

Benton County Electric System Evolution (3/17/2017)



The first electric lines were installed in Benton County in 1923 by Wadell Lucas of Humphreys County. After setting several poles, the construction of power lines were halted until 1925 when Mr. Frank A. Trimble of Tennessee Light & Power Company of Springfield, Tennessee purchased the plant in Humphreys County and power lines in Humphreys and Benton County from Mr. Lucas.

Mr. Trimble built facilities in Camden and the first actual distribution of electricity in Benton County was made in 1926. The power was generated at the Kentucky-Tennessee Utility plant in McKenzie. This power was transmitted over an old line from Bruceton. The voltage of this line was 13.2 kV and was transformed to a 2.4 kV at a substation located behind Bawcom's garage on West Main Street in Camden. Service was extended to Big Sandy in 1928 and to the Tennessee River in 1929.

The three primary feeders carried all of the load in Benton County for many years. This system served approximately 500 customers and the cost per kilowatt hour was \$0.07 per hour. The first Power Board was led by Judge Boss Odle in 1937. In 1940 the Benton County Court, after having been authorized by a referendum of the voters of the County, issued and sold bonds to buy the electric system from Tennessee Light and Power for \$52,500 and operate under the political subdivision of the Tennessee Municipal Electric Plant Act of 1935. Today, Benton County Electric has grown to over \$35+ million in system assets and 36 employees.

There were 500 customers initially and the first manager was E. E. Pafford, hired in October, 1941 and three additional employees that followed. The Board of Directors were R. A. Swindell, J. V. Walker, Blake Pafford, John Pennick, and L. N. Peebles. The Benton County Board of Public Utilities is typically referred to as Benton County Electric System (BCES). Since that time



BCES Original Office

there only have been four other General Managers including Raymond Barnes who has held this position for the last ten years. From 1940-1950 BCES went from 500 customers to over 3,000 customers, adding approximately two customers a day.

The Public Power Model's main mission is to improve the communities in which they serve. Delivering on those promises to serve all of Benton County, several innovative programs were implemented by Benton County Electric. The electric stove initiative was an early program help citizens adopt electricity and make life better for the community. If the customer would buy an electric stove, BCES would wire that stove into your electrical service at your home. This propelled the Electric System throughout the county, while also making waves in the TVA service territory.



In 1950, BCES demonstrated how service to community earned them the top spot as the highest percentage increase of kWh (Kilowatt Hours) used during the past year across the entire TVA Service Territory. The average residential home used 1,758kWh in 1949 to 2,370kWh in 1950. Today, the number of connected devices has gone way beyond the initial lighting and appliances of the 1950s. Today, the average residential customer uses 13,200 kWh annually and the system has grown to over 1400 miles of distribution lines with redundant feeds, intelligent devices, and monitoring capabilities to meet the expectations of our customers.



The first modern administrative office was built in 1961 at 115S Church Street and served the electric system well for over 50 years. Food was being cooked in the demonstration kitchen, teaching homeowners how to utilize an electric stove, plan their lighting, or laundry facilities. Agricultural Engineers helping farmers increase their production by utilizing electricity. Programs that later

helped make home more energy efficient and comfortable. From 3,000 customers in 1950 to present day 10,584 customers throughout Benton County we continue

this mission of the Public Power model to deliver safe reliable power to the citizens of Benton County.



BCES continues to be a leader in the community and in April 2016, a new state of the art administrative building was built, adjacent to our warehouse location, to prepare BCES for the next 50 years of public service. Located at 975 Hwy 70 East our goals and mission are even greater today to the citizens of Benton County as we continue the Public Power Model philosophy.



Raymond Barnes, Manager - note the dedication plaque



New Boardroom

Over the last 10 years we have implemented a full Advanced Meter Infrastructure, which provides real-time energy usage. Allowing customers to analyze their real-time energy consumption enables informed decision making. A Benton County citizen can analyze their usage detail to 15-minute intervals if they choose. They can pay for electricity daily, as they use it, through our unique service choices. These tools open many avenues to assist customers with information that has been previously unavailable. All of this data is available in office, through the

website, or a mobile device app called MyUsage®.



First Board Meeting

BCES has installed over 80 miles of fiber optic cable to communicate with Intelligent Grid Devices to monitor our operations in real-time (SCADA) (AMI); maximizing efficiency and minimizing outage durations. BCES utilizes these technological tools to be proactive in maintaining the distribution system and provide detail information and choices to the customer.

This technological toolset has helped the employees better serve our community. There is an entire staff from many areas: Right of Way, Linemen, Customer Service, Technology, Safety, and Accounting that utilize the tools they have been given to be the best at their skillset to deliver safe reliable power for all. Ensuring our employees go home at the end of the work day, having worked safely in a hazardous job, is one of our top priorities. BCES has earned a 100% perfect score during the last three years of TVPPA Safety Audit; ensuring our commitment to our employees and customers for years to come.



Working with multiple charitable organizations such as the United Way and the Ministerial Alliance has helped customers during a time of need. BCES has implemented programs such as Round Up, which rounds the electric bill to the next dollar, donating the left-over change to the Ministerial Alliance to assist customers who may be struggling. Additionally, we offer Project Help allowing customers to donate a fixed monthly amount to the Ministerial Alliance to assist citizens in need on their electric bill. Finally, we assist customers with any federal or state incentives that could aid with electric bills or incentives for new technologies, such as solar.

The electric system of tomorrow is evolving from an entity that previously just sold kilowatt hours of electricity to a delivery company. Our mission continues the Public Power Model, providing safe reliable power; and, the focus is not on just selling electricity, but to deliver services to one's home safely and reliably; while making them available for all citizens in Benton County.



BCES will work continually to make this community a better place to live. We are powered by the people in the community and our mission since 1940 is evolving but never changing. Continuing to provide safe reliable electricity, and we are staying at the forefront of technology and

services that would enrich our community. Just as the stove initiative changed the lives of our citizens; we are open to any potential service that would enrich our community. Exploring services such as broadband, solar, and battery technology are only the beginning to this evolution. Forward thinking has always served to enrich the lives of our citizens since 1940, and continues at the forefront of our strategic planning.