

Sam Houston EC “Stars” at Work



The Hummingbird

TERESA PATTERSON Data Records Coordinator

Behind the scenes at each of our branch offices there are many people who help keep everything working smoothly.

In fact, the people our members never get to meet face-to-face are some of the most integral cogs in the operation.

Teresa Patterson is one of those people. Like a hummingbird that moves so fast you can't even see its wings, Teresa is literally a blur, running around working to process member payments quickly and accurately. She and her team have to move fast. After all, there are some days when they receive and process nearly 5,000 payments.

In and of itself, this is a full-time job. But Teresa doesn't stop there. In fact, she doesn't stop at all. She's always

on the move, flitting about with endless energy. From department to department she flies, serving as an

extra hand to answer phones,

an able body to assist in

accounting and a genius at

researching member history. Whatever

the need — Teresa is always willing

and able to help. Cooperation is the

core of our business. And Teresa

Patterson is a living and

breathing example of

cooperation at its best.



DID YOU KNOW?



Sam Houston EC processes about 37,000 pieces of mail a month and nearly 5,000 pieces of mail a day on the busiest days. Every single piece is opened by hand and processed. Imagine getting that many envelopes in your own mailbox!



Sam Houston

ELECTRIC COOPERATIVE, INC.

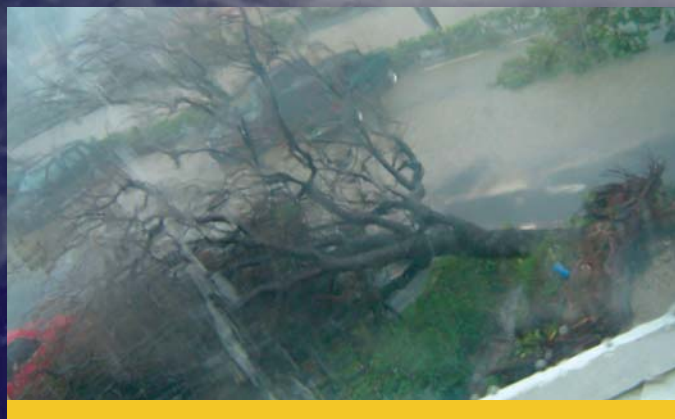
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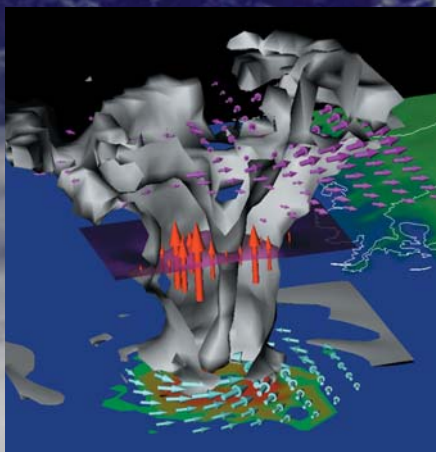
Mother Nature's Fury

No matter what part of the country you live in, you can be affected by a natural disaster – it may come in the form of a tornado, earthquake, blizzard, drought, flood or mudslide. But, for many Texans, summertime brings the memory of hurricanes past and the nervous anticipation of the next tropical storm to hit our area. While the devastation can physically tear a community apart, it can also help form close bonds among neighbors.

According to the National Hurricane Center, an average of 10 tropical storms develop over the Atlantic Ocean, Caribbean Sea and Gulf of Mexico each year. Predictions for 2005 from the National Oceanic and Atmospheric Administration (NOAA) forecast an active hurricane season – 12 to 15 tropical storms between June 1 and November 30, with seven to nine of those becoming hurricanes.

So, exactly what is a hurricane? In the simplest terms, it is a low-pressure system that generally forms in the tropics. The warmth and moisture of the ocean during late summer and early fall months energize the low-pressure disturbance and lead to thunderstorms. As the storm persists and winds reach 40 mph, the disturbance officially becomes a tropical storm. A tropical storm can become one of nature's more powerful forces as it intensifies, turning warm ocean water into powerful winds capable of mass destruction.





The Energy Behind a Hurricane

As tropical storms strengthen and intensify, they continue to pull very warm and humid air from the lower atmosphere while spitting out cooler, drier air into the upper atmosphere. According to Chris Landsea of NOAA's hurricane research division, the storm system operates like a huge "heat engine."

"The storm gets its energy from warm, humid air over the tropical ocean and releases this heat through the condensation of water vapor," said Landsea. "This energy release is what drives the powerful winds of a hurricane."

The winds are truly powerful! According to the American Red Cross, the amount of heat energy released by an average hurricane is equivalent to the amount of electric energy produced by the U.S. in an entire year. A small portion of the energy released actually warms what has become the inner core of the storm. As the temperature of the air in the inner core rises, its pressure drops, increasing the speed and intensity of the winds swirling around it. These stronger winds bring more warm, moist air to the clouds surrounding the inner core of the storm, further fueling its energy. When the swirling winds reach a speed of 74 miles per hour, the tropical storm then becomes a hurricane.

Measuring a Hurricane

Meteorologists categorize hurricanes according to the strength of their winds and damage potential using the Saffir-Simpson Hurricane scale. This rating often changes as the storm travels and strengthens.

Category One hurricanes have wind speeds between 74 and 95 mph and usually cause limited damage to trees and property.

Category Two hurricanes are considered moderate storms and can have wind speeds of around 100 mph.

Category Three storms have wind speeds between 111 and 130 mph. That is enough to blow over large trees and small, poorly constructed structures.

Category Four hurricanes have extreme winds that range from 131 to 155 mph and usually result in the evacuation of low-lying or coastal residential areas.

Category Five hurricanes are the most intense. They are capable of wind speeds that exceed 155 mph and cause severe damage or complete destruction of property.

Sometimes, the hurricane's "ranking" in terms of wind speed and intensity is quite different from the overall damage to the area hit. Sam Houston EC Operations Supervisors Larry Horn and Scott Ferguson recall the damage caused by the Category One Hurricane Jerry in 1989.

"We've experienced some bad storms, but we've also been affected

by minimal hurricanes," Ferguson said. "So many tornadoes spawned off from Hurricane Jerry that there were broken poles all over the service area."

"In fact, there were more broken poles to be repaired after that storm than some of the more major hurricanes that have blown through," added Horn.





Galveston 1900

The Gulf Coast has seen its fair share of hurricanes over the past century. The timeline (at right) recaps some of the most destructive storms beginning with the Great Storm in 1900.

Data provided by the National Hurricane Center

1 ▶ September 8, 1900: The Galveston Hurricane was the deadliest disaster in U.S. history, killing 8,000 to 12,000 people. Storm tides of 8-15 feet inundated the entire island. More than half of all the homes and buildings were destroyed. Property damage is estimated at \$700 million in 1990 dollars.

2 ▶ August 16, 1915: Another large and violent storm hit Galveston. Despite the 10-foot seawall built after the 1900 hurricane, storm tides 12 feet above normal flooded the business district to a depth of six feet. 275 people were killed.

3 ▶ September 14, 1919: This unnamed storm was the fourth most intense and deadly storm of the 20th century. It hit land south of Corpus Christi, where tides rose 15 feet above normal.



Audrey 1957

4 ▶ Hurricane Audrey, 1957: Audrey made landfall near the Texas-Louisiana border on June 27th with devastating effects. There were 390 deaths as a result of a storm surge in excess of 12 feet, which inundated the flat coast of Louisiana as far as 25 miles inland in some places. Wind gusted at 85 mph in Port Arthur.

5 ▶ Hurricane Carla, 1961: Carla was the largest and most intense Gulf Coast hurricane in decades. Winds near the center of the storm were estimated at 150 mph. Thankfully, with the benefit of early warnings only 46 people lost their lives.

Not Just a Coastal Phenomenon

While coastal areas are typically the hardest hit, the effects of a hurricane can be felt in communities hundreds of miles from the coast. And even though the total lifespan of the storm averages just 10 days, it can take weeks – sometimes even months – to recover from a significant storm.

Genette Harrelson, Manager of Member Services for Sam Houston EC, remembers Hurricane Alicia in 1983 as if it hit yesterday. “The day the storm blew in,

I remember the big pine trees in front of the office were just blowing back and forth, and the heavy glass doors blew wide open because the winds were so forceful,” she said. “But, what makes that storm so memorable is the number of trees the storm took down and the length of time we were without power. It took a couple of weeks before we got the power back on for all of our members.”

Crews worked day and night to restore the power lost due to Hurricane Alicia’s forceful winds. But, Mother Nature had a mind of her own. Even as linemen picked up the fallen lines, trees continued to fall, bringing more and more lines down. Add to that the limited equipment at the time and loss of power to the substations, it’s no wonder repairs came slowly to the area.

“We didn’t have the resources available then that we have today,” Horn said. “And, as soon as we repaired one area, another would go down. It was very overwhelming.” Ferguson added, “In those days, we had to climb everything – we had only one bucket truck at the time.”

Weathering the Storm

While hurricanes can cause massive destruction, they also have a way of bringing people together. When disaster strikes, Sam Houston Electric is there to help members in need.

This attitude crosses service area lines.

Cooperatives around the country support other co-ops in devastated areas by sending field crews and line technicians to assist in their recovery efforts. Sam Houston Electric has traveled as far as Mississippi to help fellow cooperatives get their power back on.

“Last year when Florida was hit so hard with multiple hurricanes, it was impossible for even their neighboring cooperatives to help because they had repairs to make themselves,” Horn said. “All we needed was a phone call and we would have been ready to respond. When we can spare the manpower, we’re more than willing to help. We know that other co-ops would be equally as willing to help if we were in need of assistance.”

According to Horn, the key to weathering a hurricane is being prepared. “Just as families prepare for natural disasters, so does the Co-op,” he said. “When we know a hurricane is coming our way, we have contractors on stand-by and hotel rooms booked as far in advance as we can. That way, we are better prepared when the storm actually hits.”

Ask any forecaster, meteorologist or even a fortuneteller when to expect the next big hurricane and you’ll likely get three different predictions. The truth is, only Mother Nature knows for sure how the 2005 hurricane season will shape up – and, she’s not telling! But, Sam Houston EC members can rest assured that we’ll be prepared when the next storm – large or small – heads our way. ☘

Hurricane Preparation

Hurricane season spans from June 1 through November 30. While there’s no way to dodge the course of the storm, you can prepare your family and home ahead of time.

Know if you live in an evacuation area.

Know if your area is vulnerable to storm surges, flooding or high winds.

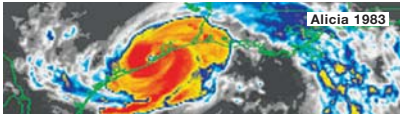


Have a written disaster plan for your family.

At the beginning of the season check supplies, batteries and your food stock.

Assemble a disaster kit with:

- A first aid kit and essential medications.
- Bottled water and canned food (don’t forget a non-electric can opener!).
- At least three gallons of water per person.
- Protective clothing, rainwear and sleeping bags.
- A battery-powered radio, flashlight and extra batteries.
- Specialty items for infant, elderly or disabled family members.
- Written instructions for shutting off electricity, gas and water.

Have cash on hand. ATMs and banks may not be operating after a storm.

1940	1950	1960	1970	1980	1990	2000
<p>6 ▶ Hurricane Celia, 1970: This was one of the most destructive storms to ever hit Texas, with damages estimated at \$1.6 billion (in 1990 dollars). It crossed the coast north of Corpus Christi and as it made landfall, spectacular damage occurred from a "cluster of high energy winds of short duration" (also called downbursts).</p>	<p>7 ▶ Hurricane Allen, 1980: When it was over open waters Allen was one of the most intense hurricanes ever. It reached Category 5 status three times. It moved inland north of Brownsville, with the strongest wind gusts measured at 129 mph. It completely destroyed State Highway 87 between Sabine Pass and High Island.</p>	<p>8 ▶ Hurricane Alicia, 1983: Alicia was the first hurricane to strike the Continental U.S. since Allen in 1980. It was the longest period in this century that the U.S. had gone without a hurricane landfall. Despite its small size (minimal Category 3 status), Alicia caused over \$2.4 billion in damage (in 1990 dollars).</p>	<p>9 ▶ Hurricane Bonnie, 1986: Bonnie made landfall along the upper coast. Jefferson County airport reported gusts up to 75 mph. Debris littered the streets of Port Arthur and Beaumont. Highway 87 was closed due to fallen power poles. Several aircraft were damaged at area airports. Winds in Sam Rayburn reservoir caused \$1 million in damage to boats and marinas.</p>	<p>10 ▶ Hurricane Bret, 1999: With winds faster than 111 mph, Bret was the first major hurricane to directly hit the Texas coast since Alicia in 1983.</p>		
						

Heavy rains fell between Beaumont and Lake Livingston. As much as 13" of rain fell at Ace, in Southern Polk county. In San Jacinto county, flooding of Big Creek closed U.S. 59 for several hours.

Put Protective Measures in Motion

A hurricane WATCH indicates the POSSIBILITY that your area could experience hurricane conditions within 36 hours.

- This watch should trigger your family's disaster plan, and protective measures should be initiated, especially those actions that require extra time.
- Prepare for high winds by securing windows with hurricane shutters or plywood boards.
- Secure or bring loose items inside, including trashcans, plants and grills.
- Check with local kennels or veterinarians for keeping any pets, since public shelters will not allow them.
- Fill your automobile's gas tank, gather any maps and notify the local police if you are leaving for a shelter.

A hurricane WARNING means that sustained winds of at least 74 mph are EXPECTED within 24 hours or less time.

- Decide on the safest location to be during the storm and expect the need to evacuate at any time. Those in flood-prone areas, mobile homes or homes that may not stand up to hurricane winds should leave, while those in sturdy homes may be better off sheltering at home with adequate emergency supplies.
- Make sure you have essential documents including driver's license, Social Security card, proof of residence, insurance policies, wills, birth certificates and tax records.
- Gather valuables, store perishables and pack enough clothing to last five days.
- Monitor local radio or TV stations for weather updates, stay away from windows and exterior doors, and use flashlights in the dark rather than candles.

During the Storm – Ride It Out or Hit the Road?

- Remain indoors during the storm.
- If you are instructed to evacuate, do not hesitate.
- If evacuating, shut off water at the main and power at the fuse box.
- A sudden calm does not mean the storm is over. After the passage of the hurricane's eye, the winds will rise very rapidly from the opposite direction.
- Stay away from all windows and exterior doors.
- Expect the loss of electricity, gas and water.
- Do not drive through flooded areas, as cars can break down or be swept away.

After the Storm – Tips for the Aftermath

- Once the storm has passed, stay tuned to local radio and TV stations.
- If evacuated, only return home once permitted by officials.
- Be sure to inspect your home or property for damage.
- Enter with extreme caution and do not smoke or turn on lights until you are sure there are no gas leaks.
- Only go out during the daylight hours, since high water can bring snakes, insects, and other animals to higher ground.
- Avoid downed wires, escaping gas, downed trees and puddles.
- Continue to use bottled water for a time and check freezers for food spoilage.
- Notify relatives that you are safe.





SAM HOUSTON EC RATES REMAIN STABLE DESPITE RISING COSTS OF OPERATION.

**A Guest Editorial By: David Babcock,
Chief Financial Officer, Sam Houston
Electric Cooperative**

Sam Houston Electric Cooperative's rates have remained the same since 1992. Think about that for a minute. What commodity can you think of that has stayed the same price for so long? Seriously, the list of consumer goods whose prices have remained the same is very short.

It's an economic fact that costs tend to rise over time. For the most part, we as consumers accept this, whether we like it or not. That's why it's significant to note that for the last 13 years our members have paid the same rate for their electric service.

In a time when it seems like the price of everything is going up, the stability of our rates is quite an accomplishment. It's especially noteworthy when you consider that the Cooperative's expenses have increased drastically over this same period of time.

We're all aware of the impact the rising cost of gasoline has had on our personal budgets. As prices have skyrocketed at the gas pump,

you have likely made compensations in your budget to accommodate for the added expense. Right? This is a good case study for the kinds of cost increases the Co-op has seen in a variety of essentials.

We've incurred a significant increase in the costs of steel, wire, equipment and natural gas. Yet, we've managed to maintain rates by making compensations and modifications to our operating budget. Providing electricity at the lowest possible cost is part of our mission. It's something we take seriously and work hard to fulfill.

Rising costs coupled with the continual need to maintain and upgrade our system have made keeping rates stable a challenge. To the positive side, interest rates aren't climbing the steep slope so many other expenses are. We are also most fortunate that our incredible employees continually work to become more efficient in serving you, our member-owners. Everyday, they find ways to save the Co-op money.

As if low rates aren't bonus enough, there is icing on the cake: Sam Houston EC members also pay less for their electricity than customers

COST OF AVERAGE MONTHLY BILL	90	100	110	120	130+
Sam Houston EC	\$83.65				
Reliant					\$128.57
TXU Energy Services				\$115.14	
Entergy Solutions				\$115.97	
GEXA			\$104.90		
Amigo			\$109.80		
ACN Energy					\$128.05
Green Mountain Energy (pollution free)					\$127.05
Green Mountain Energy (Wind)					\$137.03

Sam Houston EC rates compared to those in the deregulated Houston area. Based on 1,000 kilowatt-hours used. Includes fees, fuel costs, transmission, meter reading and monthly service charges as applicable. Costs as of June 1. Source: powertochose.org





of utilities serving surrounding areas. According to a recent analysis by Public Citizen Texas, consumers of investor-owned utilities in regulated electric markets have seen costs increase about 17 percent since 2002. Even more radical was Public Citizen Texas Director Tom “Smitty” Smith’s testimony before a Senate Committee stating that customers in deregulated electric markets have stomached as much as a 43 percent rate increase during that same time. Clearly, the Sam Houston EC Directors made the right choice in taking a “wait and see” approach to deregulation. Public Citizen Texas also reported that members of rural cooperatives,

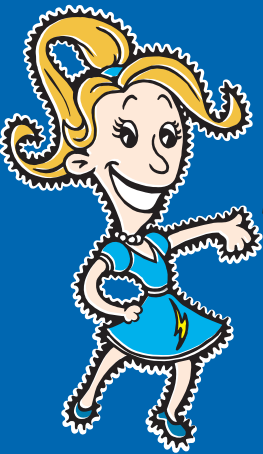
like Sam Houston Electric, have seen only a nine percent rate increase since 2002. Again, Sam Houston Electric Cooperative’s members have experienced no rate increase in 13 years. We are proud to have maintained our rate structure for so long.

As a Sam Houston Electric Cooperative member, you’re beneficiaries of some of the lowest rates around. While other providers’ rates have increased with operating costs, Sam Houston EC rates have remained a constant. And we’ll do everything in our power to keep it that way for as long as possible. That is truly a benefit of Co-op membership.

ELECTRICITY WHAT A VALUE!

Flip a light switch and voila there is light! It’s easy to take the value of electricity for granted—especially because Sam Houston EC’s electricity rates have been stable for so long. Stop a minute to consider the high costs of oil, gasoline, propane and other fuels in today’s day and age and it’s easy to see electricity’s tremendous worth. Consider these comparisons for a true sense of electricity’s incredible value.

- A 20-gallon tank of gas priced at \$2.00 per gallon is the equivalent of 2 full weeks of electric service.
- For the average household, 25 days of electric service costs about the same as a night on the town including a nice dinner, movie tickets, a medium popcorn and a couple of sodas.
- On average, 48 hours of electric service costs about as much as a meal at your favorite fast food restaurant.




BUMP UP THE THERMOSTAT TO BRING DOWN YOUR BILL. \$

Cooling is costly.
Cooling your home accounts for 44 percent of your energy dollars. Setting your AC lower than 20° F below the outside temperature only wastes money.

Make every degree count.
Turning on fans and closing curtains on south- and west-facing windows during the day can help your AC work more efficiently.

Lightning Liz
Electric Safety Crusader

 **Sam Houston**
ELECTRIC COOPERATIVE, INC.
www.samhouston.net

Linemen in the Making

Traditionally, line technicians were trained on the job, as apprentices. The trouble with this brand of on-the-job training was that while it allowed many new technicians to quickly discover they loved the challenges of line work, many others learned the dangerous job of working with electricity wasn't for them.

Rusty Koenig is one who loved the work. With more than 20 years under his lineman's tool belt working for Sam Houston Electric Cooperative, Koenig was asked by members of the electric utility industry to help revolutionize the on-the-job training program. He brought his passion for safety and quality work to the classroom where potential line technicians could study the craft and determine their interest before signing on for a full time job.

After joining the Lamar Institute of Technology-Beaumont's staff in 2000, Koenig began developing a curriculum

for a comprehensive line technician training program, while learning about state guidelines. Not long after, his first class began in the fall of 2001. The two-semester program has been going strong ever since. By the time they finish the course, Koenig's students have spent close to 1,000 hours learning their trade, both in the classroom and in the field.

Koenig's teachings include technical aspects of the job along with a dose of the real world. "We teach the good and bad aspects of the profession," Koenig said. Balancing what can be lucrative pay are late night storm repairs and the danger of working with electricity. If you're interested in more information about the lineman training program at Lamar Institute of Technology, **contact Rusty Koenig at 409.839.2922 or koenigr@lit-mail.lamar.edu. Class starts in August!**



remember this

You, Too, Can Lend a Helping Hand

Have you ever noticed how a community rallies together when someone falls on hard times? Have you ever wondered what you could do to help a family in need?

For some, even paying the electric bill can be a daunting task. And, that's where you come in. Through **Sam Houston EC's Helping Hands Program**, you can contribute funds to assist members in financial and/or physical distress in paying their monthly bill.

How Does It Work?

This non-profit program is funded entirely by contributions from Sam Houston Electric Cooperative employees and members. You can lend a hand to members in need in one of two ways – through a one-time donation or by a monthly contribution billed to your Sam Houston EC account.

Even small contributions make a big difference. Since the program began in 1992, members and employees have contributed over \$150,000 in "helping hand" donations. What's more, the funds you contribute stay right in your county, so the money truly assists your neighbors.

For more information about the Helping Hands Program, or to make an online donation, go to **www.samhouston.net** and click on "Member Services." Or, contact a Sam Houston EC Member Services Representative at your local branch office. Help us continue to help our members in need.

