

# BANDERA ELECTRIC COOPERATIVE REQUEST FOR PROPOSAL

04-13-2020

## OVERVIEW

### 1. Introduction & Background

Bandera Electric Cooperative is a member-owned nonprofit that proudly serves more than 26,000 members in a seven-county territory in the Texas Hill Country. BEC continually searches for new, innovative programs to promote energy efficiency and quality service as we *Reimagine Rural America*. In 2016, we began offering solar and energy storage options to members. In 2017, we began deploying fiber broadband to develop a smart and more reliable electrical distribution grid and provide members with access to broadband internet. It is our mission to use the grid to empower our members.

### 2. Project Goals & Scope of Work

BEC is seeking the services of a freelance writer to write two 500-word articles per month for the Texas Coop Power magazine, two 200-300 word blogs per month, and press releases as assigned. Topics may be assigned or self-generated. Blog and magazine articles will need to be submitted for review by the 15<sup>th</sup> of each month.

#### Content must reflect:

- BEC's vision of Reimagining Rural America and mission of Using the Grid to Empower our Members
- Highlight our Cooperative Principals
- Maintain Cooperative voice

#### Topics may include:

- Community Involvement
- Member/Business Spotlight
- BEC Foundation
- BEC Solar/Technologies
- BEC Fiber
- Energy Efficiency

### 3. High-Level Requirements

Proposals should include your background and three examples of relevant work.

### 4. Deadline

Proposals should be submitted for review by April 24, 2020.



BEC SOLAR PROJECT MANAGER MIGUEL RIVERA WITH BEC SOLAR MICRO-GRID IN TOTOTA, LIBERIA

## BEC Solar Micro-Grid Brings Power to Africa

BY MELISSA WHITFIELD  
*BEC Staff Writer*

**NEARLY 80 YEARS AGO, BEC BROUGHT ELECTRICITY TO THE TEXAS** Hill Country and made rural electrification a reality. Today, BEC once again is helping light up rural areas, but this time in Totota, Liberia, a community about 80 miles northeast of the country's capital, Monrovia.

"Totota is a town with potential with a population of about 6,400. Although it's a regional trading center and a few people buy electric service from individuals who own and operate small generators, most households still rely on kerosene lanterns and candles for light. It will be at least 10 years before the construction of Liberia's national grid reaches Totota," said Bill Hetherington, BEC CEO/general manager.

In an effort to accelerate the creation of economic growth in Totota, the National Rural Electric Cooperative Association (NRECA) International contracted BEC Solar to provide an energy solution—a micro-grid. Micro-grids are a combination of solar, energy storage and high efficiency reciprocating engines and generators.

Miguel Rivera, BEC Solar manager, was in Totota for two weeks in March to supervise activation of the system and connection to utility poles.

"We installed the 70-kilowatt solar power system on three-quarters of an acre in a rural area of Totota and that will provide power for approximately 300 members," Rivera said. "In Bandera, we typically install solar systems for one member. This was a project which impacted the entire community."

Totota's electricity will be powered in part with a BEC micro-grid solution—a combination of BEC Solar and energy storage technology housed within a standard 20-foot shipping container. The container makes it easy to install and secure in remote areas.

All of the technology and materials used in the BEC micro-grid are made in the U.S. The solar power system feeds a rack of lithium-ion storage batteries that can hold up to 90 kilowatt-hours of electricity. The system is comprised of 208 solar panels made by San Antonio-based Mission Solar Energy, two Ideal Power inverters, 14 LG Chem storage batteries, one Johnson Control rack and a backup diesel generator for use during months of heavy rainfall.

The micro-grid is owned and operated by the newly formed Totota Electric Cooperative. The co-op recently held their first general assembly and elected the co-op's first chairman of the board.

During the two weeks Rivera spent in Totota, he calibrated and tested the system, which stood up to the humid 100+ degree climate. Rivera also spent time getting to know the newest Totota EC members.

"Everyone was very hospitable; I spent time talking with the locals every evening, learning the local language and getting to know them. It was a different pace of life. Most of them don't have appliances or anything to plug in," Rivera said.

Two volunteers from Boone Electric Cooperative in Missouri were there to assist with the construction. Several locals were hired for the line crew on a daily basis. Many would wait in the morning to see if there was work available. The majority of the people in Totota are not fully employed.

"The micro-grid will provide power to a percentage of the population, but it will stimulate economic growth for the entire community," Rivera said.

"The sub-Saharan economy, fueled by a 90 percent increase in the middle class, will see a significant increase. U.S. exports into the sub-Saharan Africa amount to \$2.4 billion mainly in

agricultural products. Most of these are coming from rural parts of the U.S. serviced by co-ops, and exports are expected to increase dramatically over the next decade. Economic growth in rural Africa is good for rural America,” Hetherington said.

The impact of the micro-grid was felt immediately.

“When power reached the local bank, the noise and reverberation coming from the generators was gone,” Rivera said.

Before electric cooperatives brought power to rural areas in the U.S., businesses and factories preferred to locate in cities where electricity was readily available. The same is true in Totota.

“The business owners were the ones who were most enthusiastic about expanding hours and operations,” Rivera said.

“The number of people without access to electricity today is about the same as the number of people without electricity when Thomas Edison invented the light bulb. After 140 years, the growth of electricity is barely keeping up with the population growth. NRECA International has brought electricity access to more than 126 million people in 43 countries for more than 50 years,” Hetherington said. “At BEC, we believe that through this partnership agreement with NRECA International and our global partners is creating new economic opportunities for our co-op, the broader community of co-ops and the people of Totota.”



BEC SOLAR PROJECT MANAGER MIGUEL RIVERA, THREE TOTOTA EC WORKERS, AND BEC ELECTRICAL SUBCONTRACTOR DANIEL LEAL





# Pipe Creek Candied Popcorn Business Still Popping After 35 Years

BY MELISSA WHITFIELD  
BEC Staff Writer

**CARAMEL POPCORN IS OFTEN ASSOCIATED WITH BASEBALL** games and Christmas tins, but a Pipe Creek candy maker prepares the tasty snack year-round for anyone to enjoy. Bob Curtis, Pipe Creek resident and BEC member for 35 years, gets up at 4 a.m. to hand stir his Honey Crunch Popcorn one batch at a time.

“I walk out the back door and go to work,” Curtis said. “I get up there and cook before it gets too hot because that stuff comes out of the kettle at 300 degrees. It’s made in small batches when people order it and not sitting on a shelf or in a warehouse before it ships.”

Curtis has been making Honey Crunch Popcorn out of Pipe Creek since 1983 when he took over the business from his parents. Curtis’ parents took over from his uncle who started the business in the mid-1950s in California.

“My uncle made it in his garage for many years. When my dad retired in San Antonio after 30 years in the U.S. Air Force, he decided to keep the business alive in Texas after my uncle passed away. Now my wife and I run it,” Curtis said.

Curtis’ wife, Sherry, manages the accounting and works in Kerrville full time at a furniture store.

“We made an agreement she would not do this and I said no problem. When I needed employees, I hired them. Otherwise, it’s just me. I make it all,” Curtis said.

In the late ‘80s, Curtis hired eight high school students who went to Bandera High School. Around that time, Honey Crunch Popcorn was sold in convenience stores, but it has downsized since then.

Curtis attended big trade shows in New York and Chicago and ended up with 40 or 50 accounts in New York City. The Waldorf Astoria used to carry his product.

“If you’re not constantly there, they go by the wayside. Shipping, being what it is, makes it tough. You have to have a reputation of a quality product,” he said.

Curtis said he’s currently at the level he wants. The smaller, local retail outlets make it easier to manage and it gives him the opportunity to be able to talk to people.

“We just go along every day and try to grow a little bit here and there, but only to the small shops so I can manage it myself. It could change on a dime like it did before, but I’m not looking for that specifically. If it happens, it happens,” Curtis said.

Curtis uses the highest quality ingredients, including real butter, honey and pecans, and hands stirs it with a big wooden paddle in copper kettles. He used to add almonds but changed to strictly pecan around two years ago.

“In this area and in Oklahoma, I found people like pecans more than they like almonds. That was OK with me because I

was getting almonds from California and pecans from Texas and Georgia. I save a little on freight and a little on cost on the product with just pecans. So I put more pecans in it," Curtis said. "In this southern part of the state, people could care less about almonds. They want pecans."

He used to pick up 10, 30-pound cases of pecans from Seguin, but now he has it all shipped to Pipe Creek.

Curtis also occasionally makes a jalapeño product.

"It's more of a novelty. You get a few people out there who like that kind of hot stuff. I'm not one of them. Mainly we just make to demand," he said.

Until about 15-20 years ago, Curtis made apple-flavored green caramel popcorn for sale in Medina.

"They had their own label and I do private label when people want it," he explained.

In addition to private label, people can purchase Honey Crunch Popcorn locally (see below), through mail order and online, which accounts for more than half of his yearly volume.

"Most of the business is probably Christmas business. Other than that, I do a small route here locally. I don't have anyone else representing me right now, except VPV Distributors, who came on board a few months ago," he said.

Curtis, who is also the Castle Lake Ranch Volunteer Fire Department Chief, said the Christmas rush keeps him focused that time of year.

"It's not that difficult to make the product, but when you use the ingredients I do—they're expensive. It makes me a bit more unique, but basically it's just catering to the individual who likes that type of product and who wants a quality product. That's the way we've always kept it," Curtis explained.

It's likely to remain that way, too.

"I'm not a big city fan," Curtis said. "I lived in the San Francisco and Los Angeles areas in my time. I was a military brat and moved all over the world. I was born in Japan. When I was in the military, I was stationed just north of London for three years. I found that the country lifestyle was a lot more appealing to me. Although I'm FDA inspected, I'm not in the city. Because I made that decision, shipping costs are a lot higher for my customers, especially out of state, but they and the local ones, the ones that I can get to taste the product, are always around. They don't go away and they're loyal to it. They'll pay that freight charge. In that regard, I've got the best of both worlds."

#### Where to purchase locally:

- HoneyCrunchPopcorn.com
- Bandera Signs & Advertising
- True Value Hardware in Bandera
- True Value Hardware in Lakehills
- La Cabaña in Lakehills
- The Feed Barn in Pipe Creek
- Picosos on Highway 16 in Helotes
- Texas Gourmet Pantry in Boerne
- San Antonio Zoo



BOB CURTIS | BUSINESS OWNER

## RECIPE OF THE MONTH



RICK PATRICK

## Twisted Texas Chicken Diablos

- 2 pounds chicken tenders
- $\frac{2}{3}$  cup orange juice
- $1\frac{1}{2}$  tablespoons dry steak seasoning
- 8 ounces cream cheese
- $\frac{2}{3}$  cup chopped Texas pecans
- 12 whole fresh jalapeños
- 2 pounds thinly sliced bacon
- 2 cups barbecue sauce

1. Place chicken tenders in a bowl, add orange juice and 1 tablespoon steak seasoning. Stir, cover and set in refrigerator to marinate at least 1 hour but no longer than 4–5 hours.
2. In a separate bowl, mix cream cheese, pecans and  $\frac{1}{2}$  tablespoon steak seasoning. Blend well by hand and set aside.
3. When ready to assemble, wash and slice jalapeños in half length-wise, remove seeds, then rinse again. Fill each jalapeño half with cream cheese mixture, place chicken tender on top of filling, wrap with 1 slice of bacon, and secure with large grilling skewer so that bacon stays wrapped around jalapeño. Place three stuffed jalapeños on each skewer.
4. When finished, brush all finished jalapeños generously with barbecue sauce. Bake or grill until chicken is thoroughly cooked, approximately 45 minutes to 1 hour at 350 degrees, turning halfway through cooking time and basting with more sauce. Baste one last time about 5 minutes before finishing cooking or use remaining sauce to serve.

Find this and more delicious recipes online at  
**TEXASCOOPPOWER.COM**



PETNAL | ISTOCK.COM

## Member Sees Savings With Solar and Storage

**THERE ARE MANY REASONS BEC MEMBERS ARE INTERESTED IN SOLAR. IF YOU ARE** interested in reducing your monthly electric bill, earning a return on your investment, saving up to 26% on your federal income taxes, protecting against rising energy costs or helping save the environment one kilowatt at a time—it might make sense for you. Regardless of your reasoning, going solar is a big decision and a substantial investment in your future. As your energy expert, BEC wants to partner with you. We can help you research your individual needs with a free energy audit, and customize a system to maximize your benefits.

BEC member, Ryan Glore of Pipe Creek, was interested in learning more about solar energy, and in October of 2018, he made the decision to purchase his own solar system designed and installed by the BEC Solar team.

“I have been interested in alternative power sources for years. After I purchased some land, my first thought was to install solar because of its affordability,” stated Glore.

He spent several months researching solar systems by reading articles and watching online videos for information and ideas until he felt informed enough to make the decision to move forward. Glore learned that BEC offered solar and battery backup systems, so he called for a consultation, installation information and financing options.

The BEC Solar team installed an 8.28 kW ground-mounted system on his property with two Tesla batteries to store power in case of an outage and to use the solar energy generated during the day at nighttime. The installation process took about three days to complete, and he saw almost immediate savings on his electric bill along with a credit for excess generation onto the electric grid.

Installing a solar system allowed Glore to become more aware of his energy consumption. He is able to see when energy use spikes and which appliances are drawing the most power throughout the day, and he now manages his usage to save even more money.

“The process was streamlined from start to finish. BEC was great at explaining the technical terms and I liked the financing options offered. They built a system to fit my needs and expectations, and I see ongoing results every month,” stated Glore.

As your energy advisor, BEC is here to help you make informed decisions and will walk you through the process every step of the way. Request your free solar energy audit by visiting [BanderaElectric.com/Solar](http://BanderaElectric.com/Solar) or by calling 830.331.4500

## Celebrate Earth Day

**TO CELEBRATE EARTH DAY, APRIL 22,** here are a few green strategies to explore at your home.

Rainwater harvesting is the capture, diversion and storage of rainwater for daily use. It leverages a free resource, courtesy of nature—reducing your reliance on municipal or well water—and the collected water is ideal for container plants and your home’s landscape or garden. The simplest way to begin harvesting rainwater is to use a rain barrel, annually exempt from tax in Texas during the Memorial Day weekend energy- and water-efficient products sales tax holiday, May 23–25 this year.

Another water-saving technique is xeriscaping—the practice of planning and designing landscapes to reduce the need for irrigation. One quick and easy way to incorporate xeriscape principles into your garden is to mulch. A thick layer of mulch around your plants helps maintain consistent soil moisture by minimizing evaporation.

When you have enough time to prepare a meal in a slow cooker but want to forgo electricity, try a solar oven. Lightweight, flameless and relatively portable, solar ovens harness abundant sunlight to bake fish and chicken, steam vegetables, and cook rice, beans and pasta. Tote one along on your next camping trip.



GLENN SPECHT | ISTOCK.COM

# A UNIQUE TEXAS TREASURE



Students from Austin canoe around the Frio River that surrounds the H.E. Butt Foundation Camp.

PHOTO CREDIT | RUBY HINOJOSA BEC

BY LAUREN MURLEY  
BEC

**IF YOU'RE FROM TEXAS, MORE THAN LIKELY** you've stepped into an HEB store at least once in your life. If you are like many, you are dedicated to your "my HEB." In addition to HEB's excellent selection and outstanding customer service, HEB has a long standing philanthropic history that is directly related to their Christian faith. The H.E. Butt Family Foundation is one of many humanitarian efforts HEB is committed to.

In 1954, the Butt family purchased 1,900 acres near Leakey and promptly dedicated the land to the foundation. The family envisioned a place where people could develop their relationship with God while reveling in the beauty of the Texas Hill Country enhanced by the majestic Frio River.

According to Director of Property Planning and Stewardship, Trey Tull, "the property is really an umbrella over five programs that differentiate according to the guests that it serves." The programming includes family camp, youth camp, adult camp, outdoor education and adventure and the Foundation Camp that serves church groups and other community service groups at no cost.

Campers get to experience this endearing place that offers a multitude of wild animals and endless outdoor activities including canoeing, fishing, hiking, rock climbing and

zip lining. Time for reflection and renewal is encouraged as many will not have the chance to experience a place like this again.

The H.E. Butt Family Foundation notably targets Texas youth for the purpose of Christian character development. They are able to incorporate knowledge and faith into the fun and recreation in a meaningful way for the individuals who visit.

"The grandeur of what you see and feel when you're here is unparalleled," said Eric Silvius director of outdoor education. Campers leave with unforgettable memories and a fondness for nature.

One camper said on the Foundation's Facebook page that, "the H.E. Butt Camp took her experience with God's nature a step forward," and added "It's a place to remind you what life can still be about—family!"

The H.E. Butt Family Foundation is truly a dream realized when you consider the more than 25,000 people per year they serve. This retreat has impacted countless lives, and their profound experiences "are priceless and absolutely make what we do worthwhile," said Silvius. The H.E. Butt Foundation is a unique Texas treasure that will continue to live on through efforts to enlighten, inspire and transform the lives of visitors through faith based education.

## RECIPE OF THE MONTH



ALISAFAROV | ISTOCK.COM

### Honey Cheese Bacon Chicken

- 4 boneless, skinless chicken breast halves
- ¾ cup honey
- ½ cup Dijon or creole mustard
- ¼ teaspoon lemon pepper, or more to taste
- 4 slices bacon, cut in half
- 1 cup shredded mozzarella or provolone cheese

1. Preheat oven to 375 degrees. Apply cooking spray to a metal baking dish. Pound chicken breast halves to an even thickness.
2. Mix together honey, mustard and lemon pepper in a small dish. Place the breast halves in baking dish and drizzle evenly with the honey-mustard mixture.
3. Bake chicken 25 minutes, then top each breast half with 2 bacon pieces and increase oven heat to 400. Continue baking about 7–8 minutes.
4. Top with cheese and bake another 3 minutes or until chicken juices run clear, bacon is crisp and cheese is bubbly. Serve with brown or white rice.

This recipe won the *Five Ingredients or Fewer* contest in September 2015. Submit your *Texas Gulf Shrimp* recipe to *Texas Co-op Power* by February 10 for a chance to win \$100 and be published. Visit [texascooppower.com/contests](http://texascooppower.com/contests).

Find this and more delicious recipes online at  
**TEXASCOOPPOWER.COM**



ALEXANDER RATHS | ADOBESTOCK.COM

# Don't Make These Common Heating Mistakes

BY LAUREN MURLEY  
BEC

**WHILE THERE IS A RUNNING JOKE THAT TEXAS HAS TWO SEASONS:** hot and hotter, Texas does actually experience a winter season. As Texans, we are acclimated to the heat, and often times dread the formidable cold weather. We cumulatively complain as Northerners snicker about how we can't handle the cold. Nevertheless, winter happens every year, and before long we will all begin using some form of heat in our homes. With that being said, you might want to make sure you aren't making common winter mistakes that can translate into high heating costs. Read on to find out what you should and should not do to prepare and stay warm while simultaneously saving energy on your electric bill.

## **Don't turn up your thermostat too high to heat a cold house.**

Turning up a thermostat too high doesn't help heat your home any faster. It does however lead to higher than normal temperatures which wastes electricity. Do set it to a reasonably comfortable temperature, and give your heater a chance. Setting your thermostat to 68 degrees while you're awake, and lowering it 10 to 15 degrees while you are asleep can save 5 to 15 percent a year on your electric bill.

## **Don't leave the curtains closed on sunny days.**

Keeping the windows covered keeps the sun's natural warmth out—adding to the demand of your heater. Go ahead and take advantage of renewable solar energy! Open south-facing windows on sunny days to give your thermostat a break. This natural sunlight can save you anywhere from 2 to 12 percent in energy costs.

## **Don't heat an empty house.**

If you think that you are saving energy by leaving your

thermostat at a constant level to maintain temperature, you are not alone. This is a common mistake. Not only does heating an empty home waste electricity, but it also causes your heating system to work hard unnecessarily. Consider purchasing a programmable thermostat. Programmable thermostats work around you and your daily habits by allowing you to set the temperature when you are out of the house, and adjust it before you return. This technological advance adds up to big savings on your electric bill. There are many options to choose from, and prices start around \$20.

## **Don't forget about your ceiling fans.**

Many associate ceiling fans with cooling, but reversing the rotation to run in a clockwise manner helps push the warm air that rises downward. This simple trick will help keep your home comfortable and on a budget. Just remember to adjust your thermostat accordingly. It might allow you to turn down your thermostat by as much as two degrees.

## **Don't forget to prepare for winter.**

Consider getting a tune up on your heating system. A yearly tune-up ensures your system is running efficiently and also measures carbon monoxide outflow. Similarly, remember to change your air filter. A dirty air filter makes your system work harder and costs you more money. Weatherizing your home should also include inspecting for gaps around the windows and doors, holes in the exterior walls, and worn weather-stripping. If you have gaps around your windows and door frames greater than the width of a nickel, or if you can see sunlight shining through, it is time to reapply and replace. Caulking holes and replacing weather-stripping is rather affordable and can save you hundreds in the long run.