Technology Is Key To Keeping the Lights On

MESSAGE FROM GENERAL MANAGER RONNIE ROBINSON

Right now, there are a lot of "what-ifs" surrounding electric power. As a nation, we need to add generating resources to meet growing electric consumption.

As your provider of safe, affordable and reliable power, it's our job to make prudent, long-term energy decisions that will benefit you and the communities we serve for decades to come. But today, those decisions are mixed up with politics as never before. Every question of supplying power is being affected by the debate surrounding how best to meet climate-change goals. Policies limiting carbon dioxide emissions are becoming more likely, although specifics are still up in the air.

Massive investments in new technology will be required—and soon—to find a balance in meeting both our energy and climate-change goals. The Electric Power Research Institute estimates it will take a research investment of $1.4 billion a year from now until 2030 to develop new technology such as carbon capture and storage for our power plants.

Once we add this advanced technology to the equation, we can develop power plants that burn coal and isolate carbon dioxide emissions. The gas can then be compressed and pumped for permanent storage deep underground. Many experts believe that with the right financial commitment from the federal government, cost-effective carbon capture and storage technology could become commercially available around 2020.

But this is just one potential piece of the puzzle, and until our elected officials agree to increase the necessary funding to develop energy technologies, uncertainty remains.

At Comanche Electric Cooperative, we are dedicated to keeping you supplied with reliable and affordable electricity. We are, with electric cooperatives across the country, engaged in a grassroots campaign called "Our Energy, Our Future" to start a dialogue with lawmakers about critical questions such as technology's role in our energy future.

Please visit www.ourenergy.coop to contact your elected officials and add your voice to the campaign.

Financing research is only part of the puzzle to make sure we have the power we need while respecting environmental concerns. Visit www.ourenergy.coop to find out how you can help.

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FIND US ON THE WEB AT WWW.CECA.COOP

YOUR "LOCAL PAGES"

This section of *Texas Co-op Power* is produced by Comanche EC each month to provide you with information about current events, special programs and other activities of the cooperative. If you have any comments or suggestions, please contact Shirley at the Comanche office or at sdukes@ceca.coop.

COMANCHE ELECTRIC COOPERATIVE

Your Touchstone Energy® Cooperative

Priddy Students Shine with Success

Norman Vincent Peale said, "You only lose energy when life becomes dull in your mind. Your mind gets bored and, therefore, tired of doing nothing. Get interested in something! Get absolutely enthralled in something! Get out of yourself! Be somebody! Do something. The more you lose yourself in something bigger than yourself, the more energy you will have."

Students from Priddy ISD devoted the last six weeks of their school year to being enthralled about electricity and energy. The special program was thanks to teacher Cindy Hurst's successful application for a mini-grant from NRECA. Only 10 grants were awarded nationwide. Comanche Electric Cooperative presented the school district with a matching grant through the Operation Round-Up® Program.

The students spent several weeks studying electricity and energy, and then created science fair projects based on what they had learned. The result was a remarkable display of science boards, information sheets and demonstrations that proved not only that these kids are incredibly talented, but that this tiny Texas town is blessed with talented teachers who inspire their students.

Taking top honors in Priddy's science fair were, from left, Stephen Dawkins, Jesse Gustavsson, Walker Peters, Caitlyn Cagle, Jaycie DelBosque and Samuel Sanchez.

Priddy is on Highway 16 in northeast Mills County. Founded in the late 1890s primarily by German settlers, the little town never really boomed or grew much. The latest census information showed only 215 residents in 1990. But what this little town lacks in bodies, it makes up for in spirit.

The 103 Priddy Pirates in grades pre-K through 12 excel both academically and in sports. At the district UIL academic level, 35 individual students and 27 teams placed in the top three. At the regional level, Priddy students received third place in number sense, sixth place in mathematics and eighth place in calculator applications. One student advanced to the state level.

The Priddy teams advanced to district in all sports, with one student qualifying for regional and state in cross country and four students advancing to regionals for track. In basketball, both boys and girls teams were named area champions.

Congratulations, Priddy ISD students, faculty, teachers and school board members, for an exceptional job. And congratulations Priddy, Texas, on knowing how to raise up a group of exceptional young people!

Notice of Capital Credit Allocations

Capital credits recently were allocated to accounts of members of Comanche EC for the year 2007.

After the end of the calendar year, cooperatives must determine what, if any, margins from operations were made during the year and allocate these margins to members' accounts.

Your cooperative's operating margin is any money left after all its operating costs have been paid. Since members are owners of the cooperative, operating margins are allocated to their accounts as capital credits.

These capital credits will be returned to members in the future in the form of estate refunds or general refunds when doing so will not weaken the financial condition of the cooperative, as determined by the board of directors.

In the meantime, the funds remain invested in the cooperative plant, credited to each member's account, even though the member may move away from Comanche Electric's lines.

It is very important that departing members keep the co-op informed of their current mailing addresses so that they can receive capital credit refunds when they are paid.

Capital credits for 2007 were calculated by multiplying each member's bill by the multiplier below. For example: If your total annual residential bill from the cooperative (consisting of energy billing and power cost adjustment) was $500, simply multiply that amount by .01811. The product is $9.06.

In calculating your total bill, include any security light charge, but do not include any tax, service or miscellaneous charges.

If you have any questions concerning these calculations, please feel free to contact the co-op office.

This article is intended to serve as an official notice of allocation of capital credits for 2007.

Capital Credits Multipliers

Service Type	Multiplier
Residential	.01811
General Service	.02613
Large Power	.00485
Commercial	.03803
Large Commercial-Substation	.00386

Native American History Comes To Life In A Rural Community

BY SHIRLEY DUKES

Meet Comanche County resident Tommy Patterson. He is what could commonly be called a jack-of-all-trades. He is a musician/singer/songwriter, an artist and a historian. But his greatest passion lies in exploring the history of the Native American culture, particularly the Comanches, and in the reproduction of Native American artifacts. He spends countless hours making authentic-looking arrowheads, knives, bows and arrows, and copies of original clothing, bags and headdresses fashioned out of leather he cleans and tans himself.

Tommy has hunted arrowheads in this area since he was a boy and was fascinated by the structure and beauty of each piece. After reading an article that listed the names and addresses of three artisans who recreated artifacts, Tommy wrote a letter to each expressing his interest in the art. One wrote back and invited him to visit, and the hobby began.

I visited Tommy at his home and saw firsthand the beautiful items he has created. Behind his workshop is a pile of flint rocks, and it was here that we sat on stools while he showed me the fundamentals of arrowhead making. The tools of his trade are mostly river rocks, antlers and abrading stones. He occasionally uses modern copper tools but tries to steer clear of those because he wants his art to be as close to the originals as possible.

"There is a difference between functional and pretty, and I lean toward pretty," Tommy said. In other words, while he wants his work to be as close as possible to the original—functional items made by the Native Americans—it is more important to him that the arrowheads be beautiful. After all, he's not looking to kill a bison this week!

I was amazed at how the arrowheads are crafted. I had thought he would have tiny tools that gently chipped away at the flint until a single, tiny arrowhead had been created. I was way off base. Taking a large piece of flint and an even larger river rock, Tommy began beating away at the flint and breaking off flakes. The rock must have at least a 90-degree angle in order to remove a usable flake. He uses the river rock and a method called "percussion flaking" to whittle the flint to the basic size and shape that he desires. He then switches to an antler and "pressure flaking" to fine-tune the arrowhead, sharpen it and give it its unique beauty. Tommy has learned the hard way, after his wife, Sherri, had to take him to the emergency room a couple of times, just how sharp and dangerous the arrowheads can be!

Tommy has a fear of someone getting one of his creations and trying to pass it off as an original; so before he considers an item complete, he takes a diamond point and gently carves his initials into a small spot on the arrowhead.

Using an antler, Tommy picks away at the flint to give an arrowhead its final shape.

Completing an arrowhead is a time-consuming and painstaking process, and he did not finish one in my presence. But I did get to view some of the ones he has made, and they are indeed beautiful pieces.

I found the process of making arrowheads extremely interesting, but I was absolutely fascinated by the collection of leather pieces and bows and arrows Tommy has created. Using different types of wood, Tommy has fashioned some exquisite bows and arrows. The type of wood used is the most important element in the design process.

Comanche bow-makers were fortunate to have an ample supply of bois d'arc, which is one of the most durable woods around. What makes the bois d'arc different from most other trees is the quality of the wood, which is noted for its hardness, flexibility, durability and resistance to rot in contact with moisture and soil. Its beauty comes from its almost-orange color just beneath the bark, which when worked and

Tommy created these pieces of art after seeing pictures in an old book on Native American culture. All pieces were made from leather Tommy tanned himself. The beading on the bags also is Tommy's own handiwork. After doing several pieces that required intricate beading, Tommy now has a newfound respect for the women who did almost all the tanning, sewing and beading in addition to many other tasks.

varnished gives off a beautiful glow. I think my favorite piece was an atlatl, a primitive spear-throwing weapon. It consists of a shaft with a handle on one end and a spur on the other, against which the butt of the arrow rests. Its purpose is to use leverage to achieve greater velocity when throwing arrows. I had never seen or heard of one. Tommy said they were used long before the bow was created and were actually much more powerful and deadly than the bow.

Along with the beautiful bows and arrows, Tommy's collection also consists of gorgeous leather products. He beautifully crafted these items using only photos of old, original Comanche pieces as reference points. His collection includes clothing, moccasins, headdresses, beaded bags and leather shields. But the fascinating part is where he obtains the leather for these pieces. Using donated deer hides, Tommy tans them using a method he taught himself through reading books.

While there are many methods for tanning hides, Tommy uses one called brain tanning. The first step of this procedure is to scrape away all fat and meat from the belly side of the skin. He then soaks the hide in water until it is soft and pliable, after which he stretches it in a special frame to dry.

Once dried, the skin becomes very taut, and Tommy uses a tool designed to scrape all remaining hair and membrane from the hide. The product at this point is rawhide, which feels brittle, much like a very thick and coarse piece of paper. It's not something that is easily worked with, or that would feel anywhere near gentle on the skin. It is the last part of the process that turns the rawhide into a soft, pliable leather that feels almost like velvet to the touch.

I was grateful that Tommy did not do any rawhide soaking at the time of my visit, because while there are many ways to achieve the final result, the one that produces the most beautiful product—and which Tommy uses—is also the most disgusting. He makes what is called a "brain slurry," mixing water and brains in a vat to soak the hides. The length of time a hide is left in is variable, but the longer it soaks, the softer the skin. After soaking, the skin has to be squeezed repeatedly until all moisture is removed, then worked by hand until it is dry. The result is the most beautiful, soft and supple leather I've seen or felt.

Tommy's hobby is exactly that: a hobby. He occasionally gives away some of his art, or donates it for fundraisers, but he does not sell his pieces. I can't say I blame him. It is all so beautiful that I would not want to part with it either. It is a shame, though, because I would love to have some of that disgusting brain-soaked leather! Tommy's hobby, however, is more than just the reproduction of a dying art—it is also about history. If you ever want to know anything about ancient Native American culture, Tommy is your source. He has an amazing amount of history stored in his head, and he can tell some fabulous stories of the early history of our country. I encourage you to visit with him. You won't regret it!

For more information on the archaeological history of our state, visit the Texas Archeological Society at www.txarch.org or www.texasbeyondhistory.net.

LEFT: For this exquisite dress, Tommy tanned the hides, made his own leather fringe and dyes and did the cutting and sewing himself, using sinew and horsehair for the thread.

BELOW: We usually see pictures of Native Americans wearing elaborate feathered headdresses, which are authentic, but in earlier days, they more often wore headpieces much like the ones pictured here. The one on the left is a Comanche headpiece, and the one on the right is Apache. In the foreground you can see some of Tommy's atlatls.