



HUNTSVILLE UTILITIES

# Customer Connection

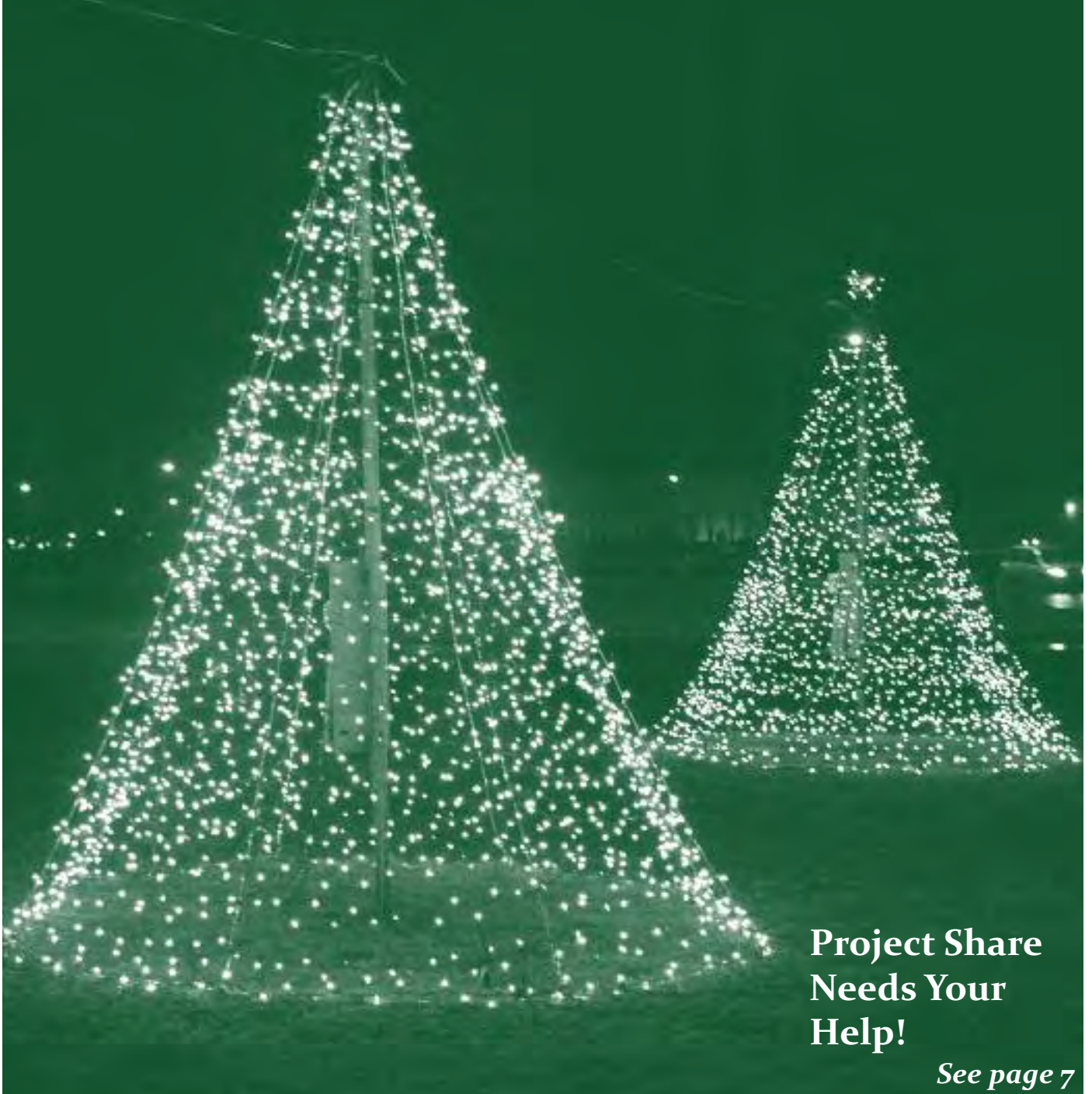
## Inside

- Dual Heat Pumps = Comfort & Savings!
- Understanding Your Rates
- Planning Water Supply for the Future

DECEMBER 2009

NEWS & INFORMATION FOR CUSTOMERS OF HUNTSVILLE UTILITIES

VOLUME 13 ISSUE 2

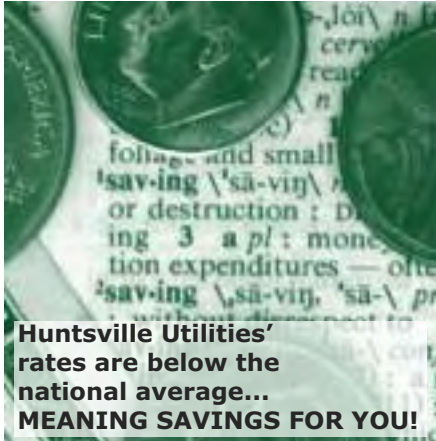


**Project Share  
Needs Your  
Help!**

*See page 7*

## Customers to Pay Less for Energy This Winter

The rates we pay to heat our homes this winter, whether we use electricity or natural gas, will be less this year compared to last winter.



Huntsville Utilities does not generate energy, but is a supplier of energy services. We buy electricity from the Tennessee Valley Authority (TVA) and natural gas from gas suppliers along the Gulf Coast. For every dollar that an HU customer spends for electricity, 89 cents is returned to TVA for the cost of electricity. Likewise, approximately 80 cents of the natural gas bill is for purchasing and transporting natural gas to

our community.

Because of reductions in TVA's monthly Fuel Cost Adjustment (FCA) over the past several months, HU customers are paying two cents less for each kilowatt hour of electricity they use this December compared to December 2008.

Over the past five years, the typical HU customer's December electric usage has been 1,540 kilowatt hours. Based on that amount of use, the electric bill last December would have been \$140.04. This December the bill will be \$109.01, a 22% reduction.

The Tennessee Valley Authority notified distributors this summer that they would be revising their Fuel Cost Adjustment program (FCA) from being changed on a quarterly basis to changing each month. A Fuel Cost Adjustment is a variable energy rate that can fluctuate as TVA's fuel and purchased power costs rise and fall. In 2005, the price of natural gas, oil and coal used to generate electricity skyrocketed. Since then, TVA has found it difficult to predict the amount of revenue that is required to cover the cost of producing power. The Fuel Cost Adjustment allows TVA to more quickly match costs with revenue and avoid implementing

permanent rate increases. The monthly FCA directly affects the rates that all TVA distributors are charged for the electricity they use.

Thanks to declines in the market price of natural gas, HU has lowered gas rates twice this year, once in May and then again in November.

During the peak heating months of December through February, the average HU gas customer uses 10,000 cubic feet monthly of gas. Last winter they would have equaled a bill of \$140.70 for that amount of gas used. Under the current rate structure their bill would be \$121.70. The average usage of 10,000 cubic feet per month is based on a 1,800 square foot house using natural gas for heating and water heating. HU did increase the monthly customer charge in November from \$2.50 to \$4.50. The monthly customer charge for gas customers had not changed in over thirty years.

The rates Huntsville Utilities' customers pay for electricity, natural gas and water are all below the national average and in many cases, near the lowest in the region. Huntsville Utilities will continue to work toward maintaining the lowest rates possible for our customers.

### Huntsville Utilities Numbers-At-a-Glance

Huntsville Utilities Main Number	535-1200
Huntsville Utilities Toll-Free	1-866-HSV-UTIL 1-866-478-8845
Automated Account Info & Payment Agreements	532-8222
Discuss Current Bill	533-0646
Turn Off/Transfer Service	535-1255
Alabama 1 Call (Call Before You Dig)	1-800-292-8525
Streetlights	
Outages (Streetlights Only)	535-1255
Installations	
Huntsville	427-5300
Madison City	772-5600
Madison County	532-1640
Energy Right Homes & Education Programs	535-1225
Green Power	533-0646
Speedpay	1-877-429-4131
Emergencies (No Power, Leaks, etc.)	53-LIGHT 535-4448

Phone Center open 7 a.m. to 7 p.m. Mon.-Fri.

### About the cover photo

Ever wonder how much electricity you would save with those new energy efficient LED Christmas lights? Huntsville Utilities is conducting an experiment to find out.

In January we will release data on the usage of the LED lit tree on the right in comparison to the tree on the left lit with traditional outdoor lights. In the meantime, while you wait for the results ...



*Happy Holidays from Huntsville Utilities!*

## Planning Water to Help Grow the Valley

The expansion project to Huntsville Utilities' South Parkway Water Treatment Plant is approximately 95% complete. The expansion of this facility has been tested and permitted through all the regulatory agencies and was placed in service on Sept. 28, 2009.

With the expansion, Huntsville Utilities has added an additional 12 million gallons of pumping and treatment capacity to our system. During the recent drought, the Water Department was operating in excess of 80% of our design capacity. During this period, an all-time production record was set at 75 million gallons per day.

Droughts are a normal component of the weather cycle and, being such, will return to our area in the future. The inevitability of future droughts, coupled with the continued growth of Madison County, requires that action be taken to ensure that future water supply demands can be met. With this in mind, Huntsville Utilities put into action our plans for the plant expansion. Design and construction took 2½ years.

Huntsville Utilities Water Department also began an aggressive leak detection and repair program about the same time we began construction on the plant. To date, we have identified and repaired leaks that will save approximately 5.2 million gallons per day.

Plans are currently underway to build a new water treat-

ment plant above the Guntersville Dam. A site has been selected and property purchased for the intake structure and plant. We are currently involved in the source water

**The wash tanks while under construction at the South Parkway Water Treatment Plant.**



treatability study and process technology review that the Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM) require be done on any new source water supply. This study will help to determine the treatment processes necessary for this source.

Design and construction of this new proposed facility will take 4-5 years to complete once the Water Board gives it approval to proceed. When it is completed, Huntsville Utilities will have three large water treatment facilities along the Tennessee River to ensure adequate water supply for the future of this area.

Huntsville Utilities is committed to providing our customers high quality water at the lowest possible cost. We must prepare now to meet the demands of the future. Planning and implementing strategies for the future are essential to meeting the ever-increasing need for water in our area.



## Do You Smell Rotten Eggs?

*"Natural gas has a distinctive smell like rotten eggs. That's because mercaptan, a harmless odor like rotten eggs, is added to help you detect natural gas if it ever leaks into the air."*



### **Meet Safety Squirrel.**

He's knows it's important to take action right away if the odor of natural gas is ever in the air. **Smell Gas? Act Fast!** means don't look for the gas leak. Don't use or touch anything electrical

... like a phone - even a cell phone. Instead, **leave the area immediately.** Then call Huntsville Utilities at 535-4448 (53LIGHT). Let professionals handle the situation so you stay safe.

## Smart Grid Technology and Huntsville Utilities

The infrastructure that delivers electricity from points of generation to consumers is commonly called the electric grid. This electricity delivery network functions via two primary systems: the transmission system and the distribution system. The transmission system delivers electricity from power plants that generate electricity to distribution substations, while the distribution system delivers electricity from distribution substations to consumers' homes and businesses. Much of this infrastructure was built during the middle and late twentieth century.

While the grid has served the nation well for many years, we have become more and more dependent on electricity and this has placed major strains upon an aging system. The Smart Grid, in its simplest terms, is the use of technology to deliver power to the consumer more efficiently and economically while allowing the consumer to have more control over their energy use.

The concept of the Smart Grid crystallized in the 2003 Blackout that caused a widespread power outage in the northern part of the country. The lack of knowledge about system conditions among power system operators turned what should have been a localized event into an event that spread across a whole region of the country.

The initial goals of Smart Grid were to make the transmission systems more secure by collecting more data faster to provide better status updates of the system to operators, and then to take many decisions out of the human operator realm and move them to computer controls. The 2007 Energy Independence and Security Act expanded Smart Grid to include items like load management, the integration of renewable energy sources, distributed generation, and improved distribution system optimization.

Huntsville Utilities is a power distribution utility; we do not generate any of our power needs but purchase wholesale power from the Tennessee Valley Authority. Because of this, many areas of Smart Grid do not pertain to our specific operations. There are two areas that Huntsville Utilities has been doing research on -- distributed generation and advanced metering infrastructure.

Distributed generation is the use of small-scale power generation technologies located close to the load being served, capable of lowering costs, improving reliability, reducing emissions and expanding energy options. Several years ago Huntsville Utilities participated in a pilot project with a solid oxide fuel cell and a gas micro-turbine to generate electricity to power a Huntsville Utilities building. Both projects were not economically feasible then and both had technical problems. At this point in time both fuel cell feasibility and micro-turbines are improving in cost and technical accomplishments. Some day in the future, customers may have a small fuel cell that provides power to their home removing the need for power poles and lines. There are currently a few residential customers and one industry participating in a pilot program with TVA to generate power on-site to resale back to TVA. This program is called Generation Partners. More information about this program can be found on the TVA Green Power Switch website ([www.tva.gov/greenpowerswitch](http://www.tva.gov/greenpowerswitch)).

The other Smart Grid technology area that Huntsville Utilities has been researching is advanced metering infrastructure. A number of utilities have moved toward automated meter reading systems. We started looking at AMI about two years ago to do a pilot project. At that time there was not a business case to move forward. One reason was that in many areas of the HU service territory, we have to read multiple meters (electric, natural gas and water). However technology today is better and the cost of that technology has become more economical. We are again looking at developing a pilot program with an initial deployment of a few hundred meters in an area where we only serve electricity.

The American appetite for more electricity to power our technology-driven lives will only continue to grow. To meet those needs, research and development into Smart Grid technology will continue so that utilities can maintain their goal of keeping the lights on.



## Planning is the Key to Timely Storm Recovery

Huntsville Utilities employees are your neighbors, they understand your frustration when there is a prolonged outage and work hard to restore life to normal as quickly as possible. When there's a massive power outage due to a catastrophic event, it's the planning that makes the difference in the recovery. That's why Huntsville Utilities has worked diligently on developing a plan to minimize the time it takes to bring everyone back online while maximizing resources and the assistance that might be needed from other utilities and private contractors. Let's look at what we are doing, and what you, as a customer during a prolonged outage, might need to do. Even though this example primarily concerns electric outages, similar plans have been made for natural gas and water service disruptions.

The two most probable events that might cause a prolonged outage in this area would be an ice storm or a tornado. The Tennessee Valley has experienced both in the past, but never to the degree that the Ice Storm of 2009 affected Kentucky, or Hurricane Katrina affected the Mississippi and Louisiana coastline. In each instance Huntsville Utilities was able to lend a hand to the traumatized regions giving our staff a chance to witness the recovery efforts.

Large recovery efforts can take weeks, even months. It took eight weeks to restore power to structures after Katrina. Power restoration to the majority of the 2009 ice storm areas took four weeks. Clean-up of the damaged poles and other equipment trash took longer.

There are three primary activities to the recovery effort: reconnaissance, material delivery, and reconstruction. The first activity mobilized will be reconnaissance. As soon as it is safe, recon teams will be sent into the field to access damage with an emphasis on repairs that will bring the most customers back online the quickest. These teams will be in utility vehicles with SURVEY insignias so that the public will understand these are not repair teams. As they assess damage, materials will be ordered and crews scheduled for repairs.

Even while the damage is being assessed, Electric crews will start moving into a damaged area to start the reconstruction. They begin on major distribution lines to bring substations back on first. Then they work their way down every street to restore power to customers, one area at a time. During this rebuild process Gas and Water Department crews are coordinating the delivery of material to drop off points all over the county.

The concept of recon, material and construction sounds simple, but when damage is widespread it can get very complicated to deliver and install hundreds of poles, thousands of feet of cable and uncountable small parts and pieces that make up a com-

Huntsville Utilities lineworkers and electricians survey the damage, and the ice, as they discuss repairs needed to a snapped utility pole in Kentucky in January of 2009. This was a common scene throughout the ravaged region.



plete power line. In addition, there are numerous support groups that keep this construction going throughout the weeks of work. Food, water, fuel, lodging and even laundry have to be considered with a large project such as this. If any part of support or materials is missing then vital time can be lost which can keep the power from coming on sooner.

Huntsville Utilities recommends that every customer be prepared for emergencies. Customers living in rural areas need to note that restoration to some rural areas could run into days and should plan accordingly. Both Hurricane Katrina and the 2009 ice storm were announced days ahead of occurring. As indications of such events are announced, the public should take time to analyze their needs. The following recommendations were recently featured in a report by the Kentucky Public Service commission:

- *Maintain a supply of flashlights and batteries.*
- *Keep several days worth of potable water and non-perishable food on hand.*
- *Users of portable generators and heating devices must be thoroughly familiar with the rules for their safe operation.*
- *Residents should have a contingency plan for seeking alternate shelter.*
- *Customers should familiarize themselves with the procedures their utilities use for reporting outages and downed lines and should know how the utility provides information on restoration efforts.*
- *Households should have a means of maintaining telecommunication service. This can be a traditional landline phone that plugs directly into the wall or a wire-less phone or other device that can be charged from a vehicle battery if necessary.*
- *Every household should have a battery-operated radio, preferably one that is capable of automatically receiving area-specific emergency weather alerts.*

The American Red Cross also lists information on preparing for many different disasters. Visit [www.americanredcross.org](http://www.americanredcross.org) to print or download information that will prove valuable when making emergency plans.

At Huntsville Utilities we pride ourselves on providing reliable utility services at the lowest possible cost. Even so, no area is impervious to devastating weather events. We urge you to be alert to weather forecasts and be prepared. It is something we, your utility company, do every day.

**Have a power outage?  
Call 53LIGHT  
to report your outage**

## Dual Heat Pumps:

### *Natural Gas + Electricity = Energy Savings & Comfort!*

For folks in the Tennessee Valley, electric heat pumps have proven themselves to be a very cost-efficient way to heat and cool a home. Most of the winter days are mild, but there are many times when the morning temperatures can be quite chilly. There is a special kind of heat pump that combines the advantages of a traditional heat pump with the advantages of a natural gas furnace.

Here's a little background. In heating mode, a heat pump pulls heat from the outside and "pumps" it inside to produce heat. Of course, there has to be enough heat outside for the heat pump to pull. Sometimes, when the temperature falls to 35° or less, the heating system must resort to some alternative method to heat the home. The traditional heat pump relies on electric resistance heat (also known as strip heating, like a portable electric heater). This is a very simple yet rather expensive way to heat a house. When the heat pump switches to strip heat, your electric meter spins two or three times as fast as it did when the heat pump was pumping heat. This means on the coldest day of the year, your heating system will employ the less efficient method of heating.

This is where the dual-fuel heat pump concept comes in. A dual-fuel heat pump is a combination of a natural gas furnace and an electric heat pump – hence the name dual-fuel. In a dual-fuel system, the electric resistance heating elements are replaced by a gas furnace which costs 40% to 50% less to operate.

If you raise the thermostat setting on a traditional electric heat pump when it is in heating mode, you almost always cause it to bring on the strip heating. This is because the thermostat senses that the heat pump is unable to meet the heating demand on its own. That is why it is difficult to set back thermostats on standard heat pumps at night. When you use the

dual-fuel heat pump, thermostat setback once again becomes a viable way to save money. When the dual-fuel heat senses the need for additional heat, it switches over to the gas furnace, which again is more economical to run than strip heating.

The gas furnace blows warmer air than an electric heat pump. So, on those particularly cold mornings when the gas furnace takes over, the air blowing from your vent will be noticeably warmer. So, it's not just about saving money, it's about comfort too.

Depending on size, make and model, a dual-fuel heat pump can cost from \$600 to \$1400 more to purchase and install than a standard heat pump. If you are re-

placing an existing gas furnace with a heat pump, it may actually be cheaper to install a dual-fuel system since you won't need to upgrade your home's wiring to handle the strip heaters. Since the gas furnace is more economical than electric strip heat, you'll be saving on heating costs during the coldest part of the winter. Payback for a dual-fuel system may come within five years, depending on a number of factors including the size of the home, the thermostat setting, and future rates.

When you're in the market to replace your existing heating and cooling system, be sure to talk to your contractor about a dual-fuel heat pump. There are several brands to choose from and quite a range of prices.

**Planning a home improvement job?  
Planting a tree?  
Installing a fence or deck?**

**WAIT!**

**Here's what you need to know first:**

**Whether you are planning to do it yourself or hire a professional, smart digging means calling 811 before each job.**

Homeowners often make risky assumptions about whether or not they should get their utility lines marked, but **every digging job requires a call** – even small projects like planting trees and shrubs. The depth of utility lines varies and there may be multiple utility lines in a common area. Digging without calling can disrupt service to an entire neighborhood, harm you and those around you and potentially result in fines and repair costs.



Know what's below.  
Call before you dig.

Calling **811** before every digging job gets your underground utility lines marked for free and helps prevent undesired consequences.



# YOUR PUBLICLY-OWNED, NOT-FOR-PROFIT UTILITY COMPANY

**PROJECT  
SHARE**



## Be the One Who Cares *Contribute to Project Share!*

Current economic trends have made many people uneasy and some days it's hard to tell if we are entering a recovery period, the economy has leveled, or are still watching unemployment rise while the value of the dollar falls. In these uncertain times it's nice to know there is help available if needed. Many organizations operate food pantries, clothing drives, and other benefits to help those in need. Huntsville Utilities is proud to partner with the Salvation Army to offer utility assistance through the Project Share program.

Project Share was formed in 1988 to help utility customers 62 years of age or older, or customers who are certified as disabled or handicapped, pay their utility bill during the winter months. Participants must be on a low or fixed income which does not exceed the Alabama Department of Human Resources' household income eligibility guidelines.

In 2009 the program was able to help 951 customers with assistance during the January through March heating season, up from 840 households in 2008, and 802 in 2007. It is to be expected that this year even more people will need assistance due to economic factors during the last 12 months. But will the funds be there?

During the summer of 2009 the Project Share board voted to suspend cooling assistance. Funds were not available due to helping a larger number of customers during the heating season. The funding source for Project Share is donations from you, Huntsville Utilities' customers. In October of 2009, 2,768 customers donated an average of \$5.47 each. Currently less than 2% of all customers donate to the program. In 2009 the average heating disbursement was \$231. A look the current fund balance shows assistance availability for only 537 families.

### **How can you help?**

If every utility customer gave one dollar it would equal assistance for approximately 613 families ... in one month.

It's really quite simple. When you pay your bill, add something for Project Share. It's tax-deductible and the Salvation Army monitors the distribution using either the income eligibility requirements specified by the Alabama De-

partment of Human Resources or the Alabama Department of Economic & Community Affairs ... so you KNOW it goes where it is needed.

If you pay by mail or in person, just put the amount you wish to donate on your bill stub and add to your payment. If you pay by bank draft, either automatic or



**Add any amount  
of \$1 or more to  
your monthly  
payment to help  
the elderly and  
disabled on lim-  
ited incomes.**

ACCOUNT NO. XXXXXXXXXXXX	
SERVICE ADDRESS XXX Main Street	
DATE BELOW APPLIES TO CURRENT AMOUNT AND NOT TO PREVIOUS BALANCE. BILL DUE UPON RECEIPT.	
PAY GROSS AFTER 08/07/03	
GROSS 173.83	
PROJECT SHARE 165.42	
TOTAL AMT. PAID	
Valued Customer xxx Main Street Huntsville, AL 35801	

going online monthly, call 535-1255 to add your donation to your bill. 100% of your donations goes directly to those in need.

Sometimes its hard to fathom our neighbors and families may not have the money for basic necessities like heat, but it does happen. Sometimes it happens due to an event such as a natural disaster or illness. Sometimes individuals on limited incomes, such as Social Security or retirement accounts, just can't make ends meet.

Please help someone who needs assistance stay warm this winter.

**Give to Project Share.**



- Make your utility payment**
- Review 15 months of account info**
- Download newsletters and other publications**
- Read about our customer programs**

**24/7 at [www.hsvutil.org](http://www.hsvutil.org)**

## PAY IN PERSON

Pay your bill in person by visiting a payment center at one of the following locations:

Main Office - 112 Spragins St.  
Monday thru Friday  
Lobby 8 a.m. to 5 p.m.

Chase Office - 1145 Jordan Road  
Monday thru Friday  
Drive-thru 8 a.m. to 5 p.m.  
Lobby 8 a.m. to 5 p.m.

Pulaski Pike Drive-Thru Payment Center - 1100 Pulaski Pike  
Monday - Friday  
7:30 a.m. to 5:00 p.m.

A service fee will be charged for any type remittance returned from any financial institution.

## PAY ONLINE

Receive and pay your bill on the internet. You can submit monthly bank drafts or authorize us to automatically draft your bank account. Visit our web site for enrollment details: [www.hsvutil.org](http://www.hsvutil.org)

## PAYMENT DROP BOXES

Huntsville Utilities has located payment drop boxes at several locations throughout their service area as a convenience to their customers. Locations include:

Griner's Food Value - Hazel Green

Southern Family Markets on Hwy. 72 West - Madison

Kroger on Hughes Rd. - Madison

Kroger on Logan Dr. - Huntsville

Piggly Wiggly - Gurley

Piggly Wiggly - New Hope

Piggly Wiggly - Toney (Hwy. 53)

Lowe's - N. Memorial Pkwy.

Senior Center at Brahan Spring Park

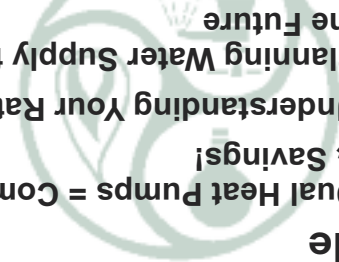
Pulaski Pike Drive-Thru Payment Center-1100 Pulaski Pike

Main Office - 112 Spragins St.

Chase Operations Center, 1145 Jordan Rd.

Water & Gas Operations Center, 4203 Triana Blvd.

This newsletter is printed on Evergreen Skyland paper, an SFI paper certified under a forest certification standard promoting responsible paper choices. Customer Connection newsletters are an economical method for sharing information with Huntsville Utilities' customers. Printing, mail preparation, and postage for each issue costs less than 28 cents per newsletter.

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- ### Inside
- Dual Heat Pumps = Comfort & Savings!
  - Understanding Your Rates
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Huntsville Utilities  
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PRST STD  
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