

A Touchstone Energy® Cooperative

Spring 2013

Remembering Charles L. Ross

Charles LaVerne Ross, KEPCo's first Executive Vice President and Chief Executive Officer, passed away April 9th.

Charles enjoyed a 20-year career in the rural electric industry. He was KEC's Executive Vice President from 1969 to 1981 and was KEPCo's



Charles L. Ross

Executive Vice President and CEO from 1975 to 1988. During his tenure he was instrumental in obtaining hydroelectric power from federal reservoirs that continues to benefit rural Kansans. He also was an incorporator of the Wolf Creek Nuclear Operating Corporation and served on its original board of directors and executive committee.

Charles also participated in numerous state, regional, and national committees and organizations, often in leadership positions, such as President of the National Rural Electric Statewide Managers Association, Vice Chair of the Central Area Data Processing Corporation, National Food and Energy Council's Board of Directors, U.S. Department of Energy's National Fuel Oil Marketing Advisory Council, Governor's Energy Council, Kansas State University's Agricultural Research and Advisory Council, and the first state PRIDE program steering committee.

In 2005, KEPCo published a "30 Years" historical perspective about KEPCo. Below is the article Charles wrote for the publication. It is a wonderful reflection on the beginning of KEPCo and the role Charles had in securing hydropower for KEPCo and its Members.

A Courageous Board and Membership

Board Support for KEPCo

When I reflect on my "watch" during KEPCo's progression from an idea in the early 1970s to its G&T status in the mid-1980s, I always gratefully recall the steadfast, courageous, loyal support that KEPCo's board and its Member REC boards consistently provided. Whatever adversity threatened KEPCo's development (regulatory decisions, litigation, legislation, negotiations, nuclear issues, financial impediments, hydropower concerns and more) respective boards loyally supported KEPCo. Even when an individual board's members disagreed among themselves on a KEPCo issue, the respective board's official actions supported KEPCo. Without this fabulous support throughout KEPCo's development era, there would be no KEPCo today and I wouldn't have this fond memory.

Hydropower for Kansas

In the early 1970's, when KEPCo was in its formative years, we met with Southwestern Power Administration (SWPA) officials regarding the purchase of hydropower. At that time, Kansas preference customers had never ever benefited from federally produced hydropower. We soon learned that the possibility of any future economically priced SWPA hydropower being marketed in Kansas was nil. Kansas simply was not included in SWPA's five-state marketing area. But tactical persistence can be rewarding. With determination, we sought, and obtained, strong support for Kansas' inclusion in SWPA's marketing area from both Kansas' U.S. Senator's and we met privately with a former Kansan who was the Assistant Secretary of the Department of Interior with oversight responsibilities for the Federal Power Marketing Agencies. After we drafted a letter that the assistant secretary signed and mailed to SWPA's marketing administrator, Kansas became the sixth state included in SWPA's marketing area. This action made it possible for Kansas preference customers to share in the economic benefits of SWPA marketed hydro peaking power today. It's another fond memory that was integral to KEPCo's successful development.

In the same publication, David Reichenberger, KEPCo President from 1997 to 2000 is quoted, "KEPCo's first decade should be considered a high-stakes fight for life. Investor-owned utilities in Kansas wanted KEPCo to fail in its bid to serve and made life as difficult as possible. But under the leadership of Charles Ross and a Board that would not roll over, KEPCo demonstrated that it was a worthy opponent, had the will to survive, and the perseverance to take its place among the major suppliers in that state of Kansas".

Although Charles has passed, his legacy as KEPCo's first EVP & CEO will live on for decades to come. May he rest in peace.

New Faces at KEPCo

The KEPCo Board of Trustees has enlisted the services of NRECA to conduct a national search to fill the position of Executive Vice President & Chief Executive Officer, due to the passing of Mr. Stephen Parr. **Mr. Charles "Chuck" Terrill** has been retained as KEPCo's Interim EVP & CEO. Chuck's career spans thirty-five years, primarily in the electric cooperative industry. Chuck will serve as Interim EVP & CEO until a successor is named.

Chuck began his career in 1972 with Public Service Indiana (now Duke Energy). In 1975, Chuck joined Hoosier Energy as a Dispatcher and was promoted to Director of Planning and Operations. In 1984, Chuck joined KEPCo as Director of Power Supply and Engineering. In 1988, Chuck was promoted to Executive Vice President and Chief Executive Officer,



Charles "Chuck" Terrill

a position he held until 1995. In 1995, Chuck accepted the position of Executive Vice President & Chief Executive Officer of the North Carolina Association of Electric Cooperatives and the North Carolina Electric Membership Corporation (NCEMC). NCEMC is one of the nation's largest G&T's serving 26 member cooperatives with approximately one million members. Chuck retired from this position in January 2007.

KEPCo Executes RS Prepayment

The KEPCo Board of Trustees authorized staff to proceed with the financing of the KEPCo Retirement Security (RS) pension prepayment with NRECA. KEPCo evaluated financing offers from CFC and CoBank. Both lenders offered competitive financing packages. KEPCo chose CoBank in order to establish a stronger banking relationship. Currently, KEPCo only has a line of credit with CoBank.

By executing the RS prepayment option, KEPCo's RS billing is reduced by 25 percent and lowers KEPCo's subsequent contribution rate. The prepayment minimizes the likelihood and impact of future Deficit Reduction Contributions and strengthens the RS pension plan for rural electric cooperatives nationwide.

KEPCo Service Awards

In March, six KEPCo employees received service awards, recognizing their dedication to KEPCo.

15-year service awards were presented to Phil Wages, Mark Barbee, and Carol Gardner; 10-year service award to Erika Old; 5-year service award to Robert Hammersmith; and a one-year service award to Chris Davidson.





Kelsey Schrempp

Chuck graduated from Purdue University with a BS in Engineering and completed graduate course work in Nuclear Engineering. Chuck also earned an MBA from Washburn University.

Chuck was born and raised in Indianapolis, IN. He is married to Barbara and they have two adult children. Chuck's hobbies include golf, woodworking, computers, and genealogy.

Kelsey Schrempp has been hired as an Administrative Assistant, replacing Laura Armstrong who retired in December 2012. Kelsey comes to KEPCo from the Kansas Bar Association, where she worked for eight years in various positions of responsibility, with her last position being Public Services Manager. Kelsey will graduate from Washburn University this May with a BA in Youth Services. Kelsey is married to Randy and they have a nine-month old son named Kason.

Maurice Hall has been hired as a Sr. SCADA Technician, replacing Michael Morris. Maurice attended Garden City Community College and North Central Kansas (NCK) Vo-Tech. Maurice has 30 years of experience in electrical system maintenance and repair, and previously worked for Sunflower Electric Power Corporation and Midwest Energy, Inc. Maurice, who is married to Brenda, will be based in the Larned area.

Shale Shock: Natural Gas May Edge out Coal as Nation's Primary Power Source

Over the past decade, the natural gas industry in North America has experienced a dramatic renaissance thanks to a combination of horizontal drilling and a shale fracturing technique called "hydraulic fracking." With this technology, previously unrecoverable gas reserves located in shale formations deep underground are now flooding the market and should continue to do so for several decades.

This "shale gas revolution" promises to have a major impact on our nation's energy future, particularly in shifting reliance from burning coal for power generation. Studies show that the U.S. will overtake Russia as the world's largest gas producer by 2015, according to International Energy Agency Chief Economist Faith Birol. She notes the resulting cheap domestic supply should lead electric utilities toward a heavier reliance on natural gas for generating power.

Given the fact that consumption of natural gas for electricity has increased every year since 2009, Birol's predictions appear to be well under way. According to the U.S. **Energy Information Administration** (EIA), natural gas's share of electric power generation in the U.S. will increase from 25 percent today to 28 percent by 2035, with renewable energy's share growing from 10 percent to 15 percent and coal falling from 48 percent to 38 percent. However, preliminary 2012 numbers indicate that pace of change may be accelerating.

When it comes to electricity, natural gas is most commonly used to fuel peaking plants—power stations that operate for brief periods during times of high electricity demand – and intermediate plants – those whose output changes in response to changes in electricity demand over the course of each day. Today, gas accounts for about 15 percent of the power produced by generation and transmission cooperatives and 16 percent of all electric cooperative power requirements nationwide.

Over the past two years, the relatively low price for gas combined with increasing federal and state regulation of power plant emissions have led to natural gas-fired plants being run for longer periods, while many older coal-fired base load power plants— those that provide dependable electric power year-round at a low cost—are being shut down or converted to gas operations. In fact, the U.S. Environmental Protection Agency (EPA) last March proposed a New Source Performance Standards (NSPS) rule that aims to curb the release of carbon dioxide and six other greenhouse gases blamed for contributing to climate change from new fossil fuel-fired power plants. This rule could also be expanded at some point to cover existing generation. To do so, it sets an emissions cap of 1,000 lb. of carbon dioxide per megawatt-hour-a nearly impossible standard for coal-fired power plants, which average in excess of 1,800 lb. of carbon dioxide emissions per megawatt-hour, to achieve.

"The only way to meet it is with carbon capture and storage [CCS] technology, which is prohibitively expensive and years away from being commercially viable," David Hudgins, director of member & external relations at Old Dominion Electric Cooperative (ODEC), a generation and transmission coop based in Glen Allen, Va., told the U.S. House Subcommittee on Energy and Environment in June 2012. "No company will take the



risk to invest billions of dollars in a power plant in the hopes that CCS will be developed."

NSPS, as outlined, will push power plants away from coal and toward natural gas base load generation because most new combined cycle gas facilities produce emissions within range of the 1,000 lb. of carbon dioxide per megawatt-hour limit. But natural gas prices are more volatile than coal, making the fuel a dicey option.

"Historically, natural gas prices have varied widely, making reliance on gas as the sole fuel to provide affordable future base load power risky at best," says Rae Cronmiller. environmental counsel for the National Rural Electric Cooperative Association, the trade organization representing more than 900 electric co-ops in the U.S. "These risks are significantly enhanced because the cost of electricity derived from natural gas is largely driven by cost of the fuel itself. This differs from coal power, which is driven by capital costs. Also, natural gas in quantities necessary to provide year-round base load generation is unavailable in some geographic areas."

Despite this, utility experts believe that natural gas production will continue to increase and that the "blue flame" may surpass coal as the nation's leading source of electric energy.

Challenge of Greening the Future

Your home's electricity comes from a combination of sources: fossil fuels, nuclear, and renewable resources. KEPCo balances these resources to deliver safe, reliable, and affordable power.

Fossil fuels—primarily coal and natural gas—are non-renewable, with limited, though extensive, stockpiles. Nuclear energy, fueled by uranium, also relies on a finite resource.

Renewable sources of energy like water, wind, sun, biomass, the earth's heat, and hydrokinetic sources like tides and ocean waves replenish themselves. And when it comes to generating renewable electricity for rural America, electric cooperatives are leading the way. Electric cooperatives receive 13 percent of their power requirements from renewable resources compared to 10 percent for electric utilities as a whole. Over the last five years, 18.5 percent of KEPCo's energy requirements have been from hydroelectricitv.

Renewable energy has its share of challenges. "Green" power resources don't exist everywhere or in sufficient quantity to "keep the lights on all of the time." There's



also a need for more transmission lines to move renewable power from the places where it's generated to population centers, and a need for new technology capable of storing electricity produced by variable wind and solar facilities as a way to make them more reliable forms of generation.

The North American Electric Reliability Corporation (NERC), which oversees reliable operation of the bulk power grid covering the United States, most of Canada, and a sliver of Mexico, estimates 39,000 miles of transmission lines need to be built by 2019, with 27 percent dedicated to connecting renewable resources to the grid. Yet getting these lines constructed poses major regulatory and community challenges. Already NERC claims almost 6,500 miles of planned transmission lines are delayed, with the typical delay lasting up to three years.

Meanwhile, the U.S. Energy Information Administration's (EIA) 2012 Energy Outlook forecasts the share of generation coming from renewable resources (including hydro) will grow from 13 percent in 2011 to 16 percent in 2040—mainly in the form of wind. But less than 25 percent of this renewable capacity will be available when consumers need it most, notably during times of peak demand, highlighting the need for research into development of advanced energy storage options.

It's important to note EIA's prediction for renewables growth is in response to federal tax credits, statelevel mandates, and requirements to use more biomass-based transportation fuels—electricity can sometimes be produced as a byproduct of the refining process.

KEPCo and its Member cooperatives are working closely with others to remind Congress to keep the affordability of electric bills in mind when debating energy legislation. A sound approach to renewable energy remains an important element for consideration.

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