

# NON-RESIDENTIAL BILL GENERAL INFORMATION



## ELECTRIC USAGE

### CURRENT USAGE

#### ⚡ ELECTRIC

Meter Reading Information	Meter # 0000000
Verified (V) kWh Reading on 8/30/17	11261
Previous (R) kWh Reading on 8/1/17	10995
Verified (V) kW Reading on 8/30/17	0.8244
Current kWh Usage	266
Meter Multiplier	80
Demand	66.0
<b>Metered kWh Usage</b>	<b>21280</b>

### READ CODE DEFINITIONS

#### Actual Read (R)

An LG&E or KU employee or contractor reads and records the meter readings in person.

#### Verified Read (V)

An LG&E or KU employee or contractor has re-checked the meter in person and verifies the reading on a hand-held device.

#### Estimated Read (E)

The reading is performed at LG&E and KU's office, and is based on historical usage, an average from previous months or the previous year. Any over-estimation or shortfall will be adjusted on the next bill or when an actual or verified read takes place.

#### Self-Read (S)

In rare cases, customers can report their own meter readings to the company, but LG&E and KU will perform an actual read periodically to verify the information.

#### Kilowatt (kW)

A kilowatt (kW) is a metric that equals 1,000 Watts of power. Wattage, in turn, indicates how much power a device can provide over a relative amount of time.

#### Kilowatt Hour (kWh)

A kilowatt-hour (kWh) is a measure of the total energy used over a specific period of time.

### METER MULTIPLIER

The actual voltage/current used is often too large to be registered by your meter. Therefore, a meter's registering capacity may only represent a small percentage of your actual load. To determine the actual usage on the demand meter, the registered usage must be multiplied by the meter multiplier.

### DEMAND

Demand (kW/kVA) is the rate at which you consume electricity, or the amount needed to power your business at any point.

# TIME-OF-DAY SERVICE RATE BILL INFORMATION



## ELECTRIC CHARGES

### ⚡ CURRENT ELECTRIC CHARGES

<b>Contract:</b> 0000000	<b>Rate:</b> Time-of-Day Primary Service
Basic Service Charge	330.00
Energy Charge (\$0.03505 x 636,000 kWh)	22,291.80
Peak Demand Charge (\$6.96 x 1,498.7 kVA)	10,430.95
Intermediate Demand (\$5.23 x 1,508.1 kVA)	7,887.36
Base Demand (\$3.48 x 1,551.5 kVA)	5,399.22
Electric DSM (\$0.00020 x 636,000 kWh)	127.20
Electric Fuel Adjustment (\$0.00131 x 636,000 kWh)	833.16
Environmental Surcharge (2.55% x (\$46,466.53 - \$15,442.08))	791.12
<b>Total Charges Contract 0000000</b>	<b>\$48,090.81</b>

*Note: The example above reflects rates approved by the Kentucky Public Service Commission, effective April 2018 (LG&E).*

### BASIC SERVICE CHARGE

The Basic Service Charge is a fixed minimum charge included in the bill for LG&E and KU to serve our customers.

#### How is it calculated?

This is a flat amount based on your rate type.

#### Why is this charge on your bill?

The Basic Service Charge is a fixed minimum charge included in the bill for LG&E and KU to serve our customers. It is designed to help defray some of the monthly administrative and fixed system costs involved in providing service to each customer, regardless of how much or how little energy they use. These costs include, but are not limited to, maintaining the meter (meter rental, meter reading and processing), billing, payment processing, infrastructure investments and transmission line maintenance.

### ENERGY CHARGE

Energy (kWh) is the quantity (usage) of electricity used.

#### How is it calculated?

Energy Charge rate (x) usage kWh

#### Why is this charge on your bill?

The Time of Day Energy Charge recovers the variable operating costs incurred to provide the amount of electricity (kWh) consumed during the billing period.

### BASE DEMAND CHARGE

The Base Demand Charge applies to all hours, both weekdays and weekends. Customers can shift usage to overnight base hours to take advantage of when energy demand is at its lowest in the community.

#### What is included?

- Base Demand charge rate
- Base Demand is measured as kW/kVA

#### How is it calculated?

Base demand charge (x) currently monthly measured kW/kVA or if applicable the historical measured kW/kVA or contract capacity

### INTERMEDIATE DEMAND CHARGE

The Intermediate Demand Charge is applied when your business is operating during the hours of 10 a.m. to 10 p.m., Eastern Standard Time (EST) (May – September) or 6 a.m. to 10 p.m., EST (October – April). Daylight Savings Time is not observed.

#### What is included?

- Intermediate Demand charge rate
- Intermediate Demand is measured as kW/kVA

#### How is it calculated?

Intermediate Demand Charge Rate (x) currently monthly measured kW/kVA or if applicable historical measured kW/kVA

## TIME-OF-DAY SERVICE RATE BILL INFORMATION (CONT.)

### PEAK DEMAND CHARGE

The Peak Demand Charge is applied when your business is operating during the highest community-demand portion of the day. For example, this is when customers typically use the most electric power to run equipment, lights, HVAC, etc. during the peak time period. Summer peak periods are May through September, 1 p.m. to 7 p.m. EST. From October through April, the peak period is 6 a.m. to noon, EST. Daylight Savings Time is not observed.

#### What is included?

- Peak Demand charge rate
- Peak Demand is measured as kW/kVA

#### How is it calculated?

Peak Demand Charge Rate (x) current monthly measured kW/kVA or if applicable historical measured kW/KVA

### ELECTRIC DSM

Electric Demand Side Management (DSM) – LG&E and KU's energy efficiency portfolio of programs that helps residential and business customers reduce energy load.

#### What is included?

The DSM includes all expected costs that have been approved by the Kentucky Public Service Commission for each 12-month period for demand-side management programs. Such program costs include the cost of planning, developing, implementing, operating, monitoring, and evaluating DSM programs. Industrial customers, as defined by tariff, are eligible to opt-out.

#### How is it calculated?

Monthly adjustment factor (x) monthly kWh

#### Why is this charge on your bill?

Electric Demand Side Management (DSM) charges are added to the customer's bill to cover energy conservation programs, including Demand Conservation and weatherization efforts.

### ENVIRONMENTAL SURCHARGE

The Environmental Cost Recovery (ECR) Surcharge allows for the recovery of costs associated with required, and Kentucky Public Service Commission-approved, environmental projects to meet legislatively imposed regulations, including air emission, land and water quality controls. The ECR is a monthly adjustment.

#### What is included?

A percent of Basic Service Charge, Energy Charge, and Demand Charge (Base Fuel Charge is subtracted).

#### How is it calculated?

Monthly adjustment factor (x) non-fuel portion of the bill

#### Why is this charge on your bill?

Kentucky regulations allow for full cost recovery of qualified environmental projects for coal-fired generation. The recovery is limited to projects that are included in each company's compliance plan(s) that have been filed and approved by the KPSC. The companies are also permitted to earn a reasonable return on construction and capital expenditures, and operating expenses associated with the approved projects. The ECR is a monthly adjustment.

### ELECTRIC FUEL ADJUSTMENT

The Fuel Adjustment Clause (FAC) line item allows for the pass-through of the actual energy cost to provide service to customers. This is a monthly adjustment.

#### How is it calculated?

Monthly adjustment factor (x) monthly kWh

#### Why is this charge on your bill?

Fluctuating prices for natural gas and coal have a significant impact on this line item on a customer's bill. The FAC is adjusted monthly and is dependent on various factors, such as fuel and coal prices that affect LG&E and KU's cost of generating electricity to meet our customers' needs. This can be a positive impact on a customer's bill, resulting in a credit.

### TAXES & FEES

Includes applicable state and/or local taxes.

#### What is included?

- Kentucky state sales tax
- School tax (if applicable)
- Franchise fee (if applicable)

#### How is it calculated?

Tax percentage (x) sub total

# MINIMUM BILLING DEMAND INFORMATION

## ⚡ MINIMUM BILLING DEMAND INFORMATION

Contract: 0000000	kW	Multiplier	kW
<b>Peak Demand</b>			
Highest prior 11 Months:	672.00	50%	336.00
<b>Intermediate Demand</b>			
Highest prior 11 Months:	675.20	50%	337.60
<b>Base Demand</b>			
Rate Tariff Minimum:	250.00	100%	250.00
Highest prior 11 Months:	681.60	100%	681.60
Contract Capacity:	682.00	100%	682.00

*Note: The example above reflects rates approved by the Kentucky Public Service Commission, effective July 2017 (LG&E).*

## TIME-OF-DAY RATES

Time-of-Day rates enable customers the opportunity to shift their load to off-peak times to reduce costs. Minimum charges may occur on each of the demand periods (Base, Intermediate and Peak) depending on current versus historical usage. The time periods for the measurement of demand charges are all in Eastern Standard Time (EST) and Daylight Savings Time is not observed.

### Why are base, intermediate and peak demand charges on your bill?

Energy companies face the challenge of maintaining enough capacity to satisfy all customers' electricity needs. To do that, utilities must invest in equipment that is on constant standby "just in case," including substations, transformers and generating stations. This capacity is expensive to build and maintain, and commercial electricity demand charges are used to help pay those costs.

## PEAK DEMAND CHARGE

### How is it calculated?

On a customer's bill, the Peak Demand Charge is calculated as the Peak Demand rate (x) the greater of the following, as measured in kW/kVA:

- The maximum measured Peak Demand reading in the current billing period
- or
- 50% of the highest Peak Demand reading from prior 11 months

## INTERMEDIATE DEMAND CHARGE

### How is it calculated?

On a customer's bill, the Intermediate Demand Charge is calculated as the Intermediate Demand rate (x) the greater of the following, as measured in kW/kVA:

- The maximum measured Intermediate Demand reading in the current billing period

or

- 50% of the highest Intermediate Demand reading from prior 11 months

## BASE DEMAND CHARGE

### How is it calculated?

On a customer's bill, the Base Demand Charge is calculated as the Base Demand rate (x) the greater of the following, as measured in kW/kVA:

- The maximum measured Base Demand reading in the current billing period
- Highest Base Demand reading from prior 11 months
- 100% of the contract capacity

or

- A minimum of 250 kW/kVA

## CONTRACT CAPACITY

The anticipated customer load (demand) is utilized to establish the contract capacity between customer and the company. This ensures that the company is providing the customer the facilities to serve the customer's needs. The contract capacity is a minimum one year agreement that is signed by both the customer and the company. The contract capacity is determined based on one of the following:

- The highest Base Demand reading from the prior 12 months if usage existed
- Information obtained from the customer provided Load Data Sheet

or

- A mutually agreed upon maximum expected load (demand) on the system that is specified by the customer

### Why is this line on your bill?

When an energy company installs electrical service for a commercial customer, there is often a substantial investment. All power lines, transformers and measuring equipment must be sized according to the expected demand. In order to recover this investment over a certain period of time, the contract capacity specifies the minimum demand (kW/kVA) which may be used in billing charges.

# TIME-OF-DAY DEMAND CHARGES

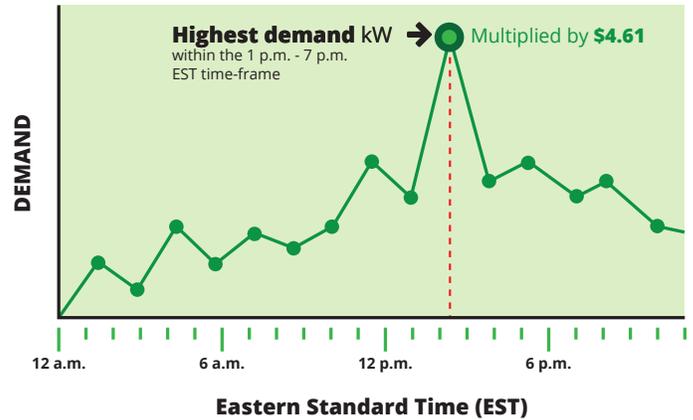


PPL companies

## BASE DEMAND MINIMUM CHARGE

### All Hours, Everyday

The **Base Demand Minimum Charge** applies to all hours, both weekdays and weekends. Customers can shift usage to overnight base hours to take advantage of when energy demand is at its lowest in the community.



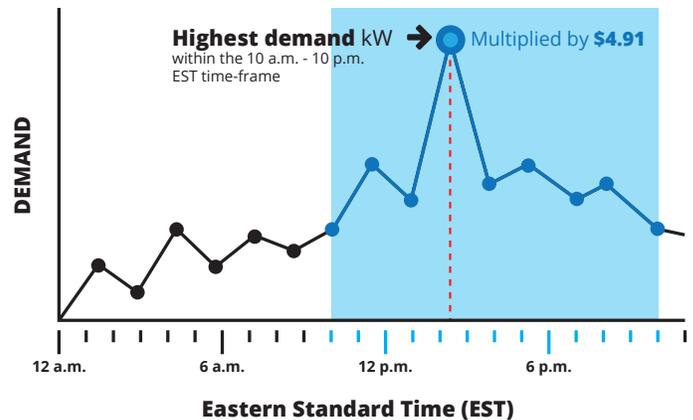
## INTERMEDIATE DEMAND CHARGE

### 10am to 10pm, EST (May - September)

### 6am to 10pm, EST (October - April)

*Daylight Savings Time is not observed.*

The **Intermediate Demand Charge** is applied when your business is operating during a moderate-to-high community demand period of the day.



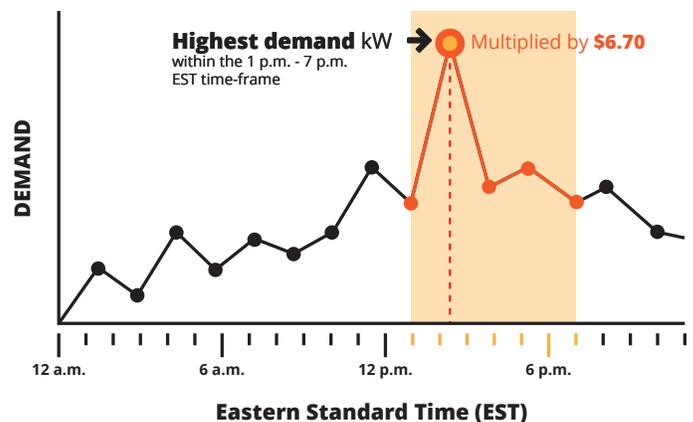
## PEAK DEMAND CHARGE

### 1pm to 7pm, EST (May - September)

### 6am to 12pm, EST (October - April)

*Daylight Savings Time is not observed.*

The **Peak Demand Charge** is applied when your business is operating during the highest community-demand portion of the day. For example, this is when customers typically use the most electric power to run equipment, lights, HVAC, etc. during the peak time period.



# TIME-OF-DAY DEMAND CHARGES (CONT.)

## BILLING DEMAND CHARGES FROM OVERLAPPING DEMAND PERIODS

LG&E and KU's demand rate structure is based on three Demand Periods. Each reflects a specific time period of the day and carries an associated charge multiplier.

**Peak** carries the highest multiplier (**\$6.70**).

**Intermediate** carries a higher multiplier (**\$4.91**).

**Base** carries the lowest charge multiplier (**\$4.61**).

Your bill includes three individual charges that help create your total electric charge, one charge for each Demand Period.

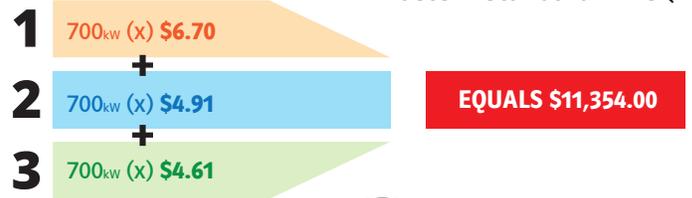
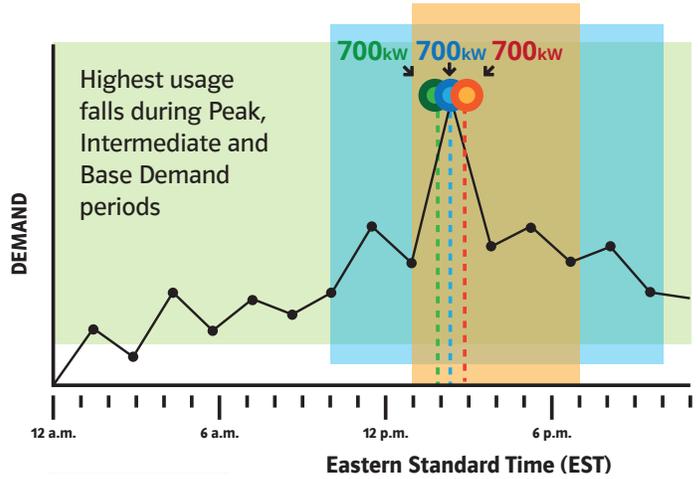
Each charge is the product of your usage (the average kW demand during the 15-minute period of maximum use during the month for that Demand Period) and the multiplier for that Demand Period.

- 1 (Peak kW x Peak Demand Period Multiplier)  
+
- 2 (Peak kW x Intermediate Demand Period Multiplier)  
+
- 3 (Peak kW x Base Demand Period Multiplier)

If your highest demand of the day (kW) occurs during the **Peak Demand Period**, higher bills result because your peak usage is multiplied by the highest rate multiplier. Your bill is also higher in this scenario because the highest demand is taking place when all three time frames overlap. So your highest usage is being multiplied by the rate in each of the three rate tiers.

However, customers that shift high demand to either the base or intermediate tiers (time frames) can lower their monthly bill.

## IMPACT OF TIMING ON DEMAND CHARGES



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