



# Talk Power

[ WE hold these truths to be self-evident ]

## Annual United Youth Tour Instills Civic Pride, Responsibility

### 2011 Application Deadline Feb. 25

No place in this country offers a better venue to see democracy in action and to learn what the U.S. flag stands for than Washington, D.C., and electric cooperatives should pave the way for youths to have such an experience. Lyndon B. Johnson made that statement in 1957 in Chicago as he addressed attendees at the annual meeting of the National Rural Electric Cooperative Association. Since that time, Texas electric cooperatives have adhered to that philosophy, joining other co-ops from across the country in sponsoring trips to the nation's capital for young students interested in witnessing government in action. United Cooperative Services has played a pivotal role in giving dozens of young people such an opportunity.

Known as the Government-In-Action Youth Tour Contest, United will again sponsor a trip to Washington, D.C., in May, for two fortunate high

school students. The two students are selected via a contest. The objectives of the Youth Tour are three-fold:

**1.**

To educate youth on all aspects of rural electrification in order to promote a better understanding of the value of rural electric cooperatives.

**2.**

To provide an opportunity for youth to visit monuments, government buildings and cooperative-related organizations in order to become familiar with the historical and political environment of their nation's capital.

**3.**

To provide an opportunity for youth to meet elected officials in order to better understand how their federal government works.

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Please see YOUTH TOUR, PAGE 20

## INSIDE THIS ISSUE:



### United Nets USDA Grant

USDA Rural Development awards United \$50,000 grant to aid co-op's installation of renewable energy lab sites at its seven area offices ..... PAGE 22

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UNITED CEO RAY BEAVERS OFFERS PERSPECTIVE ON SMART GRID, PAGE ..... 20

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2011 UNITED ENERGY INNOVATION REBATE PROGRAM OPENS, PAGE ..... 21

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ENERGY INNOVATION TOPIC—KICKING THE TIRES ON ELECTRIC/HYBRID CARS, PAGE ..... 24

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RATE WATCH COMPARES UNITED RATES TO OTHER PROVIDERS, PAGE ..... 25

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MANAGER'S PERSPECTIVE: ECONOMICS AND 2011, PAGE ..... 26

# Helping Shape Industry Perspectives

**When it comes to doing the right thing by his and other electric consumers across the nation, United CEO Ray Beavers has had a great deal to say.**

With more than 30 years invested in the business of honoring cooperative principals he has polished at each new station in his professional career, he has sought every avenue to communicate his bias for the co-op program, as well as his conviction that consumers—either through apathy or action—have the collective power to steer an electric industry that has held on tightly to the familiar comfort of older electric delivery philosophies. It may be a sign of the times, or that he’s been one of the industry’s squeakiest hinges, but his views and his ideas for change have begun to resonate with both industry insiders and the national media, alike. United is one of a handful of cooperatives featured in this month’s *Texas Co-op Power* magazine for its leadership in providing innovative solutions and vision for its membership. Specifically, United

CEO Ray Beavers was singled out to provide his perspective on the role energy conservation and efficiency will play for today’s membership, and for future generations of the cooperative’s members. Starting more than five years ago, Beavers launched a member awareness campaign that prepared United members for inevitable rises in energy costs in Texas and across the nation. Often alone in his assessment of where the industry was going, today’s current industry challenges—namely, the volatility of natural gas prices and their tumultuous effect on electric generation costs—have proven that vision was correct and that now more than ever, cooperatives like United should educate their members on ways to implement energy saving measures today as the easiest, most lasting means to combat rising energy costs.



## An opportunity of a lifetime

### YOUTH TOUR

continued from PAGE 19

This contest is open to high school sophomores, juniors and seniors who attend a high school full-time in United’s service area. Each contestant must complete and submit an application, which can be filled out online at [www.united-cs.com](http://www.united-cs.com). The applicant **IS NOT REQUIRED** to be a member of United Cooperative Services. Winners of any past Youth Tour are not eligible to enter and immediate family members of United employees or directors are not eligible to enter. Applications must be submitted no later than Friday, February 25, 2011.

“The Youth Tour has been one of the most effective vehicles in educating our local youth about the importance of our nation’s democratic model,” said United CEO Ray Beavers. “As a cooperative that also subscribes to a democratic business model, our board of directors enthusiastically supports United’s involvement in sponsoring two local students who are fortunate enough to win this opportunity of a lifetime,” he said.





## UNITED VIEWPOINT

*Texas Co-op Power* magazine's Executive Editor Carol Moczygemba seized an opportunity late last year to interview United CEO Ray Beavers, along other co-op leaders across the Lone Star state, for a smart grid feature story appearing in this month's edition of the widely-circulated, and award-winning, statewide electric monthly periodical.

## United Rolls Out 2011 Energy Innovation Rebates

United Cooperative Services' commitment to Energy Innovation continues to grow and this year that's being demonstrated again through an expanded rebate program that paves the way for members to waste less en-

ergy and hold onto precious energy dollars.

Energy Innovation rebates are available only for qualifying purchases and/or services. The availability of the Energy Innovation Rebate Program is limited and

rebates will be processed on a first-come, first-served basis. When funds have been depleted, the Energy Innovation Rebate Program will no longer be available until the next year, pending board approval. Members must complete and submit the United Energy Innovation Rebate form and required documentation within 60 days of the completion of construction and/or installation project to be eligible for this year's slate of rebate offers.

More than 2,000 United members took advantage of a variety of United's robust energy efficiency rebates in 2010 as a practical way to mitigate investment costs associated with their individual energy innovation efforts.

More information regarding United's rebate program may be found online at [www.united-cs.com](http://www.united-cs.com).

**United Cooperative Services**  
Your Touchstone Energy Cooperative

# REBATE PROGRAMS

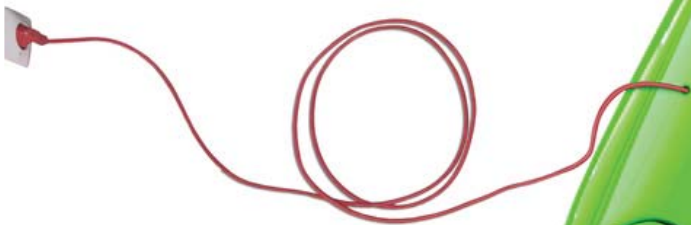
► Kicking the tires on new electric and hybrid auto technology

# Jumpstarting

ENERGY  
INNOVATION

## OUR FUEL EFFICIENCY

—By KEVIN KEESEE—



We are inundated these days with messages that ponder the depth of our carbon footprint, including the charge that our love for the automobile makes our footprint heavier. Yet, despite significant advances in emerging automotive technologies, consumers still aren't rushing to purchase these modern new fuel thrifths. Here's a look at some of our options.

Sorting out what is practical as well as affordable in our aim to be efficient consumers and good stewards to our world is often a daunting task.

With all of the promotional chatter from car manufacturers about hybrid and all-electric cars, it's sometimes difficult to get a balanced analysis on both the positives and potential pitfalls of these types of vehicles. Granted, hybrid and all-electric vehicles offer more pros than cons, but one should still see the whole picture before a decision is made to purchase this modern marvel.

Let's look at the basics.

There are three types of hybrid and electric vehicles either on the market (or will be soon for consumers in the U.S.) market. Because each has its own unique set of advantages and challenges, determining which type makes the most sense for a buyer can be confusing so some extra attention should be given to the study of this emerging class of vehicles.

Hybrid electric vehicles (HEVs) are available now from most major car manufacturers. HEVs operate on a traditional combustion engine combined with an electric motor. This combination of motors allows vehicles to maintain excellent gas mileage with reduced emissions. The electric motor is charged by the combustion engine and through regenerative braking, a process of capturing energy normally lost during braking, and instead storing this captured energy in the on-board batteries. There are two types of HEVs available to choose from. Mild hybrids use both the battery and electric motor to help the combustion motor power the car. This allows the motor to shut down while idling or while stopped. Full hybrids, on the other hand, have more powerful electric motors, which allow the combustion engine to shut down while going short distances or at low speeds, thus increasing fuel economy. Neither type of HEV has to be plugged in to charge, and both offer tremendous fuel savings while maintaining the long-range travel ability of a combustion engine.

Plug-in hybrid electric vehicles (PHEVs), such as the Chevy Volt, offer the ability to use a combustion engine and a rechargeable battery-powered electric motor. PHEVs have a larger battery pack than HEVs and can travel anywhere from 10-40 miles on one charge (known as the all-electric range), making them much more eco-friendly than HEVs. PHEVs have the ability to be plugged in to charge at either the home or at a public charging station. If charging is done on a regular basis, PHEVs are very efficient. If it is only done on occasion, efficiency matches that of a standard HEV. If charging is not done during idle time, some charging can be maintained through the combustion engine and regenerative braking. Most urban commutes can be successfully accomplished on the electric motor only, if charging is maintained.

The last option is the all-electric vehicle (EV). This electric-only motorcar is charged when not in use at the home or a charging station, and utilizes a powerful electric motor only. These fluid

free (other than brake fluid) vehicles have a range that extends as far as 220 miles, such as the reported range of the all-electric Tesla Roadster (priced over \$100,000), while less expensive models will fall within the 100-mile range. According to the U.S. Department of Transportation, 90 percent of all household vehicle trips in the United States are less than 100 miles.

Hybrid and electric vehicles offer numerous advantages, but also pose some challenges that must be realized. The obvious advantage is that these designs get better gas mileage, and also produce much less carbon dioxide. While EVs produce no emissions while on the road, emissions occur secondarily when they are being charged. The electric generating facility, unless it is a renewable source like wind or solar—or if it's generated by a nuclear power plant—must utilize some type of fossil fuel to produce the energy needed to



charge these batteries. During a 100-mile trip, a typical compact sedan produces 75 lbs. of CO<sub>2</sub>, an HEV produces 52 lbs. of CO<sub>2</sub>, a PHEV produces 44 lbs. of CO<sub>2</sub>, and a EV produces a mere 32 lbs. of CO<sub>2</sub>.

Currently, the cost of electric generation is less than the volatile gasoline prices, but this could change in the future as electric generation faces the challenge of more costly production. And while it's en vogue to be on the cutting edge, and live the "green" lifestyle, it isn't always cost-effective. Hybrid and EVs are

considerably more expensive than traditional gas-powered cars, and the return on investment may take several years to be realized. If EV owners charge their vehicles in the off-peak hours of 7 p.m. to 6 a.m., they could help to utilize some typically idle time at generating plants, thus providing a benefit to the power grid. However, if charging occurs during peak hours during the day, an additional strain could be placed on the nation's power grid, potentially causing multiple challenges, including the need for more costly generation and transmission facilities.

Another concern hanging over EV vehicles is "range anxiety," which is the fear of being stranded on the side of the road with a dead battery. It is anticipated that in the future there will be charging stations and battery swapping facilities, all for a fee, helping to remedy this anxiety. But it is also important to consider the costs associated with setting up a dedicated 240-volt circuit in the garage, fitted with the proper charging equipment necessary for maintaining PHEVs and EVs. Home charging systems can be costly. According to the Department of Energy, accelerated charging (level 2 charging equipment), which only requires three to eight hours for a complete charge, could cost the typical homeowner between \$1,500 and \$2,500.

Technologies will surely continue to advance and these cars will likely become less costly, more efficient, easier to use and understand, making them more appealing to the average consumer. Expect to see the major automakers offer more styles and options. No one knows what the future truly holds, but it is probably safe to say that hybrid and all-electric vehicles are here to stay.

# Top United Employees Recognized

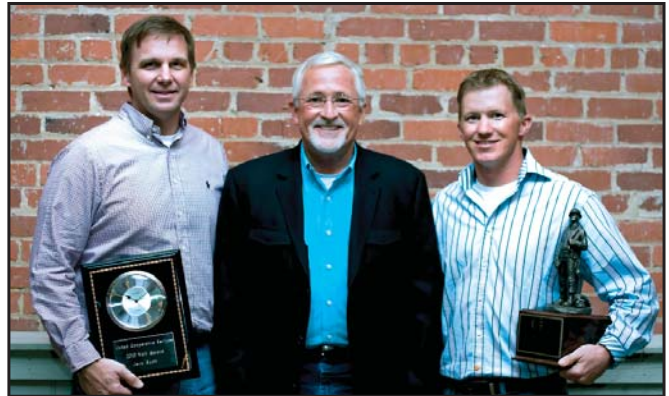
**C**leburne Journeyman Lineman Jeff Pannell and Cleburne District Foreman Jerry Scott were recognized for their leadership qualities when the two eastern division operations employees received the cooperative's most prestigious employee service awards in December.

United CEO Ray Beavers presented the awards after proudly acknowledging their achievements, leadership, dedication, loyalty and excellence during their tenure at the co-op.

Pannell became the 8th recipient of the Lineman of the Year award. He joined United's Operations Department in 1998 and became a Journeyman in 2008. Like former recipients of the Lineman of the Year Award, Pannell has risen through the ranks to become a valued leader in United's line work—both as an experienced lineman and as a mentor to incoming operations employees.

Previous winners of the award include Gary Sims, Robert Rejcek, Eddie Nunez, Mike "Frog" Ferguson, Mark Buckner Jeremiah Esquell and Jerry Don Robinson.

Scott, who will observe his 18th year of service to the cooperative in January, was named the 3rd recipient of United's Volt Award—given each year through peer review to an employee who has promoted and demonstrated the co-op's continuing commitment to safety, leadership ability, productivity, teamwork, professional representation of the cooperative in his/her job, as well as a track record for going above and beyond the expectations set for



United CEO Ray Beavers, center, stands proudly with two of the co-op's most respected employees; Jerry Scott, at left, and Jeff Pannell.

every employee of the nationally recognized electric cooperative.

He began his career at the co-op as a warehouse clerk and later became a Journeyman lineman in 2001 before being named as District Foreman in 2006.

He joins Human Resources Director Patty Holleman, last year's winner, and Field Engineering Supervisor Jason Dillard as Volt Award recipients.

## United Receives USDA Grant for Renewable Energy Labs

USDA Rural Development State Director Paco Valentin presented a ceremonial check to

United Cooperative Services recently for renewable energy systems (similar to this solar array site pictured here in Stephenville) the cooperative is developing at office locations throughout the co-op's service territory. The

\$49,927 grant was funded through Rural Development's Rural Energy for America Program (REAP).

"This grant will help United Cooperative establish renewable energy labs at its seven office locations," said Paco Valentin, USDA Rural Development Texas State Director. "Projects such as this, funded

through Rural Development's REAP program, reduce our dependence on foreign resources and help Americans become more energy-sufficient."

"As a member-owned electric cooperative, we continuously search for ways to demonstrate our energy innovation goals while also providing value to our membership," said United Cooperative

Services CEO, Ray Beavers. "Our distributed generation demonstration projects will provide us the information we need to educate our members on the role DG will play in the future. The grant we received from the USDA allows us to accomplish this without incurring significant costs to the cooperative."

United Cooperative Services will apply the grant funding to the purchase and installation of nine photovoltaic systems and five wind turbines for power distribution.

The onsite labs will serve as an educational tool for United members so that they can understand the challenges, actual costs and benefits of installing distributed generation at their homes.

United's first functioning DG application consists of two solar arrays at its Stephenville office. The units have a combined generating capacity of approximately 3 kilowatts.

"We've had tremendous interest among our members about the practicality of installing distributed generation at their homes or businesses," said Beavers. "As energy experts and a trusted organization within our communities, we feel it's essential that we provide transparent, accurate information to our members and the public about what to expect if they take the leap into owning and installing their own DG technologies," said Beavers.





The rate comparisons shown at left represent a portion of all rates offered in the North Texas utility market for the month of JANUARY 2011 and do not include new participants that have posted only temporary or introductory rates. Even though they are often lower than the average among all deregulated retail providers, those introductory rates are often short-lived retail enticements. A complete comparison of rates offered in Texas' electric retail market may be obtained at [www.powertochoose.org](http://www.powertochoose.org).

# RATE WATCH COMPARISON

## United Announces Teen Video Contest



United Cooperative Services, in conjunction with *Texas Co-op Power* magazine, announces the launch of the 2011 Co-op Teens Power Texas video contest, Monday, January 31. *Texas Co-op Power* magazine, distributed to 1.2 million electric cooperative members in Texas, is offering a total of \$4,000 in cash prizes for eligible candidates. The competition is open to high school

students residing with a parent or legal guardian served by an electric cooperative in Texas. Participating students, either working alone or in a group, will create a one- to three-minute video about electricity. The grand prizewinner will receive \$1,500. If the grand prizewinner's school sponsors the project, the school will receive \$1,000. The second-place winner will

receive \$500. Four runners-up will each receive \$250 for exemplary achievement in one of the four judging categories: creativity, educational value, youth appeal and technical quality.

Deadline for entries is Friday, April 1. Winners will be announced Friday, April 22. For rules, entry forms and information on how to submit a video, go to [www.Texas-CoopPower.com](http://www.Texas-CoopPower.com) and click the Contests link, and then the Co-op Teens Power Texas link.

To see the 2010 winning video submitted by Bryan Texas Utilities member Timothy Jones, go to *Texas Co-op Power* magazine's YouTube page at [www.youtube.com/user/TXCOPOWER](http://www.youtube.com/user/TXCOPOWER). Updates about the contest may also be obtained by becoming a fan of *Texas Co-op Power* magazine on Facebook.

POWER TALK  
Ray Beavers, CEO

I am what you would call an economics “junkie”. I read publications and journals, and any other information I can get my hands on to see what the so-called experts are saying about our economy.

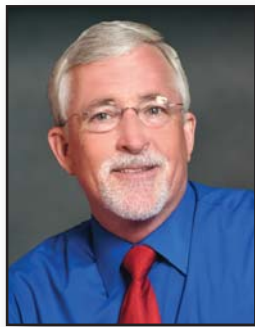
Even though I admittedly don’t possess the level of understanding that the real economists have for economics and its many intricacies, I still like to keep in touch with what predictions they are making and the reasoning behind them.

I was honored last year to be elected as a Texas, New Mexico and Arizona representative on the National Rural Cooperative Finance Corporation (CFC) board of directors. Recently, we met with the JP Morgan group in New York City and heard a report on what the large financial institutions are predicting for the future.

ing that carbon dioxide is a pollutant and the primary cause of greenhouse gas emissions.

Of further concern is that it would be left up to EPA to regulate carbon emissions. No one yet knows what action the EPA will take or the legal wrangling that will likely surround this issue, but many utilities are hesitant to invest in electric generation until they know what effect new regulations will have on such expenditures. In the meantime, an even greater need for more generation will surface as the economy continues to grow, and without those new generation sources, the lack of supply could drive higher costs for electricity.

The economists say that gas prices should remain low, for the present. Advanced drilling techniques are



# Economics and 2011

Those economists were predicting economic growth of around 2.5 percent in the nation’s Gross Domestic Product (GDP), and they believed unemployment would hover around 9.5 percent. If there were no tax increases for the year, then they estimated GDP growth could go as high as 3.5 percent and unemployment could drop under 9 per cent. However, they agreed that the growing deficit is a towering issue that has to be addressed if our country is to remain financially solvent and an attractive investment environment for international investors.

Some interesting predictions concerning the electric utility industry were also broached.

The crux of their concerns about the industry was the potential economic turmoil that could erupt as a result of the Environmental Protection Agency’s newly proposed greenhouse gas emissions regulations—especially in light of the Supreme Court’s recent rul-

bringing much more natural gas to the market and the supply glut is driving the prices lower than what was expected a few years ago. However, they also pointed to market concerns surrounding allegations that new drilling techniques could be contaminating underground water supplies. If subsequent investigations determine this drilling is found to have an environmental impact, then the consequence could limit the supply of natural gas—causing much greater pricing volatility that could drive up the costs of gas-fired electric generation plants.

New technological advancements, the economists say, will continue to change our energy picture. Renewable resources and distributed generation are already attractive investments, and as technology improves, so will investor interest. Such advancements could change the complexion of future of electric production in just the next couple of decades.