

# Knowledge is **POWER**

## UNDERSTANDING ELECTRICITY DEMAND

### What is electricity demand?

Electricity flows constantly to supply power to Walton EMC members' homes and businesses. The demand for this electricity is defined by how much is being used at any given time. The more electricity people are using at any moment, the higher the demand.

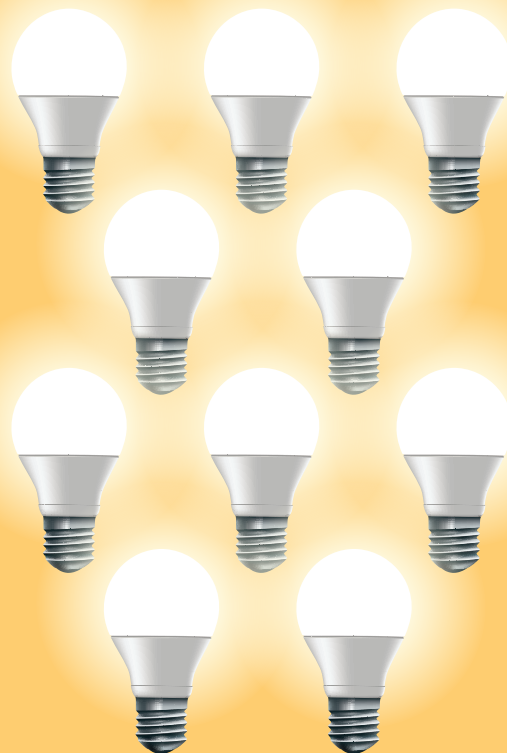
Electric consumption and demand are different. Consumption is determined by how much electricity is used overall. Demand is determined by when you use it.

### Demand versus consumption

If you turn on a single 100-watt light bulb for 10 hours, you will consume 1,000 watt/hr (Wh) – or 1 kilowatt-hour (kWh) and have a demand of 100 watts. If you turned on 10 of those bulbs for one hour, you would also consume 1,000 (Wh), but that electricity would be used in a much shorter period of time causing a demand of 1,000 W or 1kW.

### Why does demand matter?

It is Walton EMC's job to ensure we always have enough electricity to supply all of our customer-owners, no matter how many appliances, light bulbs or heating/cooling systems are being used at one time. That means Walton EMC must own enough capacity (power plants) to generate that power whenever it's needed – regardless of the demand. An increase in peak demand, increases the amount of capacity that Walton must own and pass those costs to our members. Owning capacity is like having a mortgage on your home, Walton must pay for that capacity whether or not any energy is used.



**10 BULBS  
USED 1 HOUR**

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**PUTS MORE DEMAND  
ON WALTON EMC THAN**

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**1 BULB USED  
10 HOURS**

**Plan to use your major appliances at different times during the day to help reduce peak demand...**

MORNING



WATER HEATER

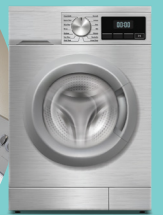
### How can co-op members help?

The more we can spread out usage to avoid high demand periods, the less we have to spend on building additional generating units. That saves Walton EMC and, ultimately, our customer-owners money.

Ways members can help reduce demand during peak times:

- **Use a smart thermostat.** These devices make it easy to lower cooling and heating use when a home is unoccupied.
- **Stagger appliance use.** Plan to use major appliances (washer, dryer, oven or dishwasher) at different times.
- **Use a timer.** Some appliances like your dishwasher or pool pump can be set to run on a timer to run during off-peak demand times.

DAYTIME



WASHER & DRYER



STOVE

EVENING



DISHWASHER