

APPLIANCE USAGE



As a tool to Defeat The Peak, here are the estimated costs associated with operating your appliances during both peak periods and non-peak periods.

REMINDER TO DEFEAT THE PEAK	
Shift or delay using high-energy appliances during:	
 Summer: 3 - 6 PM April – October	 Winter: 6 - 9 AM November – March

Definitions & Examples:

- ***Approximate Estimated Wattage:** Appliances of the same type can use different amounts of energy. For example, most space heaters use 1.5 kW (Kilowatt) per hour, but some may use more or less.
- ****Energy Charge (kWh):** The energy cost is calculated by multiplying the appliance's estimated wattage by its run time. For example, running a window air conditioner for one hour uses one kWh (Kilowatt hour) of energy.
 - o Energy Used = Approximate Wattage of Air Conditioner × Run Time
 - o Example: 1 kW × 1 hour = 1 kWh

Under the Residential General (RG) rate, the cost per kWh is \$0.0792. So, running a window air conditioner for one-hour costs \$0.0792.

If it runs for 300 hours, the total cost is: $\$0.0792 \times 300 \text{ hours} = \23.76

- **For our examples below we will use one hour of run time for each appliance**
- *****Peak Charge (kW):** The peak charge is based on the appliance's wattage and run time.
 - o Peak Charge = Wattage of Appliance × Run Time
 - o Example: A 4.5 kW water heater running for 1 hour uses 4.5 kWh of energy.

Under Santee Cooper's Residential General (RG-25) rate, the cost per "Peak Charge" (kW) is \$8.00. So, running the water heater for 1-hour costs:

o $4.5 \text{ kW} \times \$8.00 = \36.00

This charge applies only if the appliance contributes to your Peak Charge (kW), the highest electricity usage in a single hour during the peak period.

It's important to remember that most appliances don't run all at once, and many are only used for short periods. For example, a microwave may use up to 1.5 kW of energy while operating, but since it typically operates for just a few minutes, it doesn't consume much energy overall.

Additionally, appliances don't continuously operate at their maximum power the entire time they're operating. For example, a clothes dryer may consume up to 4.8 kW when the heating element is active. Still, once it switches to only spinning the drum, its energy consumption drops below 4.8 kW.

See back page with appliance chart.

Peak Charge Seasons: April through Oct. 3-6 p.m. and Nov. through March 6-9 a.m.

Appliance	Approximate Estimated Wattage *	Energy Charge (kWh)**	Peak Charge (kW)***
Heat Pump	~1kW per Ton 1 – 5 kW	\$0.0792 – \$0.396	\$8.00 – \$40.00
Mini/Multi Split	~0.6 – 1.0 kW/Ton	\$0.0792 – \$0.1188	\$8.00 – \$12.00
Resistance Heat/Heat Strips	3 – 10 kW	\$0.237 – \$0.792	\$24.00 – \$80.00
Window Air Conditioner	1 kW	\$0.0792	\$8.00
Ceiling Fan (no lights)	0.075 kW	\$0.0594	\$0.60
Light Bulb – LED 9W	.009 kW	\$0.000713	\$0.0720
Security Light – LED 40W	0.04 kW	\$0.03168	\$0.32
Space Heater	1.5 kW	\$1.188	\$12.00
Water Heater (40 Gal.)	4.5 kW	\$3.564	\$36.00
Refrigerator – ENERGY STAR®	0.5 kW	\$0.396	\$4.00
Range large burner	2.1 kW	\$1.6632	\$16.80
Range small burner	1.6 kW	\$1.2672	\$12.80
Oven	3 kW	\$2.376	\$24.00
Microwave	1.5 kW	\$1.188	\$12.00
Slow Cooker	0.15 kW	\$0.1188	\$1.20
Dishwasher	1.4 kW	\$1.1088	\$11.20
Coffee Maker	1.5 kW	\$1.188	\$12.00
Television (LCD or LED)	0.105 kW	\$0.08316	\$0.84
Television (Plasma)	0.3 kW	\$0.2376	\$2.40
Desktop Computer	0.3 – 0.7 kW	\$0.2376 – \$0.5544	\$2.40 – \$5.60
Laptop	0.6 kW	\$0.4752	\$4.80
Xbox X®	0.15 kW	\$0.1188	\$1.20
PlayStation 5®	0.22 kW	\$0.17424	\$1.76
Clothes Washer ENERGY STAR®	0.3 kW	\$0.2376	\$2.40
Clothes Washer	0.64 kW	\$0.50688	\$5.12
Clothes Dryer	4.8 kW	\$3.8016	\$38.40
Golf Cart Charger	0.6 – 1 kW	\$0.4752 – \$0.792	\$4.80 – \$8.00
Pool Pump (1HP)	0.9 kW	\$0.712	\$7.20
Hot Tub	4.5 kW	\$3.564	\$36.00
Hair Dryer	1.6 kW	\$1.2672	\$12.80
Dehumidifier (small – 25 pints)	0.35 kW	\$0.2772	\$2.80