

April 2010 magazine stories

## **Do tankless water heaters live up to the hype?**

By Jim Coode, CEMC General Manager

An unlimited supply of hot water definitely sounds like a sweet deal to many homeowners. So do reduced water heating costs, instantaneous hot water on demand and more space in the utility closet.

These are all promises made by companies selling tankless water heaters. But does the technology really deliver?

Unlike traditional electric resistance or gas-fired water heaters, tankless models do not store hot water — they heat water only as it's consumed. A series of heating elements within a tankless water heater is activated when a hot water faucet or valve is opened. The unit heats water until the faucet or valve gets closed.

'Unlimited' hot water?

An unlimited supply of hot water sounds great but generally doesn't make for responsible water use, particularly in areas of the country suffering from drought or chronic water shortages. Moreover, even the largest whole-house unit may not supply enough hot water for simultaneous, multiple uses.

For example, such a unit may be able to supply only two showers simultaneously or perhaps one shower, a dishwasher and a sink. If users demand too much water, temperatures will drop. As a result, a tankless system probably won't meet the needs of a large family.

In addition, water temperature depends on the volume coming out of a faucet. If you turn on the faucet only a trickle, water runs cold. If you open the faucet further, you will trigger hot water—the hottest possible. If you open the faucet to maximum, the temperature will drop back a bit. If you open more than one faucet, temperatures will drop even more.

Hidden costs

Generally, tankless water heaters do not require a lot of space (a large unit can fit in an area no larger than 24 inches square and extend from the wall about 8 to 10 inches). But they do require an upgrade in electrical service — something most home improvement stores often don't mention and a chief reason electric co-ops generally don't recommend the appliances. This means consumers who want to replace an existing conventional water heater with a tankless unit or add one as part of a home-remodeling project will incur additional costs.

For example, a traditional tank water heater with 4,500-watt elements operates on No. 10 wire and a 30-amp circuit breaker. One whole-house tankless model boasts four 7,000-watt elements for a total electrical load of 28,000 watts. This requires wire and a circuit breaker that will handle at least 120 amps.

If a tankless water heater is installed in an existing home without upgrading the electrical service, low voltage or sudden voltage drops are likely. This will cause dimming lights, blinking lights and other problems.

The extra load also necessitates a larger and more expensive meter loop and main breaker panel for the house. In some cases, consumers also must pay for new wiring between the distribution transformer and electric meter. Check with a licensed electrician or call us here at Cumberland Electric Membership Corporation at (800) 987-2362 to determine if you must improve your electric service connections to support a tankless water heater.

### **CEMC pays \$2.9 million in property taxes**

Local governments in the counties served by Cumberland Electric Membership Corporation are receiving payments totaling \$2,918,843.24 covering the cooperative's ad valorem (property) taxes for 2009. The total is 7.8 percent higher than the previous year.

City and county governments assess ad valorem taxes based on the value of CEMC's power lines, buildings and other fixed assets within their jurisdiction, all of which is necessary to distribute electricity to the co-op's 89,000 members.

Most of the 21 governmental entities are receiving higher payments this year, but none come close to the percentage gain experienced by one Robertson county town. Ridgetop, population 1,300, will receive a check that is over 1,600 percent more than the year before. That's due to the construction of CEMC's new Bethel Road substation.

Governments use these tax dollars for public education, road improvements, public safety, parks and recreation and a myriad of other related services.

### **Don't forget to register for a FREE elec. grill**

Some lucky person in each district will win a deluxe electric cart grill by attending Cumberland Electric Membership Corporation's Member Appreciation Days this month.

Here is the schedule (10 AM–1 PM all locations):

April 12 - Clarksville Headquarters

April 14 - Dover

April 19 - Ashland City

April 21 - Springfield

April 26 - Gallatin

April 28 - Portland

April 30 - White House

While not everyone will get a free grill, everyone will receive a free lunch consisting of grilled hotdogs, chips, cookies and soft drinks. Plus, you'll be among the first to see (and hopefully buy) CEMC's new cookbook filled with hundreds of tempting recipes. All proceeds will benefit Project Help.

### **All the good people down in Tennessee are diggin' Rivers & Spires and the CDB**

Getting great concert tickets isn't always easy. There are company pre-sales, VIP packages and brokers who magically get all the premium seats. So then, how do you wrangle a ticket to see award-winning songwriters and big name acts like Charlie Daniels and Big Daddy Weave? It's easy. You come to the 2010 Rivers & Spires Festival in downtown Clarksville, where tickets are nowhere to be found because all concerts are free!

Charlie Daniels will be the featured headliner at this year's festival to be held April 15-17. Daniels and his band will take the stage on Saturday night. The legendary fiddler is known for his eclectic mix of country and southern rock, and he was recently inducted into the Musicians Hall of Fame. Joining Daniels on the festival lineup are The Texas Tenors, who will perform Friday night, April 16. The Texas trio made it to the quarterfinals on Season 4 of NBC's talent competition series "America's Got Talent."

Contemporary Christian band Big Daddy Weave will make their Clarksville debut this year, along with duo Chris and Conrad. Big Daddy Weave toured for two years with Mark Schultz, and in 2009, they headlined the "What Life Would Be Like Tour." They have been honored at ASCAP's Christian Music Awards, and were nominated for "New Artist of the Year" at the Dove Awards in 2002. Touring with Big Daddy Weave this year is Chris and Conrad, whose debut single "Lead Me to the Cross" has become a national radio smash. Influenced by contemporary Christian artists, Chris Kuti and Conrad Johnson also pull from the ranks of yesterday's mainstream hit makers such as Chicago, The Police and U2.

If blues music strikes a chord with you, then you don't want to miss Jimmy Hall & the Prisoners of Love. Jimmy Hall, former lead vocalist and harmonica player for Wet Willie, has shared the studio and stage with artists such as The Allman Brothers, Aerosmith, Lynyrd Skynyrd, Jeff Beck Group, Grand Funk Railroad and a host of others. Also taking the Courthouse Stage on Saturday will be Jaystorm Unplugged, Syd Hedrick & the Blues News, and The Tina Brown Band.

If you've never been to the Rivers & Spires Festival or are new to town, put it on your calendar and start resting up. Rivers & Spires is three days of free entertainment, interactive activities, great food and drink, striking displays, live music, amazing art and international flavor. Some of the returning events include Last Band Standing, Jazz n' Wine, Quilts of the Cumberland, Green Zone, Marketplace and Artz Galore.

The Kidz Zone is a fun station filled with over 25 free events for kids of all ages to enjoy including face painting, carnival games and more. Kids can travel through the inflatable jungle, climb walls, paint, create, or participate in numerous kinds of interactive entertainment. There are also dance demonstrations, international performers and a new talent showcase, “Aspire to Stardom.”

Once again, kids 12-years-old or younger and their accompanying adults can join all the fun – characters in costume, small floats and walkers – in the sixth annual Rivers & Spires Festival Children’s Parade. The theme for this year’s parade is “Kids Go Green in Clarksville.” Children and groups are encouraged to enter the children’s parade theme contest.

The Teen Area has been expanded this year and will feature interactive activities and the new U.S. Virtual Army Experience (VAE). Like the America’s Army game, the VAE is designed to provide visitors with a high-fidelity, information-rich experience in which participants can take part in a virtual test drive of Soldiering in the U.S. Army. It houses more than 70 flat screens and more than five miles of data cable, requires more than 75 computers and 260 gigs of processing power to run, has the equivalent computing power of an Army Stryker Battalion, and is covered by an inflatable dome weighing over 5,400 pounds.

And yes, it’s all free for little kids and big kids, too. Last year’s festival won top awards over 1,500 other organizations and received “Overall Best Event” at the International Festivals and Events Association annual conference.

For more information on Rivers & Spires, visit the website at [www.riversandspires.com](http://www.riversandspires.com).