

ENERGY CONSUMPTION AND ENERGY DEMAND

THE EASIEST WAY TO *REDUCE YOUR DEMAND* IS TO NOT RUN EVERYTHING AT ONCE.

Sumner-Cowley Electric is updating how energy use is displayed on your monthly billing statement. The advanced meter technology at your residence now has the capability of measuring Demand and Consumption separately. We will now print two line items on your invoice relating to energy used during the billing cycle: the amount of energy consumed (kWh) and the demand (kW) you set for the month.

WHAT IS THE DIFFERENCE BETWEEN DEMAND AND MY ENERGY USE?

WHY IS MY DEMAND IMPORTANT?

LOW DEMAND



10-HOUR TRIP



100

HIGH DEMAND



1-HOUR TRIP



100

DEMAND
Speedometer

CONSUMPTION
Odometer

A car's speedometer is like the demand meter and the odometer is like a consumption meter. Two cars could travel the same 100 mile road, one at 10 miles per hour for 10 hours and the other at 100 miles per hour for 1 hour. It takes a much more capable and expensive engine to power the car at 100 miles per hour than it does to power the one going only 10 miles per hour. So in this example, consumption (kWh) is the distance traveled in a specific amount of time and demand (kW) is the speed at which that distance was traveled.

Electricity is not easily stored; however, it must be available at the flip of a switch to serve your needs and the simultaneous needs of all Sumner-Cowley Electric members. Sumner-Cowley Electric Cooperative must plan and be prepared to meet each member's demand needs even when it's not a daily occurrence.

Equipment to meet your energy needs must be on stand by and ready to fill your increased need for electricity immediately. This might include installation of additional transformers, wires, substations and even additional power plants.

For example, when you turn on your TV at the same time your neighbor fires up an irrigation system, we must make sure we can provide enough energy to meet both of those needs on demand.

It is important to know the difference between consumption and demand so you can understand how Sumner-Cowley determines its power requirements.

CONSIDER THIS SCENARIO

LOW DEMAND

FAMILY A

Spreads energy use out throughout the day.

DEMAND



2.5 HRS

HIGH DEMAND

FAMILY B

Wakes up and starts using a lot of electricity all at once.



1 HR

Both Family A and Family B used 1,500 kWh over a months time. However, Family A's demand will be lower because they spread out their energy use.

What is Demand Exactly?

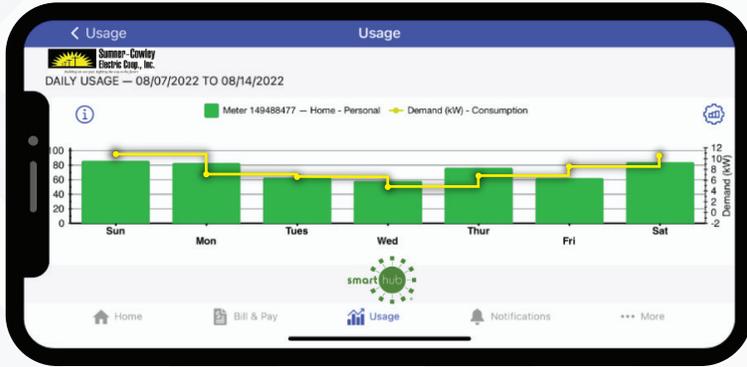
CONSUMPTION IS THE TOTAL AMOUNT OF ENERGY USED WHILE *DEMAND IS THE IMMEDIATE RATE OF THAT CONSUMPTION.*

When you use electricity, it makes an impact, or demand, on the energy grid. Your demand will be the largest amount of energy you use in any given 15-minute interval each month, which will be displayed on your bill.

What Can I Do To Lower My Demand?

Simply stagger your electric use, like Family A did in the example to the left. Don't use all your appliances at once. Wash dishes and wait until they are done to do a load of laundry. Use water heater timers and programmable thermostats. These simple actions will help lower your demand.

YOU HAVE THE POWER! CONTROL YOUR USAGE, CONTROL YOUR BILL



Use SCEC's SmartHub to stay on top of your energy habits before you get your bill. The energy use analytics tools allow you to compare energy use and demand against weather data. Tracking your energy use like this lets you see if you're using more energy than usual and empowers you to make adjustments if necessary.

Some ways you can use SmartHub for energy use monitoring:

- Analyze and understand usage trends to find ways to cut back.
- Create & track a monthly budget to avoid unexpected high utility bills.
- Set a point or range in time to compare differences in usage.

Sumner-Cowley Electric has completed a rate-case study and the board of directors will hold a public hearing and vote on the proposed rate structure at the October 26th meeting. This proposal includes a demand rate, which would charge members for the highest 15 minutes of use each month.

Approximately 56% of Sumner-Cowley Electric's energy costs are demand related. Members have always paid for demand in their energy rate.

Now, with advanced meter technology we can separate energy use in two parts:

- Amount of energy you use (kWh) - CONSUMPTION
 - Demand you set for the month (kW) – DEMAND
- SCEC is adding a line item reading to your September invoice labeled "DEMAND." This line will show the kilowatt-demand you used during the current billing period.

The image shows a utility bill and a usage history chart. The bill is for John and Doe Smith at 123 Main St, Townsville, KS. It includes contact information and a 'KWH USAGE HISTORY' chart showing daily usage from August to June. The bill also contains a table with account details and a current bill summary.

Account No.	Substation	Rate	Service Location	Map Location
999999	ROME	RES	POND	99 NW 9 99 9E
Meter Number	Pres Read	Prev Read	Mult	kWh / kW
999999999	84585	81851	1.0	2734 kWh
999999999	84585	81851	1.0	16.003 kW
Activity Since Last Bill	\$ Amount	Current Bill Information	\$ Amount	
Previous Balance	290.00	BALANCE PRIOR TO THIS BILLING		
Payment	-290.00	ENERGY CHARGES	0.00	
Other Adjustments	0.00	POWER COST ADJUSTMENT	257.82	
			90.47	

How is Residential Demand Measured?

New advanced meter technology enables the cooperative to now measure the demand of power you draw in 15-minute intervals throughout the course of a day. Once the maximum demand is established for any given day during a billing period, the reading will be printed on your monthly bill. The demand resets at the end of each billing period.

Why Separate the Energy Use?

Advanced meter technology now supplies us with the data to better pinpoint the variables that affect the cost of supplying electricity to you.

Unbundling the charges for energy use and demand more fairly distributes the costs of providing service to those members who use large amounts of electricity at one time.



If you have any questions please call the office at 888-326-3356 or visit our website www.sucocoop.com for more information.

