

TWIN VALLEYS PUBLIC POWER DISTRICT

Cambridge, NE

August 2011

“Electricity” — your least expensive energy source, keeping your life running, delivered with reliability by people who care about you

Why should you consider a heat pump?

You have a heating and cooling system to provide comfort for yourself and your family by keeping you warm in the winter and cool in the summer. How does a heat pump do this better?

- A heat pump will provide superior living conditions—a constant temperature and better humidity levels. Air isn't dried out in the winter and a more even temperature is maintained

natural gas or propane furnace (60%-98%)



air conditioning & heating for your home

heating for free with a de-superheater. Water heating is about 15% of your energy costs

- A heat pump is the safest heating and cooling system as no carbon monoxide is created like a natural gas or propane furnace does



- Much more efficient (150%-500%) than a

- Higher efficiency will save operating costs each month. Heating and cooling amount to 50% of your total energy costs
- Efficiency is produced from transferring heat rather than creating heat like fossil fuels do
- A geothermal heat pump can provide a portion of your water



Install an air source or geothermal heat pump for your family

Geothermal Heat Pumps—living comfortably with lower energy costs is now more affordable!!

Watch for Big Screen Savings

The days of large console televisions, with their wood grain exteriors and antenna wires or rabbit ears, are long gone—no more using needle nose pliers to change channels after the knob breaks or fiddling endlessly to adjust the horizontal and vertical holds. Today's televisions offer larger, thinner screens and, thanks to digital cable or satellite connections, provide a virtually unlimited number of channels.



However, some models require a tremendous amount of energy to operate—almost as much as a refrigerator. And the average American household owns 2.93 TVs, according to a 2010 Nielsen report.

All of this energy use adds up. The Natural Resources Defense Council found that U.S. televisions use more than 46 billion kWh per year, or about 4 percent of residential electricity use.

In response to consumer concerns, TV manufacturers are designing sets that use less energy without sacrificing screen size or resolution.

Are you in the market for a new TV, or do you want to make sure you're using your current TV efficiently? These tips will help you tune in to big screen energy savings.

High-Definition=High Energy Use

Although a high-definition TV

(HDTV) transforms the latest blockbuster movie into a theater-like living room experience, these sets generally use more power because of better picture clarity. Also, energy consumption often relates to screen size. The larger the screen, the more electricity required.

Four types of TVs are currently available: plasma, liquid-crystal display (LCD), rear projection, and cathode ray tube (CRT). CRT televisions are the most difficult to find because they employ old technology and screen sizes rarely top 40 inches.

Plasma screens often are cited as the largest energy user—mainly because their large 42-inch to 65-inch screens typically draw between 240 watts to 400 watts. Most consume electricity even when turned off.

LCD TVs don't need much power to operate—111 watts on average. Most LCD screens range in size from 21 inches to 49 inches. These TVs fall into two categories: those with cold-cathode fluorescent lamps to illuminate the screen; and backlit models employing a light-emitting diode (LED). LED units offer several benefits, notably better picture quality and thinner and lighter screens. They also use slightly less energy, at 101 watts.

Rear projection televisions tend to be the most energy efficient and boast the largest screen sizes. However, due to their overall weight, rear projection sets are not as readily available as plasma and LCD models.

Shopping for an energy-efficient television can be difficult. Television

manufacturers rarely advertise energy consumption, and it almost never appears on in-store labels, though new ENERGY STAR® requirements may change that 2012.

Faced with these difficulties, consumers need to conduct their own energy use research through unbiased online sources such as CNET.com, an online journal for the technology industry. Look for specific model numbers, which you can take to the store.



Tune in to Savings

If you're not in the market for a new TV but want to make sure your model is operating efficiently, these tips from CNET.com may help you save energy:

- Turn the TV and other connected devices off when they're not being used
- Turn down the LCD's backlight—you'll save energy and still retain better picture quality
- Turn on the power saver mode, which many new TVs offer
- Control room lighting. While many energy-saving tips reduce brightness of the screen, you can compensate by dimming lights around your TV.

Operating your refrigerator efficiently

Your kitchen's refrigerator keeps your cold foods cold and your frozen foods frozen every day of the year. What and how you store food in your refrigerator can affect the amount of energy that is consumed. Make the right choices and over the course of 12 months, the savings can add up!



The main purpose of refrigerating and freezing is to ensure your food is kept safely for consumption at some later time. It's true, care must be taken to keep foods cold enough to inhibit spoiling. But there is no advantage to over-cooling, and it will cost you extra money!

Refrigerators and freezers should not be set too cold. Refrigerators should maintain a temperature of 37 to 40 degrees Fahrenheit. Freezers should be at 5 degrees Fahrenheit. Stand alone freezers for long storage can be set at 0 degrees Fahrenheit. To check your refrigerator's temperature, set a thermometer in a glass of water in the center of the appliance. Read the thermometer after 24 hours. For a freezer, place a thermometer between packages and read it after 24 hours.

Keeping your refrigerator full actually helps increase energy efficiency because there is less air to cool. Be careful not to overfill though. Overfilling your refrigerator can hinder air circulation. Keep liquids covered and make sure to wrap foods when they are stored in the refrigerator. Not only will uncovered foods dry out and have their taste ruined, but the moisture that is released from uncovered foods causes the refrigerator's compressor to run longer.

Check to make sure the coils behind the refrigerator are cleaned on a regular basis. Keeping coils clean allows for better airflow over the coils resulting in the cooling unit's compressor running less than if the coils were dirty. Another important task that should be done regularly is defrosting the freezer, if the unit is not a frost-free model. Frost buildup exceeding one quarter of an inch will decrease the unit's energy efficiency.

Here's another money saving tip: Make sure there is no air leakage around the refrigerator's door seals. When cold air escapes, the compressor runs longer to replace it. To see if your unit needs new seals, perform the "dollar bill" test. Place a dollar bill between the door and the unit. Close the door. If the bill slides out easily, air is leaking and the hinges and/or seals need to be fixed. If it is difficult to pull out the bill, the seal on the door is in good shape.

Lastly, make sure your refrigerator is in the right location. Though location is often limited by electrical and water hookups, making sure that there is proper air flow around the refrig-

erator can help it run more efficiently. If the appliance is stored between cabinets, make sure that nothing stored around the unit hinders its airflow.

If you are considering replacing your main refrigerator, or if you no longer have need for an older, secondary unit, you may be interested in the EnergyWiseSM Refrigerator Recycling Program.



If you are a customer of Twin Valleys Public Power District you can take advantage of the program by calling 866-444-9160 or visiting www.jacoinc.net to schedule a free pick up. Customers should be sure to have their utility bill in hand when scheduling. Refrigerators or freezers must be between 10 and 30 cubic feet in size and be operational at the time of pick-up. Not only will you be saving money on your electric bill and helping recycle valuable materials, you are eligible for \$35!

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| <p>Board of Directors Bruce Lans, President Larry Kubik, Vice President Brent Ballou, Secretary K. Dale Fults, Treasurer Dallas Ott Gerald Meyerle David Black</p> | <p>Staff James P. Dietz, General Manager Sandra Stagemeyer, Director of Administrative Services Mike Langley, Director of Operations Bill Minnick, Director of Communications & Marketing</p> |
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Website: www.twinvalleysppd.com

Notice of Board Meeting
 The regular meeting of the Board of Directors of Twin Valleys Public Power District is scheduled for 2:00 p.m. the third Monday of each month at the District Office in Cambridge, Nebraska. An agenda for the meeting, kept continuously current, is available for public inspection at the principal office of Twin Valleys Public Power District in Cambridge during normal business hours.

Office Hours: 8:00 a.m. to 4:30 p.m.
Monday - Friday
Service Calls After Hours
 Please call 800-658-4266 or 697-3315 at all times to report outages or service calls after normal business hours. A Twin Valleys' dispatcher will take down the necessary information.


Twin Valleys' Employees

David Benson, Line Superintendent
 Bob Bergquist, Lease Town Meter Reader
 David Custer, Apparatus Supervisor
 Todd Eitzmann, Apprentice Lineman
 Derek Galusha, Apprentice Lineman
 David Garcia, Load Mgmt & Info Technology Specialist
 Gary Groshong, Construction Layout Tech
 Riley Guthrie, Apprentice Lineman, Alma
 Doug Huxoll, Warehouseman
 Marcie Houghtelling, Secretary/Receptionist
 Kim Miller, Cambridge Crew Chief
 Jim Mollhoff, Journeyman Lineman
 Brock Mowry, Apprentice Lineman
 Cole Nickerson, Apparatus Tech
 Janet Rasmussen, Accountant
 Adam Stottler, Apprentice Lineman, Alma
 Jim Teter, Journeyman Lineman
 Carol Voss, Billing Supervisor
 Karen Werkmeister, Billing Clerk
 Nick Woetzel, Apprentice Lineman, Alma
 Brandon Wright, Alma Crew Chief
 Philip Young, Area Serviceman

Construction begins for Twin Valleys Public Power District

Mid Plains Power, Inc. of Grand Island has begun construction of a new 69kV sub-transmission line in Harlan County. For the next several months they will be working along P Road between Road 711 and 719. Please take all the necessary precautions when traveling this road as there will be equipment and men working in this area.

Twin Valleys Public Power District is pleased to be able to upgrade our service to this area and wants to make sure everyone stays safe when they travel through the area where the new line is being built.



Energy Efficiency

Tip of the Month

During summer months when air conditioners work hardest, do energy-intensive tasks such as laundry and dish washing during off-peak energy demand hours, usually in the early morning or later evening.

Source: Alliance to Save Energy

Capsule Sermons

- *The smallest good deed is greater than the greatest of good intentions
- *The trouble with discretion is that it usually comes too late to do any good
- *Age is a matter of feeling, no years
- *All you need is love, but a little chocolate now and then doesn't hurt
- *Rather than thinking of the cost of doing something, think of the cost of doing nothing

“This institution is an Equal Opportunity Provider and Employer”