

Currents



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Your Link to Sussex Rural Electric Cooperative



High Voltage . . .



Know

What's Below

Now you can be connected directly to the *Call Before You Dig* One Call system by simply dialing 811 from anywhere in the United States. The new, federally mandated national number was created to help protect you from unintentionally hitting underground utility lines while engaged in digging projects. The One Call Center personnel will notify affected utility companies, who will send crews to mark underground lines for free.

Before you, or a professional you hire, begins digging in a fence, mailbox post, or swing set, tilling a new garden spot, planting a tree, installing a satellite dish, or adding a deck, it's essential to call 811. You must call 3 days in advance and not more than 10 days before you begin your project.

Why Call Before You Dig?

1. It could save your life!

Many services lie buried beneath the ground. Power lines and gas lines are two of the most deadly. Cut cables cannot transmit signals to 911 or in-home medical equipment.

2. It could save your property!

Fire or explosion from a damaged gas line, erosion from a broken water line, disease from a broken sewer line or simply the inconvenience of losing your phone or cable TV service due to a cut power line.

3. It could save you money! It

doesn't cost anything to contact the One Call center. With one quick telephone call, all utilities

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Commentary by the President & CEO



Tankless/ Instantaneous Hot Water Heaters

by Jim Siglin
President & CEO

Energy savers beware! Instantaneous water heaters may not be all they appear. Okay, now that I have your undivided attention, let's talk about the tankless water heater. These devices are just what their name implies; they heat water without a storage tank. This means they produce hot water only when there is a demand for it. On the surface, this makes sense. No heating water in a large tank that will cool and require reheating a number of times before it is needed. This is the very basis of the efficiency claims by the manufacturers.

If you are investigating one of these units, under no circumstance buy an electric tankless water heater. Surprising for an electric utility to say, right? Let me tell you why. These units almost invariably exceed the capacity of your home's electric service. They require 150 amps on their own for a family size unit. How does this affect you? Well, in the movies, when the mad scientist throws the giant double bladed knife switch to turn on the power to his terrifying creation, the lights dim, motors whine under massive load and sparks fly. All right, so it isn't that bad. However, these units draw so much power you will need substantial upgrades to your wiring and possibly a larger transformer outside your home to handle these units. Failure to do this can create a dangerous situation as your service is constantly overloaded.

So that makes the logical choice a propane or natural gas tankless water heater, right? Not necessarily. Most American families lead hectic schedules that call for multiple hot water needs simultaneously. For example, on a school night, the laundry might be going, the dishwasher running and a shower or two might join the mix exceeding the ability of the tankless device to meet the demand.

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In this situation, if it occurs frequently, a second tankless heater could be needed.

Other considerations that impact the suitability of these units for your needs include:

- the temperature of your incoming water (it can't be too cold),
- the hardness of the water (which can void the unit warranty if too high),
- the cost of installation (this can be substantial) and
- the availability of service (these are highly complex pieces of equipment).

Finally, the efficiency rating on these units falls off over time as their coils scale up and get older so your savings diminish as well.

Since I am not prone to negative writing, I must state that these units make sense in specific situations such as households with single occupants or where minimal hot water is required. For the rest of us, a high efficiency electric water heater is a better choice. The Marathon water heater, with a range of storage capacities, is designed for the hectic life style most of us lead. It heats your water and keeps it hot all day (losing just 5 degrees over 24 hours). Plus, service is a breeze for any qualified plumber or devoted DIYer with only four components to worry about.

At Sussex REC our goal is to provide you with the information needed to make the best choice possible when it comes to your energy use. We want you to run your home and business as efficiently and cost effectively as possible. As interest in conservation and energy savings grows, use us as your source for reliable information. Our website, www.sussexrec.com, is an excellent place to start or give us a call at 1.973.875.5101. Together we can make a difference.

CORRECTION...

"Fluorescent Lighting II"

In that article I state that T8 lamps cannot be used in existing T12 fixtures. This is not correct. You must replace the ballast to use the T8 lamps but the existing T12 sockets will work with these lamps.

Take the chill out of your home cost effectively and safely

Autumn is upon us - my personal favorite season. The crisp air, the smell of leaves, the color of the foliage. Ahhhh. The hot muggy days of summer are now a dim memory.

As the temperatures drop, the heat comes on. Maybe you have a room in your home that doesn't get quite warm enough. Maybe you want to keep the house cooler than last year and use spot heating solutions to supplement. What are your options?

The best and safest option is the tried and true electric baseboard. Now, before you start calling me names and accusing me of insanity for recommending such a solution, let me offer the following from the Cooperative Research Network (CRN) in Washington, DC:

For electric heating, a classic technology is the electric baseboard which offers the consumer a relatively low initial cost. Since it is an electric resistance heater, it is nearly 100% efficient. It is also readily controllable and widely available. A convection heater can also be used instead of a baseboard heater. The convection heater is capable of moving heat faster to a point farther from the heater than a baseboard heater. Selecting one over the other is a matter of personal taste. The operating cost difference is trivial. Please note that electric resistance heat is the most expensive form of heat, from an operating expense perspective. It is more expensive to operate than other major space heating forms, including natural gas, propane, electric heat pumping, and fuel oil.

See, our researchers even state that electric is the most expensive form of heat. However, it has the advantage of low initial cost, excellent control and high safety. If you are considering electric heat as the primary source for any large area or continuous use, we have better options. Give us a call.

If you opt for some form of portable space heater look for two specific features: a protective grid over the heating elements to keep fingers and combustible objects away from the hot elements and a tip over switch so if it falls or is knocked over it turns off. Moreover, under no circumstances use a fossil fuel space heater in your home that is not directly vented to the outside. Carbon monoxide - bad, don't let it in your home with a space heater.

Finally, this time of year will bring

advertisements from firms offering unique technologies, typically electric, that promise to save you a bundle. Last year, an ad for one of these units ran in local papers, the Parade Sunday magazine and in other places. It offered remarkable savings with its innovative quartz technology. I sent the ads to CRN and received the following assessment.

We contacted two separate distributors of the EdenPURE Portable Heater, and neither was able to provide any type of performance data or publication that can confirm the claims attributed to this device. Considering that quartz infrared heating technology is not a new technology and that the power draw of the two heater models (750 Watts and 1500 Watts) are similar to that of other electric space heaters, the potential to reduce heating bills by 50 percent appears to be unsubstantiated.

Electric space heaters can save money on heating bills if properly used in specific applications. If the house has an electric central heating system, energy consumption can be reduced by turning down the thermostat and using electric space heaters only in the rooms where heating is called for. By heating the occupants directly, energy is not wasted on heating large volumes of unoccupied space. According to Lawrence Berkeley National Laboratory's (LBL) Home Energy Saver Website (http://hes.lbl.gov/hes/answerdesk_dat.html#h2), if the central heating is gas, the possibility of reducing heating costs by substituting heating with electric space heaters is "not something to take for granted." Also included at LBL's website is a chart homeowners can use to help estimate the effect electric space heaters have on their heating bills.

As noted above, the main benefit offered by electric space heaters is allowing homeowners to setback their thermostat settings. Turning down the thermostat by 1 deg. F is equivalent to a 1-3 percent decrease in heating energy consumption, throughout the entire heating season. As noted in the Heating Tech Atlas, in an eight-hour setback period, heating energy consumption may be reduced by 1 percent per degree of setback. According to Rocky Mountain Institute's (RMI) Home Energy Briefs: #4 Space Heating, when electric space heaters are used in a well-insulated, small home or in a home with only one or two rooms occupied, the use of electric space heaters may enable occupants to reduce the thermostat 6-

8 deg. F. Therefore, assuming a setback of 8 deg. F. and a corresponding savings in heating energy of 3 percent per deg. F., the maximum reduction in heating energy obtained is around 24 percent, less the energy consumed by the electric space heaters. Setting back the thermostat to 50 deg. F., as suggested on EdenPURE's website, is well below what is recommended by RMI and can result in occupancy discomfort. If residents don't feel comfortable, the thermostat will go up, and any potential for energy savings is negated.

Also, note that the potential for savings from the EdenPURE space heater is only for heating energy and not total energy. As shown on the 2006 Buildings Energy Data Book website (<http://buildingsdatabook.eren.doe.gov/>), for the average U.S. residence, energy used for heating is responsible for 30 percent of total residential energy consumption, so a 24 percent reduction in heating energy corresponds to an overall reduction in total energy costs of approximately 7 percent.

To wrap this all up, cutting back the thermostat and using spot heat to supplement can save money. Do not fall for ads touting new technology especially when they claim huge energy reductions. If you have a question, give us a call at 973.975.5101 today.



SAVE WATER AND GET HOT WATER FASTER

For this article, I want to address a pet peeve. That peeve involves standing by the sink or outside the shower for an interminable time waiting for the hot water to reach the faucet or shower head. Conservationists have preached for years about the amount of water that literally is going down the drain waiting for the hot water to get hot. A quick Internet search says most people waste 3 - 4 gallons every time they do this and some wait as long as 4 minutes for hot water to get to the tap. Doing some math, that adds up to an awful lot of water simply going to waste (Okay, so it is the new math. What, you want numbers? How about an average of 16,534 gallons are wasted per person each year?).

There are a number of solutions to this problem. I recalled seeing something about this on one of those old house restoration television shows so I asked one of our plumbing friends for



some advice. He came back with an under sink recirculation pump. This is a small pump that is mounted between the hot and cold supply lines under the sink or near the shower head. In the automatic model, a temperature sensor activates the pump when the temperature of the water in the hot supply line drops to 85 degrees. The pump passes the mildly warm water into the cold supply side, saving it from going down the drain. As soon as the water at the sensor reaches the proper temperature, it shuts down. A timer lets you determine schedules for operation to further economize.

The model recommended by our plumber is manufactured by Laing Thermotech, Inc. Check out their web site at www.lainginc.com for more information. The model I have my eye on is the Autocirc1. While not inexpensive (approximate-

ly \$400), these units offer savings in electricity and water consumption.

There is another, less gadgety solution that involves installing a small hot water tank closer to the point of use. For example, in our home, the shower happens to be directly above the water heater (a lovely, curvaceous Marathon 50 gallon - <http://www.sussexrec.com/brochures/Marathon.html>). The kitchen, however, is at the far end of the house so it takes several minutes to get hot water to the tap. As an alternative to the Laing pump, I could install a second, small Marathon directly under the kitchen to speed delivery of hot water. Now, I have nearly instant hot water plus an additional hot water supply if I need it.

Whatever the solution you opt for, consider insulating any exposed hot water lines in your home and caulking around plumbing openings under sinks to eliminate drafts. Check our website at www.sussexrec.com and click on the Energy Use & Efficiency link on the left for more energy saving ideas.

MARK 'EM AND CELEBRATE

National Cook Something Bold and Pungent Day?

by: Tom Tate

Fall is upon us and with it a slew of national observances. October seems to have a veritable cornucopia of them (couldn't resist being this close to Thanksgiving). My personal favorites? National Chili Month and World Egg Day. Who would have thought? And, then there is Cook Something Bold and Pungent Day in November with what has to be an intentional National Flossing Day on the Friday following Thanksgiving. Cook something bold and pungent? I'm open to suggestions. Send me your recipes for something bold and pungent (it must be edible) and I'll award the best entry with something from our goodies closet. Our panel of crack culinary experts will aid in the decision making. Since many of you don't get this until late in the month there will be a winner every week! Fax and email is best, but a phone call is fine. Here is the necessary information: 973.875.4114 (fax), ttate@sussexrec.com or 973.875.5101 x117. If the entries use things like lutefisk and limburger cheese we can all be thankful the celebration is only one day.

October

- Oct 1-31 Celebrate Sun Dried Tomatoes Month
- Oct 1-31 Eat Better, Eat Together Month
- Oct 1-31 Frozen Foods Festival
- Oct 1-31 Go Hog Wild - Eat Country Ham Month
- Oct 1-31 National Bake and Decorate Month
- Oct 1-31 National Book Month
- Oct 1-31 National Breast Cancer Awareness Month
- Oct 1-31 National Chili Month
- Oct 1-31 National Construction Toy Month
- Oct 1-31 National Dental Hygiene Month
- Oct 1-31 National Popcorn Poppin' Month
- Oct 1-31 National Roller Skating Month
- Oct 1-31 National Seafood Month
- Oct 1-31 Spinach Lovers Month
- Oct 1-31 Talk About Prescriptions Month
- Oct 1-31 Vegetarian Month
- Oct 7-13 Fire Prevention Week
- Oct 8 Columbus Day
- Oct 8-12 Improve Your Home Office Week
- Oct 10 National Cake Decorating Day
- Oct 12 World Egg Day
- Oct 14-20 National Chestnut Week
- Oct 16 National Boss Day
- Oct 20 Sweetest Day
- Oct 28 Mother-in-Law Day
- Oct 31 Halloween

November

- Nov 1-7 National Fig Week
- Nov 1-30 National Georgia Pecan Month
- Nov 1-30 National Pomegranate Month
- Nov 1-30 National Roasting Month
- Nov 1-30 Peanut Butter Lovers' Month
- Nov 1 National Men Make Dinner Day
- Nov 3 Sandwich Day
- Nov 6 Election Day
- Nov 8 Cook Something Bold and Pungent Day
- Nov 11 Veteran's Day (Observed 11-12)
- Nov 12-18 Children's Book Week
- Nov 15 National Bundt Day
- Nov 17 Homemade Bread Day
- Nov 18-24 National Game and Puzzle Week
- Nov 21 Pumpkin Pie Day
- Nov 22 Thanksgiving
- Nov 23 National Flossing Day



On the Doorstep of the Onion Capital

Don't the memories of strolling along the main street of the New Jersey State Fair taking in all the wonderful food aromas just make your mouth water? A few pungent favorites such as sausage sandwiches, cheese steaks, and hamburgers often have a common ingredient that contributes to their popularity. Can you guess? I know you know it. Yes, that's right, an ONION! Have you ever thought about where those onions may have come from? Most likely it hails from right around the corner in Pine Island, NY; AKA the Onion Capital of the World.

A visit to the Pine Island, NY Chamber of Commerce website (www.pineislandny.com) and the Hudson Valley Network (www.hvnet.com)

uncovered some fascinating facts. Pine Island is quite literally surrounded by a sea of black dirt. Scraped and scoured by the last glacier, the wide flat valleys were once a glacial lake, which became a swamp and later dried, leaving this black dirt legacy. 19th century immigrants recognized the similarity in this new world dirt to what they left behind so they drained the swamps, cleared the land, and established the area as the largest onion-growing region in New York State, now providing 25% of the nation's onions. Take that, Georgia, with your vidalias!



Don't such stories bring tears to your eyes? Well in this case it should. Yes, I know, terrible pun. The main type of onion grown is a premium cooking onion called the yellow globe. These tasty treasures naturally find their way to our tables along the eastern seaboard and are shipped as far away as Israel. Want to get them first hand? Well, you don't have to travel far! Down almost every country road are roadside farm stands laden with fresh from the garden fruits and vegetables. Or, you can travel a short distance from Sussex County and visit one of the dozens of Farm Fresh Street Markets that have been established throughout the Valley.

If you're looking for expertly prepared cuisine featuring the area's sweet onions, try Ye Jolly Onion Inn. The relaxed atmosphere, fresh ingredients from local farms and wonderful wines make it a favorite with travelers and locals alike. Visit the Jolly Onion's webpage at www.yejollyonioninn.com for more information.

Fall is one of the best times of the year to explore new areas such as the Black Dirt Region. Maybe we'll see you over a Jolly Onion Blossom at Ye Jolly Onion Inn soon!

Know What's Below

Continued from page 1

in your area will be notified to come and mark the location of their lines.

However, if you damage a utility line and did NOT call before digging, you may be fined and liable for up to three times the actual amount of the damage.

4. IT'S THE LAW!

One Call makes it easy to be safe and eliminates the need for you to call each utility directly. The person or company doing the excavation is required to call the Center. The following information is needed to process your request: name, address, the dig address and the nearest intersection, how deep you are digging, the type of work and

where you need the property marked out. You will receive a ticket number, which you should keep as proof of compliance until your project is safely completed. One Call will alert all the operators of underground facilities in your area. These operators will then mark any underground lines or hazards, helping you to dig safely. The color code markings for utilities are:

RED – electric

YELLOW – gas, oil, dangerous materials, product & steam lines

ORANGE – CATV communication

BLUE – water

GREEN – sewer

WHITE – proposed excavation

Remember, it's not just a good idea to call this free service - it's the law.

Make the wise choice

When it's time to buy a new water heater, there are a number of choices you can make. You can purchase a heater warranted for six or eight years, one that will be cheap to buy, but expensive to operate. Or you can invest in a Marathon and save money in operating costs...for a lifetime. Marathon - super efficient and warranted not to leak for as long as you own your home.



- **Seamless Polybutylene Tank** will never rust, corrode or leak.
- **Environfoam® Insulation** completely surrounds the tank. Superior efficiency with no Ozone-depleting chemicals.
- **Heating Elements** designed to maintain water temperatures and perform in the harshest water environments (just like ours here in NJ).
- **Bowl-Shaped Tank Bottom** developed to allow more complete tank draining.

Contact us today for model availability, pricing and complete information. 973.875.5101 x117 or go to our website:

<http://www.sussexrec.com/brochures/Marathon.html>

Marathon *Simply the wisest choice*
WATER HEATERS *in water heaters.*

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