day Service	Public	173,365	350.9	570.0	0.615545	0.677191	0.416841
KU	School Time-of-Day Service	Public	100,972	254.3	326.2	0.779399	0.544299	0.424226
KU	School Time-of-Day Service	Public	120,392	283.2	472.3	0.599637	0.582639	0.349372
KU	School Time-of-Day Service	Public	121,690	295.7	399.5	0.740282	0.564026	0.417538
KU	School Time-of-Day Service	Public	95,987	152.9	251.8	0.607082	0.860632	0.522474
KU	School Time-of-Day Service	Public	254,802	573.5	749.2	0.765550	0.608924	0.466162
KU	School Time-of-Day Service	Public	78,742	198.1	288.2	0.687476	0.544695	0.374465
KU	School Time-of-Day Service	Public	88,067	152.3	249.8	0.609548	0.792771	0.483232
KU	School Time-of-Day Service	Public	99,746	208.7	381.0	0.547907	0.654936	0.358844
KU	School Time-of-Day Service	Public	254,270	527.5	636.6	0.828613	0.660652	0.547425
KU	School Time-of-Day Service	Public	250,104	408.9	512.6	0.797710	0.838338	0.668750

Kentucky Utilities Company

Summary of Load Data for Customers Served under the Pilot Rates for Schools

November 2017 through October 2018

Utility	Rate Schedule	Public/Private	Average kWh	Average CP	Average NCP	Coincidence Factor	CP Load Factor	NCP Load Factor
KU	School Time-of-Day Service	Public	101,966	255.6	317.7	0.804302	0.546875	0.439853
KU	School Time-of-Day Service	Public	102,071	202.7	365.5	0.554614	0.690151	0.382767
KU	School Time-of-Day Service	Public	223,704	491.2	623.8	0.787335	0.624241	0.491487
KU	School Time-of-Day Service	Public	87,270	207.4	281.2	0.737609	0.576660	0.425350
KU	School Time-of-Day Service	Public	90,084	207.6	328.5	0.632143	0.594629	0.375891
KU	School Time-of-Day Service	Public	75,807	174.5	331.9	0.525803	0.595401	0.313064
KU	School Time-of-Day Service	Public	90,757	197.2	293.2	0.672451	0.630910	0.424256
KU	School Time-of-Day Service	Public	154,664	332.2	495.0	0.671079	0.638201	0.428284
KU	School Time-of-Day Service	Public	366,976	528.6	846.8	0.624292	0.951468	0.593994
KU	School Time-of-Day Service	Public	124,030	210.4	317.8	0.661916	0.808048	0.534860
KU	School Time-of-Day Service	Public	65,747	175.7	228.3	0.769649	0.512786	0.394665
KU	School Time-of-Day Service	Public	123,603	315.4	469.1	0.672346	0.537152	0.361152
KU	School Time-of-Day Service	Public	77,929	156.8	246.2	0.636936	0.681026	0.433770
KU	School Time-of-Day Service	Public	65,021	117.0	234.3	0.499624	0.761428	0.380428
KU	School Time-of-Day Service	Public	501,637	735.3	1,116.0	0.658819	0.935125	0.616078
KU	School Time-of-Day Service	Public	164,737	395.6	463.2	0.854132	0.570739	0.487487
KU	School Time-of-Day Service	Public	138,434	307.4	449.4	0.683956	0.617301	0.422207
KU	School Time-of-Day Service	Public	106,972	187.9	270.1	0.695481	0.780416	0.542764
KU	School Time-of-Day Service	Public	175,443	258.3	458.4	0.563411	0.931098	0.524590
KU	School Time-of-Day Service	Public	114,721	196.8	330.4	0.595776	0.798811	0.475912
KU	School Time-of-Day Service	Public	105,328	204.1	322.1	0.633737	0.707153	0.448149
KU	School Time-of-Day Service	Public	119,028	253.8	370.3	0.685343	0.642824	0.440555
KU	School Time-of-Day Service	Public	83,108	180.6	281.1	0.642538	0.630582	0.405173
KU	School Time-of-Day Service	Public	101,677	171.0	246.2	0.694492	0.815151	0.566116
KU	School Time-of-Day Service	Public	198,406	352.9	513.2	0.687602	0.770587	0.529857
KU	School Time-of-Day Service	Public	85,590	164.2	256.9	0.639114	0.714554	0.456682
KU	School Time-of-Day Service	Public	181,645	256.5	382.7	0.670391	0.970453	0.650583
KU	School Time-of-Day Service	Public	192,934	378.4	550.9	0.686968	0.698787	0.480045
KU	School Time-of-Day Service	Public	101,321	226.3	300.8	0.752471	0.613543	0.461674
KU	School Time-of-Day Service	Public	163,311	257.8	363.5	0.709276	0.868105	0.615726
KU	School Time-of-Day Service	Public	127,958	209.6	305.8	0.685566	0.836566	0.573521
KU	School Time-of-Day Service	Public	178,443	273.7	449.6	0.608655	0.893665	0.543934

Kentucky Utilities Company

Summary of Load Data for Customers Served under the Pilot Rates for Schools

November 2017 through October 2018

Utility	Rate Schedule	Public/Private	Average kWh	Average CP	Average NCP	Coincidence Factor	CP Load Factor	NCP Load Factor
KU	School Time-of-Day Service	Public	100,621	232.7	336.7	0.690954	0.592751	0.409564
KU	School Time-of-Day Service	Public	103,850	212.5	342.2	0.621048	0.669690	0.415910
KU	School Time-of-Day Service	Public	75,031	161.6	236.1	0.684677	0.636305	0.435664
KU	School Time-of-Day Service	Public	114,474	211.0	297.6	0.709198	0.743526	0.527307
KU	School Time-of-Day Service	Public	96,638	168.4	296.9	0.567094	0.786724	0.446146
KU	School Time-of-Day Service	Public	100,517	168.9	271.6	0.621851	0.815736	0.507266
KU	School Time-of-Day Service	Public	82,636	165.6	233.7	0.708696	0.683902	0.484678
KU	School Time-of-Day Service	Public	141,770	274.1	399.5	0.686132	0.708943	0.486429
KU	School Time-of-Day Service	Public	109,982	207.6	277.5	0.748240	0.726090	0.543289
KU	School Time-of-Day Service	Public	116,593	192.4	280.8	0.685361	0.830481	0.569179
KU	School Time-of-Day Service	Public	147,553	292.6	365.5	0.800423	0.691193	0.553246
KU	School Time-of-Day Service	Public	82,542	219.3	312.5	0.701669	0.515949	0.362026
KU	School Time-of-Day Service	Public	203,443	376.7	623.1	0.604570	0.740158	0.447477
KU	School Time-of-Day Service	Public	96,075	277.3	331.8	0.835775	0.474871	0.396886
KU	School Time-of-Day Service	Public	66,806	131.6	303.4	0.433740	0.695828	0.301809
KU	School Time-of-Day Service	Public	93,912	233.0	332.5	0.700645	0.552492	0.387101
KU	School Time-of-Day Service	Public	80,792	216.3	300.5	0.719809	0.512001	0.368543
KU	School Time-of-Day Service	Public	59,319	156.8	208.9	0.750619	0.518512	0.389205
KU	School Time-of-Day Service	Public	121,596	226.2	300.5	0.752496	0.736936	0.554541
KU	School Time-of-Day Service	Public	100,990	250.3	333.5	0.750463	0.553057	0.415049
KU	School Time-of-Day Service	Public	96,192	204.7	279.6	0.732334	0.643990	0.471616
KU	School Time-of-Day Service	Public	150,626	423.3	498.0	0.850008	0.487688	0.414538
Average KU Pilot Rate for Schools			88,059	177	263	0.674012	0.680610	0.458739

APPENDIX B

Louisville Gas Electric Company

Summary of Load Data for Customers Served under the Pilot Rates for Schools

November 2017 through October 2018

Utility	Rate Schedule	Public/Private	Average kWh	Average CP	Average NCP	Coincidence Factor	CP Load Factor	NCP Load Factor
LG&E	School Power Service	Public	44,697	99.4	161.6	0.614790	0.616637	0.379102
LG&E	School Power Service	Public	55,937	118.7	150.1	0.790834	0.645794	0.510716
LG&E	School Power Service	Public	54,071	138.6	203.9	0.679912	0.534708	0.363554
LG&E	School Power Service	Public	43,816	89.5	141.3	0.633451	0.671188	0.425165
LG&E	School Power Service	Public	44,334	110.9	156.9	0.706932	0.547924	0.387345
LG&E	School Power Service	Public	50,981	147.0	260.0	0.565418	0.475274	0.268729
LG&E	School Power Service	Private	45,667	89.0	133.9	0.664758	0.703274	0.467507
LG&E	School Power Service	Public	66,405	170.8	235.1	0.726267	0.533001	0.387101
LG&E	School Power Service	Public	47,592	112.7	195.8	0.575407	0.578895	0.333100
LG&E	School Power Service	Private	32,514	66.0	110.9	0.594741	0.675559	0.401782
LG&E	School Power Service	Public	60,282	122.8	176.9	0.694134	0.673053	0.467189
LG&E	School Power Service	Public	47,653	120.7	222.5	0.542540	0.540979	0.293503
LG&E	School Power Service	Public	28,636	90.6	129.3	0.700387	0.433295	0.303474
LG&E	School Power Service	Public	42,959	102.1	163.3	0.625478	0.576554	0.360622
LG&E	School Power Service	Public	43,484	89.9	126.5	0.710425	0.663314	0.471235
LG&E	School Power Service	Public	35,167	87.5	134.5	0.650312	0.550992	0.358317
LG&E	School Power Service	Public	117,684	284.2	457.5	0.621202	0.567558	0.352568
LG&E	School Power Service	Public	35,975	107.9	183.6	0.587873	0.456936	0.268620
LG&E	School Power Service	Public	41,931	116.9	186.5	0.626988	0.491482	0.308154
LG&E	School Power Service	Public	46,293	96.3	179.2	0.537351	0.658925	0.354074
LG&E	School Power Service	Public	60,814	147.0	198.0	0.742457	0.567071	0.421026
LG&E	School Power Service	Public	2,064	3.2	4.2	0.743172	0.897611	0.667079
LG&E	School Power Service	Public	53,221	134.9	170.7	0.790090	0.540732	0.427227
LG&E	School Power Service	Public	45,228	71.9	139.8	0.514304	0.861875	0.443265
LG&E	School Power Service	Public	205,036	348.0	448.9	0.775097	0.807621	0.625985
LG&E	School Power Service	Public	47,250	114.1	163.0	0.699739	0.567710	0.397249
LG&E	School Power Service	Public	53,355	134.2	215.5	0.622434	0.545130	0.339307
LG&E	School Power Service	Public	65,819	144.7	211.3	0.684808	0.623441	0.426938
LG&E	School Power Service	Public	61,029	161.9	214.4	0.755395	0.516513	0.390171
LG&E	School Power Service	Public	48,068	127.0	175.1	0.725417	0.518816	0.376358
LG&E	School Power Service	Public	43,794	100.6	170.9	0.588648	0.596666	0.351226
LG&E	School Power Service	Public	50,508	104.7	167.0	0.627034	0.661305	0.414661

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Summary of Load Data for Customers Served under the Pilot Rates for Schools

November 2017 through October 2018

Utility	Rate Schedule	Public/Private	Average kWh	Average CP	Average NCP	Coincidence Factor	CP Load Factor	NCP Load Factor
LG&E	School Power Service	Public	42,923	99.1	153.1	0.646963	0.593949	0.384263
LG&E	School Power Service	Public	40,447	85.7	131.3	0.652803	0.646877	0.422284
LG&E	School Power Service	Private	46,857	106.0	137.3	0.771723	0.605976	0.467646
LG&E	School Power Service	Public	41,187	95.3	136.5	0.698413	0.592155	0.413569
LG&E	School Power Service	Public	43,054	118.6	159.1	0.745234	0.497700	0.370903
LG&E	School Power Service	Public	30,043	42.8	61.9	0.691707	0.961700	0.665215
LG&E	School Power Service	Public	162,662	318.8	431.5	0.738761	0.699330	0.516638
LG&E	School Power Service	Public	198,963	451.1	612.5	0.736479	0.604560	0.445246
LG&E	School Power Service	Public	61,530	160.0	209.6	0.763265	0.527222	0.402410
LG&E	School Power Service	Public	40,153	83.2	144.4	0.576475	0.661305	0.381226
LG&E	School Power Service	Public	39,712	86.9	146.0	0.595580	0.626019	0.372844
LG&E	School Power Service	Public	44,466	115.2	158.3	0.728096	0.528885	0.385079
LG&E	School Power Service	Public	25,804	35.8	51.9	0.688604	0.989284	0.681224
LG&E	School Power Service	Public	14,852	42.7	53.7	0.794528	0.476828	0.378853
LG&E	School Power Service	Public	50,861	114.2	141.1	0.809429	0.610280	0.493978
LG&E	School Power Service	Public	38,093	105.4	132.0	0.798434	0.495515	0.395636
LG&E	School Power Service	Private	210,962	552.0	703.5	0.784696	0.523785	0.411012
LG&E	School Power Service	Public	287,456	612.6	826.8	0.740859	0.643181	0.476506
LG&E	School Power Service	Public	46,710	114.1	187.2	0.609578	0.560931	0.341931
LG&E	School Power Service	Public	50,279	113.1	184.2	0.613664	0.609568	0.374070
LG&E	School Power Service	Public	85,580	128.0	195.9	0.653283	0.916383	0.598658
LG&E	School Power Service	Public	144,105	229.0	344.0	0.665620	0.862652	0.574198
LG&E	School Power Service	Public	63,865	169.1	224.0	0.754881	0.517670	0.390779
LG&E	School Power Service	Public	39,570	97.4	157.4	0.618740	0.556827	0.344531
LG&E	School Power Service	Public	38,142	107.6	149.0	0.722027	0.485851	0.350797
LG&E	School Power Service	Private	87,280	223.1	336.2	0.663758	0.536122	0.355855
LG&E	School Power Service	Public	37,586	100.0	120.4	0.830945	0.515026	0.427958
LG&E	School Power Service	Public	193,333	428.8	689.3	0.622002	0.618016	0.384407
LG&E	School Power Service	Public	65,552	195.1	380.0	0.513466	0.460514	0.236458
LG&E	School Power Service	Public	75,261	159.4	212.1	0.751808	0.646999	0.486419
LG&E	School Power Service	Public	89,185	174.5	227.9	0.765959	0.700321	0.536417
LG&E	School Power Service	Public	47,109	103.4	169.3	0.611067	0.624249	0.381458

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Summary of Load Data for Customers Served under the Pilot Rates for Schools

November 2017 through October 2018

Utility	Rate Schedule	Public/Private	Average kWh	Average CP	Average NCP	Coincidence Factor	CP Load Factor	NCP Load Factor
LG&E	School Power Service	Public	54,570	151.1	181.2	0.833615	0.495085	0.412710
LG&E	School Power Service	Private	44,469	117.2	167.1	0.701137	0.520229	0.364752
LG&E	School Power Service	Public	44,161	112.2	154.3	0.727528	0.539298	0.392354
LG&E	School Power Service	Public	36,101	106.3	133.1	0.798227	0.465657	0.371700
LG&E	School Power Service	Public	15,032	34.8	41.6	0.835301	0.592339	0.494782
LG&E	School Power Service	Public	54,954	103.8	237.1	0.437753	0.725631	0.317647
LG&E	School Power Service	Private	26,121	59.1	78.1	0.756143	0.605994	0.458218
LG&E	School Power Service	Private	18,627	43.1	60.9	0.707877	0.591893	0.418988
LG&E	School Power Service	Public	41,130	98.1	143.2	0.685509	0.574376	0.393740
LG&E	School Power Service	Public	15,558	38.2	73.4	0.519608	0.558816	0.290365
LG&E	School Time-of-Day Service	Public	214,045	437.6	661.7	0.661301	0.670490	0.443396
LG&E	School Time-of-Day Service	Public	78,856	154.3	258.7	0.596656	0.700345	0.417865
LG&E	School Time-of-Day Service	Public	169,564	353.4	487.5	0.724855	0.657692	0.476731
LG&E	School Time-of-Day Service	Public	57,484	116.0	261.4	0.443807	0.679211	0.301438
Average LG&E Pilot Rate for Schools			66,573	150	220	0.681444	0.609078	0.415053