HOW TO ESTIMATE
Energy Usage and Cost

The wattage of appliances and equipment as well as the amount of operating time can vary greatly. The following information will show you how to determine where the energy dollars are going in your home.

Step 1

Since the cost of electricity is determined by the number of kilowatt-hours (kWh) used during a billing period, the first step is to determine your average cost per kilowatt-hour.

$$\text{Avg. kWh cost} = \frac{\$ \text{ amount of electric bill less fixed charges}}{\text{kWh used}}$$

$$\text{EXAMPLE:} \quad \frac{\$144}{1{,}200 \text{ kWh}} = \$.12 \text{ per kWh}$$

Step 2

Since the wattage of an appliance or electrical equipment determines the electrical usage per hour, the second step is to determine the wattage.

The wattage of an appliance is found on the serial plate. It is possible that electrical equipment will be expressed in volts and amperes rather than watts. If so, multiply volts times amperes to determine the wattage.

MICROWAVE OVEN			
AMPS	12.1	VOLTS	120
HERTZ	60	WATTS	1,452
FORM NO.	00000	MODEL NO.	0000
CODE	0	SERIAL NO.	000000

EXAMPLE:
120 volts x 12.1 amps = 1,452 watts

Step 3

Use the formula shown in the following example to estimate usage and cost.

EXAMPLE:
A light uses 100 watts and is left on 15 hours. How many kWh are used and what does it cost you?

$$\text{kWh use} = \frac{100 \text{ watts} \times 15 \text{ hrs.}}{1{,}000 \text{ watts}} = 1.5 \text{ kWh}$$

Your cost = 1.5 kWh x $.12 = $.18

Step 4

To find your daily cost for electricity, divide your bill by the number of days in the month.

$$\text{EXAMPLE:} \quad \frac{\$144}{30 \text{ days}} = \$4.80 \text{ which is your daily cost.}$$

To find the daily cost per person in your family, divide the daily cost by the number in your family.

$$\text{EXAMPLE:} \quad \frac{\$4.80}{4} = \$1.20 \text{ per person per day.}$$