



# TRI-COUNTY Electric Cooperative, Inc.

" A Commitment to Service and Savings "

## How much does it cost to...

Run my hair dryer?

Operate a 100 watt light bulb?

Run my 1 HP water pump?

These are questions that people frequently ask when contacting the Cooperative. Understanding how electricity is used is an important first step in gaining control over energy consumption. Electricity use is monitored by a watt-hour meter normally located near the service entrance to your home or business. Appliances in the home, by design, all have a certain amount of demand for electricity. The manufacturer's label will normally express this in watts or amps.

**8002722201**

One of the units of measurement used to bill for electricity is called a kWh or (kilo-watt hour). A kWh is a thousand watts of power used for a period of one hour. To put this in perspective, you could burn a 100-watt light bulb for a period of ten hours on a single kWh. With an average cost of ten cents per kWh, the cost of operating that bulb is rather insignificant. The formula used to compute the number of kWh is expressed as follows:



$$\frac{\text{Wattage X Hours Used}}{1,000} = \text{kWh}$$

An electric furnace is normally rated by the kW of heating element installed by the manufacturer. Common sizes are 10kW, 15kW and 20 kW. The kW stands for thousand watts; so a 20kW heater uses 20,000 watts of electricity. Using the above formula, we can determine how much the heater costs to operate per hour.



$$\frac{20,000 \text{ X } 1 \text{ (hour)}}{1,000} = 20 \text{ kWh}$$

The 20 kW furnace is using the equivalent of two hundred, 100-watt light bulbs when it is fully operational. The operating cost is \$2.00 per hour based on an average cost of \$0.10 per kWh.

**196600202**

The operating cost of your new 1500 watt hair dryer is computed the same way.



$$\frac{1,500 \text{ X } 1 \text{ (hour)}}{1,000} = 1.5 \text{ kWh}$$

The hair dryer will cost you \$0.15 per hour to operate. On the surface, this is rather insignificant, but when you start listing all these little items used in the home on a daily basis, things start to add up.

**8002357901**

A number of appliances continue to use electricity even when you think they are turned off. The VCR, television, DVD player, CD player, stereo and just about every remote control appliance is using some electricity while on stand by, waiting for your command to play that movie or song.

**8004577201**



Submersible pumps supply significant amounts of water per kWh used.

To compute the operating cost of an electric pump motor, all you need to know is that there are 746 watts in a horsepower. So your 1-HP pump will use .746 kWh for every hour of operation. If the volume of the pump produces 15 gallons of water per minute, than you can move 900 gallons of water in one hour at a cost of \$0.08 cents.

If the name plate on your appliance only lists the amps of current and voltage required, you can calculate the watts using the following formula.

$$\text{Amps X Volts} = \text{Watts.}$$

That old refrigerator that you moved from the house to the garage is another kWh bandit. The door gaskets are moldy and cracked and the outside walls are spotted with rust from condensation which builds up during humid weather. The drinks inside the unit are good and cold but you can't remember the last time you went to the box and it wasn't running. Federal regulations imposed on appliance manufacturers have significantly improved the performance of today's refrigerators. Better insulation prevents sweating and reduces run time. You can wait until old faithful breaks down or replace it with a new, energy-efficient unit.

Take an inventory of all the equipment in your home that is plugged in and working. Don't forget those appliances that you hide away until you need them. You will probably be shocked at the number of appliances on your list when you finish.



# Kitchen Safety Message

Most burns are preventable - especially when children are the victim. Just a few seconds of neglect or carelessness can lead to life changing injuries. By taking a few preventive measures now, you can do your part to work safely in the kitchen.

Free standing cook-tops and oven units are very popular but need to be properly secured to prevent injury. An oven door can make a good platform for a child not quite tall enough to view the top of a stove. They are old enough to pull the door down but too young to understand the danger. You can test your stove by making sure nothing is on the cook top and lowering the oven door. Apply downward pressure to the open oven door and make sure it does not cause the stove to tip forward. This test should only be performed when the unit is cool to the touch. A properly installed unit will have the back legs secured to the floor to prevent tipping. If you apply downward pressure to the open door and the unit tilts forward, the installation is not correct. Accidents have also occurred when attempting to lift heavy meals from the oven and using the door as a platform to rest the roasting pan when attempting to gain a better grip. The open door provides leverage and with a minimal amount of weight can cause the unit to tilt forward. If you have a pan with hot liquids on top of the stove, they will come sliding forward possibly falling to the floor and burning yourself and anyone to close too the unit.



Always make sure that pan handles are turned inward so they can't be bumped by people walking by or grabbed by little hands. Establish a safety zone in front of the stove top because splatters of hot grease can also cause injury to the skin and eyes.

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Lower hot water heater thermostat settings to 120 degrees, a comfortable temperature that won't scald inquisitive hands.

Teach children that matches, lighters and electrical equipment are for adult use only and make sure they understand.

## It Pays To Stay Informed!

Find your account number in our Member Information Bulletin and you will receive a \$20.00 credit on your electric bill. Simply contact one of the offices listed below and make them aware of your discovery. **It pays to stay informed!**



# TRI-COUNTY

Electric Cooperative, Inc.

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[www.TCECTEXAS.com](http://www.TCECTEXAS.com)

Central Headquarters Office (817) 444-3201 or (817) 523-7231

Southwest District Office (817) 279-7010 or (817) 279-7011

Northeast District Office (817) 431-1541

B-K District Office (940) 888-3441

## From The Cooperative Kitchen



This month's recipe was provided by Linda Brenner from Weatherford TX. She will receive a Texas Co-Op Power Cookbook, compliments of TCEC.

# GRANDMA'S BLUEBERRY COBLER

### CRUST:

2 - CUPS ALL-PURPOSE FLOUR

1-1/4 - CUPS SUGAR

2 - TEASPOONS BAKING POWDER

1 - TEASPOON SALT

2/3 - CUP CRISCO SHORTENING

1 - CUP MILK

2 - EGGS (SLIGHTLY BEATEN)

### FILLING:

2 - CUPS BLUEBERRIES (FRESH OR FROZEN)

1/4 - CUP OF SUGAR

1-1/2 - TEASPOONS CINNAMON

PREHEAT OVEN TO 350 DEGREES. GREASE AND FLOUR A 13" X 9" X 2" BAKING DISH.

MIX CRUST INGREDIENTS TOGETHER AND POUR INTO PAN. DO NOT OVERMIX.

POUR THE 2 CUPS OF BLUEBERRIES (FRESH OR FROZEN) OVER TOP OF CRUST MIXTURE. THEN MIX TOGETHER 1/4 CUP OF SUGAR AND 1-1/2 TEASPOONS CINNAMON. SPRINKLE OVER BLUEBERRIES.

BAKE FOR 40 TO 50 MINUTES.

VARIATIONS: YOU MAY SUBSTITUTE SPLENDA FOR THE SUGAR IF DESIRED. ALSO, YOU CAN USE NUTMEG INSTEAD OF CINNAMON. BLACKBERRIES MAY BE SUBSTITUTED FOR THE BLUEBERRIES.

SERVE COBLER WITH VANILLA ICE CREAM OR SWEET VANILLA FLAVORED WHIPPING CREAM.

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