Calculating the Cost of an Appliance or Other Electrical Device

To calculate how much it costs to run an appliance, you will need a recent bill. There are so many factors that affect your electric bill, that a meaningful estimate can only be achieved by knowing the total cost to you for electricity.

Step 1: Add the Total Generation Charges and the Total Delivery Charges to get the total cost of energy for the month

On your bill are boxes showing what it cost to create the energy you use and what it cost to deliver that energy to you. If you are a Time Of Use (TOU) or commercial customer, your line items will be different.

Current Supplier: THE UNITED ILLUMINATING COMPANY			
Generation Services Charge	778 kWh X $.122800	$	95.54
Total Generation Services Charges		$	**95.54**

Transmission per kwh	778 kWh X $.014319	$	11.14
Distribution Basic Service		$	14.33
Distribution per kwh	778 kWh X $.034470	$	26.82
Combined Public Benefits Charge	778 kWh X $.005034	$	3.92
Competitive Transition Assessment per kwh*	778 kWh X $.016161	$	12.57
Non-Bypassable FMCC	778 kWh X $.008656	$	6.73
Total Delivery Charges		$	**75.51**

In this example, we get $171.05 as the total cost of energy consumed for the month ($95.54 plus $75.51).

Step 2: Find the total energy consumed for the month

On your bill is a box showing your Electricity Usage. This is the total energy consumed for the month.

Electricity Usage

Meter	Service Period	Meter Reading *Current*	*Last*		Multiplier		Kilowatt Hours
016019644	29 days POD ID: 171-0023977-020	0018979	0018201	X	1	=	778 kWh

In this example, we get 778 kwh.

Step 3: Determine the cost of energy per watt per hour

Divide the total cost of energy by the total energy consumed to give you the cost per kilowatt (1,000 watts) per hour. In this example, 171.05 divided by 778 equals .2198586. Divide that by 1,000 to give you the cost per watt per hour. In this example, .2198586 divided by 1,000 equals .0002198586. This is the cost per watt per hour.

Step 4: Calculate how much it costs to run something per hour

Multiply the number above (in this example .0002198586) by the wattage of the appliance to give you the estimated cost per hour to run that appliance. For example: a 1500 watt electric heater will cost about 33¢ an hour to run (.0002198586 multiplied by 1500).

Note that these are estimates only. Options on appliances (such as heat-boost and energy-saver settings on dishwashers, auto-defrost settings on freezers, etc.) will affect the actual amount of energy consumed by the appliance. Time-Of-Use customers are charged different rates at different times of the day, which also affect the actual cost of using an appliance at night versus during the day.

