



ABOVE: The Centurion Team with their Comdex award. Front row: Becky Reeves and Janet Carr. Back row: Dan Jones, Ron Hampton, Ron Yust, Phillip Anderson, Larry Walters and Peggy Samson.

State Line Plant Expansion

One of the most outstanding achievements of 1997 was the completion of the new 152-megawatt gas turbine peaking unit at the State Line Plant. This was the second generating unit constructed at the State Line facility, bringing total plant capacity to 250 megawatts.

On the heels of that success, the company announced on October 2, 1998, a plan for the construction of a 350 megawatt addition to the State Line Power Plant.

New Internet Web Site

In January 1997, as a way for customers to be in touch, an Internet web site was launched. (www.empiredistrict.com).

Power Plant Achievements and Upgrades

The Asbury Power Plant spring outage was a success as the 27-year-old plant went back online ahead of schedule. Asbury then achieved a record continuous run of 170 days.

For the year, the Asbury facility completed an all-time, on-line-hours record of 7,753 hours with only 178 forced-outage hours. This resulted in a record availability rate of 88.51%.

During 1997, technology upgrades were installed at both the Asbury and Riverton Plants. Asbury became more efficient when a new fiberglass cooling tower was installed, and at the Riverton Plant, refurbishment work was completed on the stack and a new overflow spillway was installed.

Centurion

Centurion, a state-of-the-art Customer Information System (CIS), and its development team at Empire gained special recognition in several national publications throughout the year. Centurion, which was developed in-house at an extremely low cost, featured technical benefits both equal to or better than commercially available CIS selling for millions of dollars.

In 1997, Centurion was internationally recognized at the Comdex Internet Application Awards in Germany. Empire was the only United States company to be recognized and the only company in the world to received two awards at Comdex. In addition, in 1998 Centurion was honored for innovation by *Public Utilities Fortnightly*.

Ice Storm Hits on New Year's Day

The Empire system and employees were tested early on in 1999 when an ice storm struck across the service area shortly after midnight on New Year's Day, knocking out power to 25% of Empire customers before it was through. Fighting frigid temperatures and gusting winds, employees worked through the following days to restore the system. Their quick, sustained response brought many calls of thanks from grateful customers.

UtiliCorp United Inc.

On May 10, 1999, faced with the uncertainties possible deregulation held, Empire entered into an Agreement and Plan of Merger with UtiliCorp

BELOW: Ice storm, 1999.



United, Inc., a Kansas City-based utility with international operations. The agreement was approved by Empire stockholders at a Special Shareholders' Meeting on September 3. The combination of UtiliCorp, Empire and St. Joseph Light & Power (another small Missouri utility) was designed to form a western Missouri-based utility that would deliver world-class service and products to its customers and achieve significant economies of scale in its operations. The merger transaction was slated to be completed by late 2000.

State Line Combined Cycle

In 1999, Empire began the largest construction project in its history with a 350-megawatt addition to the State Line Plant. The project was undertaken jointly with Westar Generating, Inc., a wholly owned subsidiary of Western Resources, Inc. The new generating unit would use combined cycle technology to capture and recycle waste heat created by the generating process. Also planned was a new 161-kV transmission line to be built in 2000 to accommodate the increased power generation. The new unit, scheduled to be online in mid-2001, would make the State Line Combined Cycle Plant one of the most efficient and environmentally friendly facilities in the nation.

Under the joint agreement, Empire would own 60% of the combined cycle unit and would be responsible for operating the facility once construction was concluded. Westar would own the remaining 40%.



ABOVE: Empire employees attend the groundbreaking for the State Line Combined Cycle Plant.

New Products Offered

Empire added or expanded five product lines that assisted homes and businesses in protecting their electronic investments. The new expanded products for 1999 included point-of-use surge protectors; MeterTreater, a whole-house surge protection leasing plan; Generlink, an innovative solution for using portable generators; UPS (Uninterruptible Power Supply) System, which provided standby power and surge protection; and an extended power generator.

Empire was also offering an entire array of new services which included monitored security for homes and businesses (E-Watch), fiber optic leasing, monitored energy management and automation, and specialty lighting (E-Luminate). Just as Empire had marketed kitchen appliances seventy years before, the company continued to be a regional supplier of choice for energy and energy-related products.

PeopleSoft and Centurion

In late 1997, after a careful review of the available alternatives, Empire committed to purchase and implement an integrated financial and human resources software system from PeopleSoft, Inc.

The new software system was installed in 1999 replacing 20-year-old financial management and human resource software packages. The employee-designed Centurion Customer Information System was also installed. Centurion provided state-of-the-art technologies that gave the flexibility necessary to support both regulated and new non-regulated services. With this a flexible, more cost-effective client service technology replaced the mainframe system. During 1998 and 1999, Empire employees replaced every computer system that the company had built and installed over the previous 15 years.

Brick Stacks Removed From Riverton Plant

Two distinctive landmarks were removed when the remaining two of the original four, 250-foot tall brick smoke stacks at the Riverton Power Plant were methodically dismantled. The first two stacks were razed during the 1950s.

Empire Employees Receive Les Reynolds Million Hour Award

Despite all the challenges posed by nature, Empire employees marked a major milestone in July, reaching, for the first time in 32 years, one million man-hours worked without a lost time injury. Empire was presented with the Les Reynolds Million Hour Award for outstanding achievement in safety.

Order No. 2000

On December 15, 1999, the FERC issued Order No. 2000 which encouraged development of Regional Transmission Organizations (RTO). RTOs were designed to administer the transmission grid on a regional basis. Order 2000 was intended to continue the process of promoting open and more competitive markets in bulk power sales of electricity that was begun with Order 888.

Empire Good Will

In 1999, Empire employees raised a total of \$90,000 for the local United Way campaign. The majority of the funds were raised from employee donations. Other fundraisers included various in-house breakfasts and lunches. The cuisine varied from ham-n-beans to build-your-own nachos to breakfast burritos.

Empire also presented a check for \$3,050 to the Joplin and Springfield Ronald McDonald Houses. The funds were raised through the sale of 610 Empire collector replica bucket trucks.

And, once again, the annual Christmas Elf Program assisted in brightening the holidays for nearly 600 elderly citizens of the area.

Y2K Prepared

With the century closing, Empire management created a task force to document and test areas of the company which could be affected by the rollover to the Year 2000 (Y2K). Their plan, named Year 2000 Readiness Plan, called for a multi-step approach. The plan included creating awareness of the Y2K problem, developing procedures for documenting readiness, developing a methodology for readiness planning and testing, and remediation of affected items pursuant to the Year 2000 Readiness Plan. In the end, approximately 150 employees spent an uneventful night at work on New Year's Eve, ready to respond to any Y2K rollover difficulties.

BELOW RIGHT: Vicki Williams and Dale Harrington discuss applicant qualifications.

Vicki Williams

Vicki Williams became director of Human Resources in 1999. As director, her responsibilities encompassed employee relations, benefits, training and payroll.

A native of Alba, Missouri, Williams is a graduate of Alba High School. She began her career at Empire in 1966 in the computer services department. She moved to the personnel department in 1968 and was named assistant director of personnel in 1978 and manager of human resources in 1995.

Williams reflected on her career at Empire stating, "It is a great source of pride for me to see employees begin working in an entry level position and progress to being seasoned and respected employees of Empire. I am so proud and honored to have been involved in bringing those individuals into the company that will continue to build on our solid reputation of having skilled, 'good' people that take care of business so that our shareholders, customers and employees can be proud to be associated with Empire."



A Century Closes

Empire president Myron W. McKinney summed up the 90th year in Empire's 1999 Annual Report stating, "The 90th anniversary of the company's founding was filled with significant achievements. It began with the challenges of a New Year's Day ice storm and ended with a smooth, uneventful transition to the year 2000. In between, we embarked upon our largest construction program ever, upgraded technologies throughout the organization, and achieved efficiencies and innovations that have set the stage for further progress in the future."

21st Century

EDE Holdings, Inc.

In 2000, Empire launched EDE Holdings, Inc., a holding corporation for the company's non-regulated businesses. EDE Holdings consisted of EDE Industries, Inc., which marketed contract lighting services, fiber optics and telecommunications, and E-Watch, a monitored security program. Conversant, Inc., another part of EDE Holdings, began business in 2002.

In early February 2003, Empire added dial-up Internet service to its existing line of non-regulated services with the purchase of Joplin.com. The purchase was made through Transaeris, a non-regulated subsidiary of EDE Holdings, Inc. Together, the two companies took the name of Fast Freedom, Inc. Joplin.com was the leading Internet provider in the Joplin area, serving nearly 6,000 customers. EDE Holdings, Inc. posted its first profitable period in the fourth quarter of 2003.

BELOW: The Annual Shareholders Meeting in 2000 featured displays of Empire's non-regulated product offerings.





ABOVE: Christine Broadwater, Tom Snyder and Myron McKinney (far right) join Missouri Department of Conservation officials to dedicate the new Cooper Creek Access.

RIGHT: Doug Garvin, Baxter Line Operations, climbs aboard Big Al.

Digger Derrick for Sale

In March 2000, Empire donated \$3,045 to the Muscular Dystrophy Association from the proceeds received from the sale of a toy collector truck. The Digger Derrick truck, the second in a series, carried on a tradition of giving that began with the creation and sale of the Empire bucket truck, offered in 1998.

Cooper Creek Access

On May 23, 2000, the newest public access to Lake Taneycomo was officially dedicated. The development of Cooper Creek Access was made possible through Empire's partnership with the Missouri Department of Conservation.

Big Al

The newest addition to the Empire transportation fleet arrived in July, 2000. The Altec A. Class Transmission Line Truck, dubbed Big Al, was able to reach a height of 82 feet and surpassed the reaching capacity of the Teco truck. The 1982 Teco truck had a maximum height capacity of 65 feet.



Centurion Receives Additional Awards

Centurion, Empire's customer information system, won top honors at the international Object Application Awards 2000 held in Vienna, Austria. Chosen from a field of more than 100 worldwide submissions, Centurion received the "Best Implementation of a Distributed Application using Object Technology" category.

UtiliCorp Terminates Merger Agreement

On January 2, 2001, Empire received official notification that UtiliCorp was exercising its right to terminate the joint merger agreement. Under the terms of the agreement, either Empire or UtiliCorp could negate the deal if all regulatory approvals were not finalized by December 31, 2000.

State Line Plant Gains New Combined Cycle Turbine

On June 25, 2001, the Empire system grew by 500 megawatts as the new combined cycle turbine came online at the State Line Plant. The operation was one of the most efficient and cleanest burning facilities in the nation. One feature of the plant was the heat recovery steam generators which play a crucial role in the high efficiency of the total plant. The heat recovery system worked by capturing the otherwise lost heat from the exhaust of the combustion turbines. The exhaust heat was recycled to supply enough steam to produce an additional 200 megawatts of power.

Other interesting facts concerning the plant were the unit generated enough power to supply 29,400 homes with electricity. The amount of natural gas consumed by the unit in one hour was sufficient to heat an average home every day for three years. The cost of the \$200 million expansion was comparable to the construction of the TWA Dome stadium in St. Louis Missouri.



LEFT: The State Line team displays the dedication plaque for the combined cycle project. Front row: John Woods, Terry Krause, Bill Howell, Brad Beecher and Tony Embrey. Back row: Bill McNeil, Keith Ketcherside, Joe Simmons, Roy Pugh, Shane Conley, Deborah Woods, Mike Malcolm, Larry VanGilder, Gary Pierce, Ed Easson.



ABOVE: State Line Combined Cycle Plant.

1000 Megawatts Reached For The First Time

On August 9, 2001, the need for the recently-completed State Line Combined Cycle unit was punctuated when a record peak demand of 1001 megawatts was reached. The new peak occurred at 3:00 pm when the temperature climbed to 98 degrees.

Hedging Strategies

Empire management continued to plan ahead by establishing prudent hedging strategies. Fuel and purchased power made up about 55% of the operating expenses. Fuel price volatility had major ramifications on both short-term and long-term purchasing strategies. In 2001, a hedging strategy was implemented for natural gas, which allowed use of both physical purchases and financial tools. Under this strategy, the company would hedge future natural gas requirements over time under a set of predetermined percentages. The aim was to lessen the impact of volatility in fuel and purchased power expenses and establish a more predictable basis for future rate proceedings.

In September 2001, Empire received approval from the Missouri Public Service Commission to implement an Interim Energy Charge (IEC) which provided a certain level of protection from the volatile wholesale fuel market. The IEC was scheduled to be in effect until October 2003. At that point, the actual fuel and purchased power costs would be audited and any amounts collected for the IEC above the actual costs would be refunded with interest to customers. With the addition of the IEC in Missouri, nearly 95% of the company's electric business had protection from fuel cost volatility.

Call Center East Opens

The new Call Center East went online in the summer of 2001 to provide customers with quick responses to their inquiries. In addition, plans began for a global positioning system which would allow Empire to move more quickly by pinpointing service interruption problems.

Myron McKinney Retires

Myron McKinney retired as president and CEO of Empire on April 30, 2002. He stated in the company's annual report, "After more than thirty-four years with Empire, I can honestly say I have been proud every day to be associated with this organization and the wonderful people who make up the Empire family. At Empire, integrity is not a word; it's a way of life." McKinney was named Chairman of the Board of Directors effective May 1, 2002.



ABOVE: The Ozark office was converted to a call center in 2001. Pictured: Twila Robbins, Martha Day, Tina Jung and Linda LeJeune.

William (Bill) L. Gipson Becomes New President & Chief Executive Officer

Bill Gipson joined the company in 1981 in the Information Technology area and was promoted to manager of Economic Development in 1987. In 1995 he was promoted to director of Commercial Operations, and in early 1997, was named general manager of Commercial Operations. He was elected vice president of Commercial Operations in April 1997, executive vice president in 2001 and chief operating officer later that same year. In 2002 he was elected to the Board of Directors and became president and chief executive officer of Empire.

A native of Jasper County, Missouri, Gipson graduated from Missouri Southern State University (MSSU) with a Bachelor of Science degree in Management Technology.

Gipson served as chairman of the Missouri Energy Development Association and the Joplin Area of Chamber of Commerce. He served as a board member of the Missouri Development Association, the Edison Electric Institute, the Financial Research Institute, and as chairman of the Missouri Chamber of Commerce. He also served as a member of the MSSU School of Business Advisory Council, the MSSU Foundation and the Joplin Rotary Club.



Missouri Energy Development Association

Empire joined with other Missouri investor-owned electric and natural gas companies in October 2002 to create the Missouri Energy Development Association (MEDA). Based in Jefferson City, Missouri, MEDA's purpose was to serve as an industry voice on legislative and regulatory issues. Empire president and CEO Bill Gipson became the chairman of MEDA's Board of Directors.

In 2003, MEDA played a key role in passing initiatives at the state level, including the authorization of the fuel adjustment clause for electric companies and predetermination for significant capital projects such as new generating facilities. On the regulatory side, MEDA worked for more balanced treatment of return on equity, pension expense and depreciation.

BELOW: Enhanced stainless steel wheel at Ozark Beach Plant.

Power Plant News

Construction for the \$55 million addition began at the Energy Center during the summer months of 2002. The two 50 - megawatt FT8s used jet

engine technology to produce efficient power with very low emissions when fueled by natural gas. The company gained additional efficiencies in the construction by using the existing Energy Center site and some of its current infrastructure. The FT8s were the company's most efficient, simple-cycle generating units.

The State Line Combined Cycle Unit was named one of the five lowest-cost providers of combined-cycle generation in the nation by *Power* magazine in 2002.

Ozark Beach employees replaced two of the hydro facility's water wheels and, in the process, gave the units a complete maintenance overhaul. The previous water wheels dated back to the early 1930s. According to plant manager Tom Snyder, the average life expectancy of the wheels was usually thirty to forty years. The replacement stainless steel wheels with an enhanced design allowed an almost 20% increase in output. The remaining two wheels were replaced two years later. With all four water wheels replaced, the generation capacity was increased from 16 megawatts to nearly 19 megawatts.





In 2002, the control room at the Asbury Plant converted to high-tech with the installation of a fully automated Distributed Control System (DCS). One of the key benefits of the new DCS was its extensive data collection capability. This dramatically enhanced the plant staff's ability to analyze problems that occur during plant operation.

Empire continued to support the environment by renewing the Asbury program to burn tire derived fuel (TDF). TDF was a fuel source made by recycling tire products. Asbury's controlled conditions and continuous emission monitoring system ensured that TDF was environmentally safe. Plans called for burning up to 10,000 tons of TDF each year, or about 1% to 2% of Asbury's total fuel. It is estimated that 10,000 tons was equal to just about one million scrap tires.

International Lineman's Rodeo

Some of Empire's line crews competed at the 19th Annual International Lineman's Rodeo in Bonner Springs, Kansas. A total of 234 teams of linemen representing the United States, the United Kingdom, Canada and Jamaica participated in the event. The event tested the skill and safety of the competitors and provided an opportunity to share experiences with others in their unique trade.

ABOVE: The Energy Center team installs a plaque to dedicate the expansion project. Pictured: Brian Berkstresser, Bill Shipley, Joe Simmons, Dale Jasumback, Joe Ruark (Asbell Construction), Buck Shirk, Darren Roper, Ryan Kerschen, Willie Sturm, Jeff Asbell (Asbell Construction), Loy Mahan, Robert Massey, Richard Metsker, and Brad Beecher.



BELOW: United Way team captain, Yvonne Copeland, and Scuba Bill helped raise funds for another successful campaign..

Empire Good Will

Since the creation of the first formal economic development program in 1946, Empire continued to play an active role in the local communities. In 2002, Empire donated an unused tract of land to a not-for-profit organization in Neosho, Missouri. The Joplin Area Chamber of Commerce named Empire its 2002 Industry of the Year citing contributions toward improving the quality of life and the impact it has had on the local economy. An individual honor went to Rick Wallace, manager of line operations in Ozark, Missouri, who received Chamber Member of the Year from the Ozark Area Chamber of Commerce. Empire cyclists took part in the Children's Miracle Network Bike Tour and brought home the trophy for the company with the most participants.

Empire employees raised more than \$120,000 for area United Way organizations during 2002. They also gave their talents and resources to area schools by providing school supplies, judging science contests and reading to children. In 2002, Empire celebrated the 20th anniversary of Project Help, a joint program for the American Red Cross. Over those two decades, \$570,000 in assistance had been distributed to the elderly and handicapped for meeting emergency, energy related needs.

Empire Acquires Precision Products

On July 17, 2002, EDE Holdings, Inc., a company subsidiary, together with other investors, acquired the assets of the Precision Products Department of Eagle Picher Technologies, LLC, a manufacturer of close-tolerance metal products whose customers are in the aerospace, electronics, telecommunications and machinery industries. The acquisition was accomplished through the creation of the newly formed, non-regulated limited liability company, Mid America Precision Products. EDE Holdings acquired a controlling 50.01% interest in this newly formed company through a cash investment of \$650,000.

Empire Museum Relocates to Joplin Museum Complex

As 2002 closed, The Empire District Electric Company Museum located at the company's headquarters was moved to the Joplin Museum Complex. A display area at the Complex was renovated to accommodate the new exhibit. For many years, members of the Empire Retirees Association collected significant artifacts and memorabilia. After museum representatives learned of the unique collection, they became interested in ensuring its preservation while making it more readily accessible to the community. The Empire District Electric Company has had a long association with the museum. Empire became the museum's first corporate sponsor in 1931.

Empire Sells E-Watch

On January 3, 2003, Empire sold E-Watch, a monitored security business, to Federal Protection, Inc. of Springfield, Missouri.



Southwest Power Pool Receives RTO Status

The Southwest Power Pool (SPP), of which Empire was a member, received conditional approval for regional transmission organization (RTO) status on February 10, 2004.

Empire Receives Three Awards from Missouri Governor Holden

In October 2003, Empire received three Missouri awards from Governor Bob Holden, the Pollution Prevention Award, the Recycling Award and the prestigious statewide Environmental Excellence Award. These awards recognized the Asbury Plant's TDF program, which recycled old tires into fuel for power generation.

Two New Turbines at Energy Center

In late April 2003, two new generating units were completed at the Energy Center. Units 3 and 4 were finished on time and on budget. Plant Manager Joe Simmons stated, "These new units consist of smaller components so they're easier to install and maintain." Aside from their manageable size, each unit contains two 25-Megawatt FT8 gas-fired turbines which are a derivative of the Pratt and Whitney JT8D aircraft engine. These units became

ABOVE: The Empire Museum in Joplin Museum Complex.

BELOW: Governor Holden presents the Environmental Excellence Award to Chris Schafer, Bob Bromley and Brad Beecher.





ABOVE: Energy Center, units 3 & 4.

the most efficient, simple-cycle generation owned by the company. The new peaking units could come online and reach full capacity in about ten minutes. They also feature the latest technology in continuous emissions monitoring. Plant managers could monitor and control each of the four Energy Center units and the State Line Unit 1 (which also fell under the operational duties of Energy Center staff) from inside the new main control room.

Deadly Tornado Ravages Region

On May 4, 2003, a series of deadly tornadoes ripped through the Empire District region. Empire employees were immediately called to action. Called “a 50-year to 100-year event” by the National Weather Service, the three supercell storm systems devastated local communities and huge swatches of rural areas. Damage to the Empire system was unprecedented. The storm destroyed two substations and significantly damaged others. The losses were monumental including 170 transmission poles, three steel towers, more than seven miles of transmission lines, about 1,400 distribution poles and nearly 50 miles of distribution line. About 30,000 of the company’s 157,000 customers lost power. By midnight the next day, power had been restored to all but 10,000 customers.

The storm touched down in southeast Kansas, then crossed into southwest Missouri, delivering devastating damage. It ranged in width from 200 to 300 yards. The communities of Carl Junction, Pierce City and Stockton suffered the worst damage. In the end, the tornado left a path of destruction of approximately 75 miles.



Joplin Main Street Receives New Period Street Lights

Empire assisted the City of Joplin with new historical period light fixtures on Main Street from Fourth Street to Eighth Street. The project was the inspiration of the City of Joplin and Main Street Joplin. Main Street Joplin was a not-for-profit organization that assisted in the revitalization of the downtown area.

July 4th Storm Knocks Out Power

During the morning of July 4, 2004, thunderstorms wreaked havoc on the region knocking out power for 35,000 Empire customers. High winds caused severe damage to hundreds of trees. Many of the limbs landed directly on power lines or inconveniently blocked roads making access to remote, rural areas problematic. Power was restored to most of the region by July 8, however, on that evening another burst of thunderstorms moved through the area causing some additional outages. By the following day, power was once again restored.

ABOVE: Empire crews repair storm damage in the Aurora area.

Empire Crews Assist Southern States

In September 2004, for the first time in company history, Empire line crews were dispatched to lend assistance with a hurricane restoration effort. Hurricane Ivan ravaged the southern states of Mississippi, Alabama, Florida and South Carolina. Empire personnel came to the aide along with 1,800 utility workers from across the nation. Ivan's wrath contained winds of more than 130 mph and left 1.4 million people without power.

Nearly one year later, Empire personnel were called to Mississippi to help with the relief efforts from the devastating damage caused by Hurricane Katrina. Empire dispatched 21 crew members who worked 5,600 man-hours to assist in the restoration effort.

BELOW: Empire Katrina relief crew.



Empire Receives Distinguished Citizen Award

On November 30, 2004, the Ozark Trails Council of the Boy Scouts of America honored Empire and its employees with their Distinguished Citizen Award. The award was given in recognition of the generous dedication of time, service and financial gifts Empire and its employees have continually shown the region.

Safety Record Reached

Congratulations were in order as the employees at Empire surpassed the 1.5 million man-hour plateau without a lost-time injury. On December 12, 2004, for the first time in the 95-year history of the company, the 1.5 million man-hour goal without a lost-time injury was reached.

Wind Generation

Company history was made in 2004 when Empire signed a 20-year contract with PPM Energy. The agreement provided for the purchase of energy generated from 100 individual wind turbines at the 150-megawatt Elk River Windfarm in Butler County, Kansas.

The Elk River Windfarm is an 8,000-acre area located near Beaumont, Kansas. At the time, wind energy offered an environmentally friendly alternative that was affordable as well as stable in price. If the energy generated by wind at Elk River were generated at a typical coal generation plant, nearly 300,000 tons of coal fuel would be consumed per year.

Empire's vice president of Energy Supply, Brad Beecher, stated, "We're not only gaining the environmental benefits of a renewable fuel source, we're creating a balanced mix of generation options which enhances price stability."

The decision for alternative sources of energy was timely with market prices for purchased power and natural gas hitting record highs and rail transportation issues occurring throughout the Midwest impacting coal inventories. This project represented the largest wind generating operation in the state of Kansas. The site was also located close to existing transmission.

During the first quarter of 2006, the "Power on the Prairie" generated 142,595 megawatt-hours of power and contributed an estimated savings of about \$4.2 million in purchased power costs.



ABOVE: Elk River Windfarm.

Riverton Plant Celebrates 100 Years

2005 marked a 100-year anniversary for the Riverton Plant. A Centennial Celebration of the Riverton Plant and a groundbreaking ceremony for a new generating unit, referred to as Unit 12, was held on May 21, 2005.

New Substation for Webb City

A new \$2.75 million substation was completed just north of Webb City. The new substation was constructed to meet the growing needs of the Webb City area and was officially named the Cardinal Substation with its strong connection to the home team of the Webb City Cardinals.

BELOW: Empire representatives and Webb City community leaders dedicated the new Cardinal Substation on June 8, 2005.



Asbury Plant Shines

The Asbury Power Plant was recognized as one of *Power* magazine's Top Plants in 2005. The plant received the award for mixing pieces of tire-derived fuel (TDF) into the coal fuel supply while not compromising local air quality.

In December of 2005, the Asbury Plant set a record for running 4,624 continuous hours or 192.7 days without a work stoppage. The previous record was set in 2000.

BELOW: Asbury employees after a successful spring maintenance outage.



Tornadoes Hit Branson

On March 11 and 12, 2006, the Branson area experienced a series of strong storms, tornadoes and straight-line winds. The Missouri communities of Marionville, Clever and Billings also suffered damages. For a short period of time, about 8,500 customers were without power.

Plum Point

In keeping a balanced generation portfolio, Empire signed an agreement to become a partner in the Plum Point Energy Station located near Osceola, Arkansas. Construction of the 665-megawatt coal-fired plant began in March of 2006. Empire's commitment was to own a 50-megawatt share of the plant.

Empire Acquires Natural Gas Operation

On June 1, 2006, Empire branched out, acquiring another utility when they purchased the Missouri natural gas distribution operations of Aquila Inc.

The newly formed Empire District Gas Company was a wholly owned subsidiary consisting of 48,500 customers representing 44 communities in northwest, north central, and west central Missouri. The gas system included 1,274 miles of transmission and distribution mains. The acquisition allowed for some diversity by balancing the company's summer electric air-conditioning peak with the gas company's winter heating peak.



ABOVE: Bill Gipson and Aquila CEO Rick Green sign documents completing the sale of Aquila's Missouri gas operations to Empire.

Energy Star Light Bulb

In 2006, Empire embarked on its second year in the Energy Star, "Change a Light, Change the World" program. Empire teamed up with the Missouri Department of Natural Resources and Midwest Energy Efficiency Alliance to become a sponsor of the program that offered Empire residential customers instant rebates to encourage use of CFLs. By using 75% less energy than standard bulbs, energy savings of \$30 per bulb was possible. Customers purchased 9,800 bulbs through the program in 2006.

BELOW: Ice storm, January 2007.

Paralyzing Ice Storms Cover Service Area

History was rewritten in 2007 when two destructive ice storms bore down on the area, the first in January and the second in December.

On January 12, a paralyzing ice storm that raged for three days affected the majority of the Empire service territory. Crews worked through the freezing rain and ice putting lines back up only to have more continue to fall. At the height of the damage, more than half of the company's customers – or a total of 85,000 – were without power.

Communities that suffered the most severe damage included those in and around Aurora, Neosho, Ozark and Bolivar in Missouri as well as towns in northeast Oklahoma and northwest Arkansas. Many other parts of the service area experienced damage and power outages as well.

Empire enlisted an additional 1,500 workers from across the country to assist the company's 400 employees working in the field during the restoration effort.

Finding lodging for all the outside workers proved to be another challenge. Rooms quickly filled in Joplin, forcing alternate planning. With many hotels unavailable in





ABOVE: Ice storm, January 2007.

RIGHT: Riverton employees with new Unit 12.

Springfield, which was also hit by the storm, Empire was forced to bus visiting crews to hotels and motels in Branson. In total, Empire rented out about 7,300 room nights to board the workers.

During the effort, 1,800 poles, 3,500 crossarms, and 400 transformers were replaced, and nearly 100,000 calls were received in the company's call center.

By January 23, the company reported less than 2,500 customers without power. Many of those remaining had property damage that hindered reconnection.

As a side note, by March 15, city work crews in Neosho had removed nearly 105,000 cubic yards of tree limbs as part of the storm cleanup. This amount equaled to an astonishing 29,000 pickup truck loads. According to Neosho finance director, Bob Blackwood, the cost for cleaning up the city was around \$1.6 million to \$1.7 million.

For this storm, the total cost to Empire alone exceeded \$20 million. This amount was substantially higher than the \$7 million incurred from the tornadoes that swept through the area in May of 2003, previously the most damaging storm in the company's history.

Then, on December 9, as the Christmas holiday approached and thoughts were turning to family and festivities, Empire was hit again. This time, 65,000 customers were affected, many in and around the Joplin area.

The damage was similar to the January ice storm, with lines and equipment succumbing to the affects of heavy ice and wind. Empire crews were assisted by 1,200 contract personnel and by December 19, virtually all custom-



ers were restored to service.

On January 31, the company announced they had incurred expenses of more than \$18 million in the repair effort.

That same month the company and its employees were honored with the Edison Electric Institute “Emergency Recovery Award.” This was the first time Empire employees had been chosen to receive this national award given in recognition of their “perseverance through the harshest of conditions,” in response to the January 2007 ice storm.

Speaking at the company’s annual meeting in April, Bill Gipson, president and CEO, remarked, “I couldn’t be more proud of my fellow employees and the outside crews who assisted us during the restoration. Their performance was nothing short of heroic. This award is a tribute to their skill, dedication, and tenacity. And their repeat performance eleven months later when we were dealt a second storm further amplifies my pride in our employees.”

Riverton Plant Adds New Turbine

On Tuesday, April 10, 2007, Riverton Unit 12 came online. The new generating unit was a Siemens Westinghouse V84.3A2 combustion turbine fueled by natural gas. To accommodate the new turbine, a new 161-kilovolt substation was constructed on the site, existing plant-structures were removed and a new natural gas lateral line and metering station were constructed. Total investment in the plant, on-site transmission and substation facilities was \$49 million. The new unit offered high efficiency, economical operation and low emissions.

NO_x Reduction

Installation of a selective catalytic reduction system was added to the Asbury Power Plant. Selective catalytic reduction is a process where a gaseous or liquid reducing agent (anhydrous ammonia in Asbury’s case) is added to the flue or exhaust gas stream and is absorbed onto a catalyst. The ammonia reacts with NO_x in the exhaust gas to form water vapor and nitrogen gas.

With the new system in place, an 85% reduction in NO_x could be achieved.

New Substation for Republic

A new substation was constructed for Republic, Missouri, to meet the fast growing population. Over the preceeding five years, 1,067 building permits were issued in Republic totaling \$144 million. During this period, Empire responded to this extraordinary growth by investing \$8 million in improvements, including \$1.8 million for the construction of the new substation.

Additional Street Lights for Joplin

New street lights were added to Joplin as a result of a public safety tax which was passed by the electorate in November 2006. The street lighting project entailed nearly 4,000 new street lights. The new 150-watt, high pressure sodium lights had a longer life span and produced 16,000 lumens of



ABOVE: Bob McKenzie and Rick Stockton discuss the street lighting project in Joplin.

BELOW: Vince Weatherly at work on the new Republic Substation.



lighting power compared to the former 175-watt mercury vapor light which provided just 6,800 lumens.

Fiber Optic Growth

Fiber optics continued to be a successful growing business. Starting in 1996 with a first year goal of \$5,000 in revenue by 2007, revenue had grown to more than \$3.6 million. The network consisted of 835 miles of fiber with 475 connections.



ABOVE: Meridian Way Windfarm.

Flood Waters Close Ozark Beach Plant

The Ozark Beach Plant sustained a long-term outage when White River flooded over the dam. Record-setting rainfall amounts occurred during the months of March and April. At flood peak, the water crested at the highest level since the construction of Table Rock Dam. Due to the flooding, the plant did not go on line until August 2008.

Satellite Communications

The employee friendly E-Work came online in 2008. The program, developed by Empire's Information Technology Department, allowed each truck to communicate via satellite with the office throughout the day, enabling linemen to receive jobs and complete jobs without having to return to the office. The new program also did away with the cumbersome, time-consuming hand-written paper work that existed previously.

Kelly Walters

Kelly Walters became the first female senior officer in 2006 when she was elected vice president – Regulatory and Services. Walters’ job responsibilities include corporate communications, information services, land administration, planning and regulatory, purchasing and stores and safety and environmental services. She joined the company in 1988 as a fuel accountant and held various accounting and management positions before being named director of auditing in 1997. During a four-year separation, she served as the Director of Financial Services for Crowder College in Neosho. She returned to the Company in 2001 as Director of Planning and Regulatory and was later named General Manager of Regulatory and Services.

A native of southwest Missouri, Kelly holds a Bachelor of Science degree in Accounting from Pittsburg State University and a Masters degree in Human Resource Management from Webster University, St. Louis, Missouri.

Kelly serves as a member of the Crowder College Foundation Board and is a former board member and treasurer of the American Red Cross Southwest Missouri Chapter. She is a graduate of Leadership Missouri, and is a member of the Anderson Lions Club and serves on the Missouri Workforce Investment Board.

Walters summed up her career at Empire, “There have been many female managers at Empire and I am honored to be included in that group. Regardless of gender, it is a great responsibility and I have and

will continue to work hard to obtain the respect of those working with me.”

She is also pleased to be a part of Empire’s second hundred years. “For 100 years, Empire’s culture has encouraged people to do their individual best to provide safe, reliable service to our customers and solid value to our stockholders. This tradition will continue as we move forward, and I look forward to being a part of Empire’s future.”



Tornado Hits Tri-State Area

Another deadly storm struck Empire’s service territory May 10, 2008. The storm packed winds up to 170 miles per hour, baseball-size hail and a series of deadly tornadoes. It stretched through the states of Kansas, Oklahoma and Missouri leaving 14,000 customers without power.

Meridian Way Wind Farm

Ground was broken for the Meridian Way Wind Farm in Cloud County, Kansas, on April 11, 2008, and commercial operations began in Decem-

ABOVE: Kelly Walters with Otto Martin and Bob Barchak of Land Administration as they survey maps of company land holdings.

ber 2008. The wind farm, owned and operated by Horizon Wind Energy, is located near Concordia, Kansas, and was expected to provide 350,000 megawatt-hours of energy annually.

Empire signed a 20-year purchased power agreement with Horizon Wind Energy for 105 megawatts of Meridian Way. The project consists of 35 three-megawatt Vesta V90 wind turbines. The structures stand 260 feet tall at the hub and have a blade diameter of nearly 300 feet. They kick into operation with a nine-mile-per-hour wind and cut off when wind speeds reach 58 miles per hour.

When combined with energy from Elk River Windfarm, the two projects were expected to provide about 15% of Empire's energy needs in 2009.

A Final Word

As The Empire District Electric Company ended a century of service, its workforce had expanded to 733 employees. Its electric segment had grown to provide service to 167,645 customers in 121 incorporated communities in Missouri, Kansas, Oklahoma, and Arkansas with 1,281 miles of transmission lines, 6,857 miles of distribution lines, and 1,255 megawatts of generation. The natural gas segment was providing service to 44,703 customers in 44 communities in northwest, north central, and west central Missouri through 87 miles of transmission mains and 1,113 miles of distribution mains. Water was provided in three Missouri communities to about 4,500 customers through 87 miles of mains, and the non-regulated subsidiary for the fiber optics business had 84 customers.

BELOW: Natural gas service is extended to the Marmaton River Project in Nevada. Pictured: Don Vernon and Norman Wilson.





William L. Gipson
President and Chief Executive Officer

October 2009

As Brad was writing our 100-year history, there was much discussion of generating plants, poles, and electric and gas lines. Clearly it is our business to build these kinds of facilities in order to serve our customers. But our business is much more than kilowatts and mcfs; our business is people.

In a way, this is true of every business. But energy utilities, especially small, investor-owned utilities like Empire, embody the concept in a special way. The work we do ensures that factories and hospitals operate, that ballparks are lit for night games, that homes are warm. We – “we” meaning Empire employees and shareholders – impact the lives of everyone in the Empire service territory every single day, and when we’ve done our jobs right, they don’t even notice.

It is this role that we play in our communities and our awareness of the responsibilities it entails that form the core values of Empire. We work hard every day to ensure that our customers get reliable, cost-effective energy, that our communities receive the benefits of a good corporate citizen, that our employees enjoy a positive work experience, and that our shareholders receive a good return on an investment of which they are proud.

Our legacy and our values will continue to guide us as we face the challenges ahead. We have an obligation and a commitment to go forward thoughtfully. We take this duty seriously as we constantly strive to fulfill our mission to be a respected supplier of energy and services.

Bill Gipson

The Empire District Electric Company
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Celebrating a Century of Service

Since the early days of The Empire District Electric Company, employees and their families have enjoyed gathering for food and fun at picnics. To celebrate the 100-year anniversary, three picnics were held with over 1,300 employees, retirees, and their families enjoying the festivities.



ABOVE: Annual picnic for Empire employees at Riverton, July 14, 1914.

OPPOSITE: Joplin's Schifferdecker Park, the former location of Empire's Electric Park, was the perfect spot for the Joplin picnic.





THIS PAGE: Rain early in the day didn't dampen the spirits of picnic-goers in Ozark.





THIS PAGE: There was plenty of friendly competition in Sedalia with ladder golf and hula hoop contests.

About the Author

Brad Belk is a native of Joplin, Missouri. He has been a practicing public historian for the last twenty-two years. Belk is an author, educator, archivist, historian, exhibit designer, conservator and historical film script composer and producer. He has been associated with the Joplin Museum Complex since 1987 and currently holds the position of Executive Director. The Joplin Museum Complex is committed to preserving the history of Joplin, the Tri-State Mining District and southwest Missouri.

Belk graduated from the University of Missouri in 1978, and attended the University of Kansas, as well as graduate work at Pittsburg State University and the University of Oklahoma.

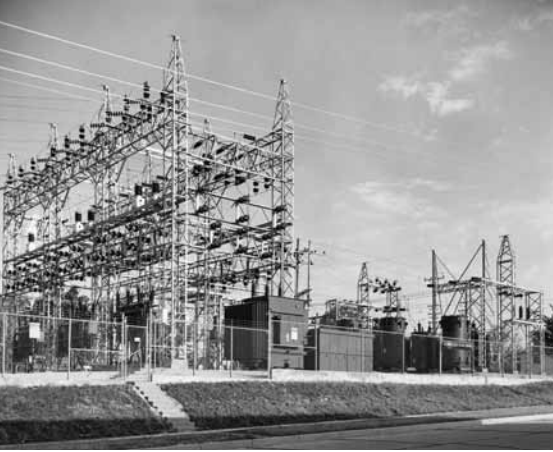
He is currently a member of the Joplin Elk's Elkland Advisory Committee, Joplin Sports Hall of Fame Selection Committee, Missouri History Speakers' Bureau, American Association of Museums, American Association For State and Local History, Association of Science Museum Directors, University of Missouri Alumni Association, The Archeological Conservancy, Society of American Archivist, Seven Eagle Club of Center Creek Golf Club, National Council on Public History, National Trust for Historic Preservation, an honorary Life Member of the Joplin Historical Society and historian of the Joplin Rotary Club.

Belk has held official positions in a wide variety of organizations including: president of the Merle Evans Circus Tent #27; vice president of the Heritage Trust; president of the Ozark Museums Association, secretary, treasurer and co-founder of the Tri-State Gem and Mineral Society; co-chairman of the City of Joplin's 125th Celebration; chairman and host of the 1999 state conference for the Missouri Alliance for Historic Preservation; director of the Crystal Cave Rediscovery Project; adjunct faculty member of Missouri State University; board member of the Route 66 Association of Missouri; board member of the Missouri Alliance for Historic Preservation; chairman of the Route 66 monolith project; advisory board member of the Joplin Convention & Visitor's Bureau and Joplin chairman for the Missouri Lek Trek.

He has served on the advisory committee for the Jasper County Centennial Courthouse Committee, Vision Joplin and the 2001 Capital Improvements City Task Force.

For a decade Belk provided an historical photograph and narration for the weekly "The Way We Were" feature in *The Joplin Globe*. He has assisted *The Joplin Globe* in numerous historical series and celebrations. In 2009 Belk began writing a monthly column for the newspaper.

To further preserve the region's local history, Belk began writing books and producing historical DVDs in 1993. The following publications were written by Belk: (The * symbol denotes that Belk was a co-author.) * *Crystal Cave: Hidden Jewel of Joplin* (1998), *To Our Absent Brothers* (1999), *100 Years and Growing Strong* (1999), *The American Photographic Series: The Best of Joplin* (1999), **Joplin Keepsake Album* (2000), **Joplin Souvenir Album* (2001), **Joplin Historical Guide* (2003), *A Mausoleum Walking Tour of Mount Hope Cemetery* (2004), *Orley's Legacy: The History of Freeman Health System* (2005), *First United Methodist Church 100 Years 1905-2005* (2005), *Murvin Mosler's Gift to Joplin* (2005), *For the Families: Ronald McDonald House Celebrates the First Ten Years* (2009), and **History Guide Joplin & Carthage, Missouri* (2008). In 2009 Belk assisted in creating and writing



ABOVE: 26th Street substation #59.

BELOW: Sales consultant demonstrating light fixture in the 1920s.



a website covering the history of lead and zinc mining in Jasper County for Missouri Digital Heritage www.sos.mo.gov/mdh/collections.asp.

The following film productions which have been shown on local and regional television networks were co-written and co-produced by Belk: "From the Ground Up"- a three part series on the history of Joplin (1993-1996); "Tri-State Mining Roundtable" (2002); "The Joplin Museum Complex" (2003); "Scientific, Geological Wonders and Curiosities In and Near Joplin" (2003); Exploring the Mausoleums at Mount Hope Cemetery" (2004); Route 66: Missouri's Mother Road" (2006); "Hometown Heritage Series" (2007); "Thomas Hart Benton - - - from the Ozarks and Beyond" (2008); "Heart of a Community: The Story of Freeman Health System" (2008) and "The History of Missouri Southern State University" (2009).

Belk was honored by receiving the Missouri Governor's 2006 Missouri Humanities Award for his "special contribution to a community's understanding of its heritage" as well as "preserving the history of southwest Missouri."

In 1991, Brad married Belinda Porter. Both are extremely active in serving the Joplin community with their time and talents. They reside with their furry, four-legged family members Bea, Bella, Boo Boo, Baby and Blossom in the Eastmorland district of Joplin.



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ABOVE: November 8, 1910.

FOLLOWING: Empire line crew.

BELOW: Lowell Dam, Riverton.



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Dale Jasumback

Doug Kennedy

Frank Kerr

Ryan Kerschen

Louis LaGasse

Bob Lamb

Otto Martin

Jack Mayfield

Rick McCord

Sam McGarrah

Virginia McKenzie

Larry Myers

Beverly Newman

Phil Owens

Wade Palone

Randy Penn

Shane Peterson

Jess Reed

Donna Roehling

Richard Russell

Tom Schneider

Joe Simmons

Jack Smallwood

Tom Snyder

Richard Swaim

Steven Taylor

Martha Thomas

Dave Walden

Kelly Walters

Vicki Williams

John Woods



Index

10th and Wall substation, 39
 25-Year Club, 78, 82
 26th and Pearl substation, 89
 50th Anniversary, 98–99
 60th Anniversary, 111
 100th Anniversary, 178–81

A

AC/DC services, 87
 Acid Precipitation Act (1980), 130
 acid rain, 130
 Adams, Benjamin C., 22
 add-on heat pump program, 127
 advertisements
 for electrical appliances, 19
 employment ad in *Newsweek*, 66
 marketing by radio, 75
 for Project Help, 144
 Air Free Bill (1988–Missouri), 131
 airplane surveillance system, 73–74
 Alexander, Baron, 7
 all-electric homes, 41, 134
 Allen, Richard C. "Dick," 101, 105, 107, 117, 136
 Allis-Chalmers engine, 18
 Altec A Class Transmission Line Truck "Big Al," 158
 alternating current electrical service, 87
 alternative energy sources, 169
 alternative fuels, 117
 Alumbaugh, Anna Lee, 148
 Ambursen Hydraulic Construction Company, 16
 American Legion Post 592, 140
 American Society of Heating, Refrigeration and Air Conditioning Engineers, Springfield Chapter, 141
 American Society on Aging (ASA), 148
 Anderson, Phillip, 152
 Annual Report (1999), 156
 appliances. See electric appliances
 appliance service crew, 110
 Appliance Showroom, 24, 56
 APP (Average Payment Plan) program, 138
 Aquila Inc. acquisition, 170–71
 Arab Oil Embargo (1973), 112
 arc lamps, 8
 Arnold Electric Power Station Company of Chicago, 12
 ASA (American Society on Aging), 148
 Asbell, Jeff, 163
 Asbury Power Plant
 achievements and upgrades, 152
 burning Western coal, 131, 140, 142
 construction expenditures, 118
 control room conversion to DCS, 163
 electrostatic precipitators, 113
 groundbreaking and construction, 108, 109–10
 on line, 112
 NOx reduction, 173
 Operation Green Tree, 143
 overview, 106
 Power magazine's 2005 Top Plants, 170
 TDF program, 163, 165, 170
 Aschbacher, Ray, 145
 Associated Electric Cooperative, 133
 Atomic Energy Act (1954), 96
 Aurora Light Company, 68
 auto lot with lighting, 41
 "Avondale Mine," Elizabeth Mining Company, 39
 awards
 Asbury as one of *Power* magazine's 2005 Top Plants, 170
 Business of the Year Award (1994) from ASA, 148
 for Centurion CIS, 152, 159
 Comdex Internet Application Awards, 152, 153

Edison Electric Institute awards, 94, 100, 173
 for efficient lubrication system, 65
 Environmental Excellence Award, 165
 Forbes best small companies in America, 127
 "Highest Merit Award" from *Financial World*, 71
 Joplin Area Chamber of Commerce 2002 Industry of the Year award, 164
 Laura McCall Awards, 83, 100
 Les Reynolds Million Hour Award for safety, 155
 Missouri Community Business Award, 148
 NSC award for accident prevention, 100
 Ozark Area Chamber of Commerce Chamber Member of the Year, 164
 Ozark Trails Council of the Boy Scouts of America Distinguished Citizen Award, 168
 Pollution Prevention Award, 165
 recognition as 7th fastest growing utility, 141
 recognition as low-cost provider, 140, 162
 Recycling Award, 165
 Thousand Points of Light honor, 145
 United Fund Awards, 109
 United Way Gold Award, 132
 White House Office of Private Sector Initiatives commendation for Project Help, 124

Axtell, Louis, 84

B

Baker, Bruce, 143
 Baker, Chris, 145
 Baker, Larry, 124
 Baker, Robert W., 48
 baking and cooking contests, 82–83, 84, 100
 Ball, Noel, 75
 Ball, Tom, 145
 Barchak, Bob, 175
 Barnett, George B., 31, 41, 56
 Bartlett, E. O., 82
 Barton County Mine "Empire Mine," 112
 baseball team, 28, 43
 Beecher, Brad, 159, 163, 165, 169
 Beems, Jim, 109
 Belton Electric, 38
 Benton County Utilities Corporation, 58
 Berkstresser, Brian, 163
 Berry, Margaret, 83
 "Best Implementation of a Distributed Application using Object Technology" award for Centurion CIS, 159
 Better Light–Better Sight program, 48, 94
 Big Al, 158
 Black and Veatch Engineer-Architects, 79, 128
 Blackwood, Bob, 172
 Blazer-Vollmer Construction Company, Wichita, 37
 Blazic, Jane Ann, 145
 Blizzard, Roy, 26
 Bluejacket, Oklahoma, 73
 Board of Directors and officers, 14
 boiler construction at Riverton Plant, 91–92
 Bolivar Polk County Times, 111
 bond issues for municipal electric light plant, 11, 21
 bond issues for World War II (War Bonds), 56
 bowling teams, 84, 111
 Branson, Missouri
 entertainment industry, 141
 Home Economic Workshop for teachers, 100
 storm damage, 61, 170, 172
 white way inauguration, 74
 Branson Commercial Club, 17
 Brill, Debbie, 124
 Broadwater, Christine, 158
 Bromley, Bob, 143, 165
 Brown, Jamot, 12
 Brown, Leonard, 75
 Brown, Sam, 12
 Brownell high-speed engine, 68
 Buckeye high-speed engine, 68
 Bucyrus-Erie shovel, P&M, 107
 Bump, Milan R., 13, 14

Burr, Don, 114
 Burrow, Dee, 115
 Bush, G. H. W., 131, 145
 Business of the Year Award (1994) from ASA, 148
 Butler, Paul, 142
 Butts, Ann, 148

C

Call Center East, 161
 Call Centers, 148, 161, 172
 Campbell, James C., Jr., 136
 Camp Crowder, 60–61
 Cardinal Scale, 129
 Cardinal Substation, Webb City, 169
 Carnar, 150
 Carney, Harold, 84
 Carr, Janet, 148, 152
 Carthage limestone quarries, 15
 Cash, Mr., 53
 Caterpillar Diesel tractor and bulldozer, 86
 Centurion Customer Information System (CIS), 153, 155, 159
 Centurion Team with Comdex award, 152
 Chad, Bill, 7
 "Change a Light, Change the World" Energy Star light bulb program, 171
 Chapman, Twyla, 139
 Charter, 14
 Chartier, Jeneane, 139
 Cherokee County, Kansas, 4
 Children's Miracle Network Bike Tour, 164
 Childress Brothers Rabbits Foot Mine (Joplin), 4
 Choices program, 143–44
 Christmas Baskets, 23
 Christmas Day ice storm, 135
 Christmas decorations on Main Street, Joplin, 62, 94
 Christmas Elf Program, 148, 155
 Christmas Eve long-distance for elderly program, 125
 Christmas packages for soldiers, 57–58
 Christmas party, 81
 CIS (Customer Information System), 153
 Cities Service Company
 breakup of, 3, 58, 88, 99
 creation of, 13–14, 34, 98
 and Doherty, 12, 13, 14, 28, 34
 Doherty clubs, 22–23
 emblem of, 36, 59
 managers from Empire, 14, 28, 51, 76–77
 and Powersite Dam, 16
 social structure, 22–23
 and stock ownership by employees, 28–29
 Clean Air Act amendments, 131, 140
 Clemens Company of Chicago, 38
 Clements, Howard, 58
 coal consumption, 86, 106, 112, 130–31
 coal contracts, 123, 136, 142
 coal preparation plant at Riverton, 85, 86
 Coats, Charlie, 117
 Cody, Sid, 7
 Cogeneration magazine, 140
 Cole Circus, 7
 Colgin, Harold, 143
 Colgin, H.R., 143
 Columbus, Kansas, 29, 129
 Columbus Advocate newspaper, 31
 Columbus Electric Company, 14
 Columbus gas engine plant, 29
 Comdex Internet Application Awards, 153
 communication systems, 71, 73, 174
 Community Betterment Program, Joplin, 89
 community franchise agreements, 73, 103
 Community Leaders Luncheon sponsorship, 132
 Competitive Positioning Process (CPP), 149
 conduit for low-voltage circuits, 34
 Conley, Shane, 159
 Consolidated Light, Power and Ice Company, Joplin, 13, 14, 15
 Conversant, Inc., 157
 conversion from 25 to 60 cycle power, 81
 Cook, John, 114

- cooking contests, 82–83
- Cooper Creek Access, 158
- Copeland, Yvonne, 164
- Corkle, Vernon, 117, 126
- Corliss engine generator, 12
- corporate logo, 62, 150
- Corporate Office Building, 37–38, 57, 58, 103, 120, 128
- cost figures, 34
- Country Pride Foods, 129
- CPP (Competitive Positioning Process), 149
- Crane, Missouri, 103
- Crestline, 15
- Crow, Richard, 145
- Crowder, Enoch H., 60
- Customer Call Centers, 148, 161, 172
- Customer Information System (CIS), 153
- Customer Service Department, 56
- customer survey, 138

D

- Danbury and Bethel Gas & Electric Company, 43
- Dan Stanley Ford dealership, 121
- Day, Martha, 161
- DC/AC services, 87
- DCS (Distributed Control System), 163
- DeGraffenreid, Ernie, 105
- DeGraffenreid, Jack, 143
- Delano, Gene, 114
- demand for electricity, 25
- Denton, Charles E., 14
- deregulation, 149
- Digger Derrick toy collector truck, 158
- Diplomat Mining Company, 72
- direct current electrical service, 87
- discharging flume at Riverton, 85
- dispatchers, 142
- display window, 53
- Distributed Control System (DCS), 163
- district managers for 10 districts, 67
- District Office, 32
- Docking, Robert, 108, 109
- Doherty, Henry L., 12, 13, 14, 28, 34
- Doherty Girls' Club, 23
- Doherty Men's Fraternity, 22–23
- Do-It-Yourself Energy Audit, 120–21
- Drewelow, Earl J., 69, 79, 90, 95, 98, 105
- dual-fuel capabilities, 122, 148–49
- "duck and cover" era, 90
- Dunwoody, Lena, 55
- Dwyer, Ed, 105

E

- Eagle-Picher Company, Ottawa County, 20, 128–29
- Eagle-Picher Lead Company, Netta mine, 20
- Eagle Picher Technologies, LLC, 164
- E*A*S*E (Empire's Action to Support the Elderly), 124–25
- Easson, Ed, 159
- Economic Regulatory Commission, 122
- EDE Holdings, Inc., 157, 164
- EDE Industries, Inc., 157
- Edison, Thomas A., 8
- Edison Electric Institute, 83, 92, 94, 100, 173
- Edwards, Shirley, 121
- Eichman, Bill, 139
- elderly-support programs, 124–25
- electrical equipment manufacturers' overcharges, 101–2
- electrical equipment product lines, 154
- Electrical Exposition (1926), 23
- "Electrical Servants" (play), 23
- electric appliance repairs, 56
- electric appliances
 - advertisements for, 19
 - Appliance Showroom, 24, 56
 - conversion from 25 to 60 cycle power, 81
 - at Electrical Exposition, 23
 - electric blankets, 40

- Home Service Department, 74
- Home Show at Memorial Hall, 52
- sale discontinued during World War II, 56
- sales figures, 24, 31, 52, 56
- Smart Home, 134
- stoves and cooking contests, 82–83
- Electric Baking Contest, 82, 83
- electric blankets, 40
- electricity, demand for, 12, 25, 94, 101, 111, 144–45.

See also generating capacity; service territory

- Electricity on the Farm magazine, 69
- Electric Light and Power magazine, 141
- Electric Park, Joplin, 3, 15
- electric pumps, 27, 30, 41
- electric railway for ore hauling, 26
- electric services, 154
- electric signs, 5, 35, 38, 96
- electric traffic signals, 31
- electric trolleys, 32–33
- electric water heaters, 41
- electrostatic precipitators, 112, 113
- elevators, 38
- Elizabeth Mining Company "Avondale Mine," 39
- Elk River Windfarm, 169, 176
- E–Luminate (specialty lighting), 154
- Embrey, Tony, 159
- Emergency Recovery Award from Edison Electric Institute, 173
- Empire baseball team, 28, 43
- Empire bucket toy collector truck, 158
- The Empire Builder, 34, 76
- Empire District Academic Challenge, 139
- Empire District Electric Company
 - 50th Anniversary, 98–99
 - 60th Anniversary, 111
 - 100th Anniversary, 178–81
 - Appliance Showroom, 24, 56
 - Average Payment Plan program, 138
 - company directory, 127
 - contract with City of Joplin, 21
 - corporate structure, 13, 14
 - customer survey, 138
 - display window, 53
 - DSM program, 144–45
 - formation and Charter, 14–15
 - independence from Cities Service, 58–59, 99
 - interconnection with KG & E, 36
 - interconnection with Southwest Electric Power Company, 126
 - overview, 3–5, 9
 - Rural Electrification Department, 68, 71
 - and Southwest Power Pool, 64
 - System Operations, 126
 - thermal energy storage program, 141
- Empire District Electric Company employees
 - appliance service crew, 110
 - Aurora District employees, 98
 - baseball team, 28, 43
 - Centurion Team with Comdex award, 152
 - Choices program, 143–44
 - Christmas party and turkey, 81
 - corporate logo, 62, 150
 - dispatchers, 142
 - Employee Stock Purchase Plan, 133
 - Energy Center team, 163
 - Group Life Insurance Plan, 59
 - health insurance plan offered, 50
 - Honor Roll of employees serving in W.W.II, 55
 - Joplin Call Center, 148
 - Les Reynolds Million Hour Award, 155
 - meter readers, 44, 70
 - mule handler, 40
 - photographs of, 2, 46–47, 50, 55
 - picnics, 178–81
 - Proctor's relationship with, 43
 - reorganization, 149
 - at Riverton Plant, 16, 78
 - service department meeting, 63

- Service Excellence Awards, 145
- social program participation, 124–25, 140, 155, 164
- State Line team, 159
- at storeroom, 53
- systems operation center, 117
- turbine installers, 18
- War Bonds drive participation, 56
- water crew, 129
- Western Division Line Department, 54
- See also line crews and linemen
- Empire District Electric Company finances
 - breakdown of dollars (1946), 65
 - construction expenditures, 104, 106, 109, 111, 118, 120, 121
 - costs of ice storm, 115
 - employee payroll, 16, 31, 34
 - gross revenue exceeds \$30 million, 113
 - hedging strategies, 160
 - kilowatt hour sales, 106, 114
 - operating revenues, 46, 48, 123
 - payments for benefits from federal hydro projects, 114
 - rate hearings, 94
 - taxes paid, 31, 65, 84, 94
- Empire District Electric Company Museum, 164, 165
- Empire District Gas Company, 170–71
- "Empire Electric Clock" radio program, 75
- Empire Energy Center
 - dual-fuel capabilities, 122, 148–49
 - expansion, 120, 162
 - overview, 119
 - turbine generators, 118, 123, 165–66
- Empire Girls' party, 64
- Empire Retirees and Spouses Association, 125, 164
- Empire's Action to Support the Elderly (E*A*S*E), 124–25
- Employee Group Life Insurance Plan, 59
- employee health plan, 50
- Employee Stock Purchase Plan, 133
- Endeavor Mining and Investment Company, 20
- Energy Center team, 163
- energy conservation audit, 120–21
- Energy Conservation Award to Mel Tillis Theater, Branson, 141
- Energy Conserving Home program, 120–21
- energy management and automation monitoring, 154
- Energy Management System, 142
- Energy Star light bulb "Change a Light, Change the World" program, 171
- enhanced stainless steel wheel, 162
- Environmental Excellence Award, 165
- Environmental Protection Agency (EPA), 142
- environmental regulations and laws, 130–31
- Evans, Claude, 75
- E–Watch security monitoring service, 154, 157, 164
- E–Work satellite communications, 174
- Explorer Pipeline Company, 114–15
- extended power generator, 154

F

- F.A.G. Bearing Corporation, 110
- Famous Barr department store, 129
- Fast Freedom, Inc., 157
- Federal Antitrust laws, 101
- Federal Energy Regulatory Commission (FERC) Order No. 2000, 155
- Federal Power Act (1920, 1935), 104
- Federal Power Commission (FPC), 59, 102, 104, 114
- Federal Protection, Inc., 164
- FERC (Federal Energy Regulatory Commission) Order No. 2000, 155
- Ferguson, Donna, 148
- fiber optic leasing, 154
- fiber optic network, 174
- Field, Harold, 99
- Field, Rick, 145
- Financial World magazine, 71
- Fletcher, Randy, 135
- Flint Creek Generating Station (SW Electric Power Co.), 126
- floods, 60–61, 146–47, 174
- Florida Business Recovery Service, 143
- Forbes magazine, 127

Foster, Cedric, 75
 Foster, E. L., 68
 Foushee and Heckender post hole digger, 81
 FPC (Federal Power Commission), 59, 102, 104, 114
 franchise agreements with communities, 73, 103
 fraternity meetings, 22–23
 Freeman, Shirley, 97
 Freeman Hospital, Joplin, 129
 Frisco and Kansas City Southern Railroad, 32–33
 Frisco Building, Joplin, 57
 Frisco Railroad, 86
 Fristoe, Mark, 14
 Frueauff, Frank W., 14, 28
 Fuchs, Albert, 117
 fuel adjustment cost on customers' bills, 112, 162
 Fuel Administration, 21
 fuel cost increases, 112, 118

G

Galena, Kansas, 12
 white way inauguration, 74
 Galena Light & Power Company, 14
 Gard, Sam E., 12, 18
 Gardner, Mike, 109
 Garren, Virginia, 111
 Garvin, Doug, 158
 gas companies and Cities Service, 58
 gas engine plants, 15, 29
 gas for fuel. See natural gas fuel supply
 Gatekeeper Program, 125
 gender clubs, 22
 General Electric Company
 and Empire's home economics demonstration
 contests, 84
 and lighting experiment at Lafayette Grade School, 48
 lighting school, 35
 generating capacity
 1910, 15
 1921, 25
 1922, 27
 1923, 29
 1926, 34
 1927, 35
 1950, 67
 1952, 87
 1954, 88
 1970, 109
 1978, 120
 1980, 122–23
 1988, 138
 1991, 141
 1997, 152
 2001, 160
 2002, 162
 2003, 165–66
 overview, 176
 generation plants, 29
 Generlink, 154
 Gibbons, Dora, 117, 126
 Gipson, William L. "Bill," 161, 162, 171, 173, 177
 giraffes for linemen, 92–94
 girls clubs, 23, 64
 global positioning system (GPS), 161
 Gold Award from United Way, 132
 Goulds water pumps, 27
 Grand Falls, 8, 34
 Grand Falls hydroelectric plant, 29
 Grand Falls Power Plant, 52
 Great Depression, 44
 Green, Rick, 171
 Gregg, A. M. "Mitch," 82
 Group Hospital Service program, 50
 Gulf Oil Corporation, 106–7
 Gunlock, Ralph, 145

H

Haile, Lillise, 82, 97
 Hall, Durward G., 109

Hallam, Bobby, 126
 Hamilton, Jim, 135
 Hammerschmidt, John Paul, 109
 Hammett, Gary, 145
 Hampton, Ron, 152
 Harrington, Dale, 156
 Harsh, James E.
 50-year pin, 88
 as board member, 14
 common stock purchase, 59
 on corporate building site selection, 31
 office suite, 38
 overview, 77
 photographs of, 67, 77, 88
 on Riverton Plant, 67
 Riverton power plant groundbreaking ceremony, 69
 Harvey, Gayle, 114
 Hawkins, Matt, 68
 Hayler, George E., 12, 20, 51
 Haynes, Clarence C., 108, 109
 Hays, Helen, 111
 health insurance plan for employees, 50
 Hearn, Warren E., 108, 109
 heat pump program, 127
 heat recovery steam generators, 159
 Helton, Thomas S., 136
 Henning, Cheryl, 111
 Henry L. Doherty & Company, 13–14, 28, 34
 Henshaw, Don, 62
 Henshaw, Elzy, 53
 "Highest Merit Award" from Financial World, 71
 high pressure sodium lights, 173–74
 high-voltage stations, 34
 Hill, C.E., 99
 Hilton, Gary, 111
 History of Jasper County (Livingston), 7
 Hi-Voltage magazine
 and Doherty Girls' Club, 23
 on ground breaking for Spring River plant, 12
 the "Ice Issue," 73
 McKee on rate increases, 94
 McKee's post-World War II address, 62–63
 on meter readers and linemen, 70–71
 new look in 1949, 74
 on nuclear power, 90, 97
 on Riverton Plant expansion, 67
 on soldiers appreciation for Christmas packages, 58
 Hoag, David D., 10, 13, 14, 34
 Holan Body Company, Cleveland, 88
 Holden, Bob, 165
 home economics demonstration contests, 82–83, 100
 Home Economics Workshop for Home Economics
 teachers, 100
 Home Service Department, 74
 Honor Roll of employees serving in W.W.II, 55
 Honor Student Conference, 118, 132
 Horizon Wind Energy, 176
 Horner, Jack, 81
 Horton, Lacy W. "Tillie," 82, 83
 Howard, Charles W., 48
 Howell, Bill, 133, 143, 159
 Hunter, Gary, 114
 Hurricane Ivan, 168
 Hurricane Katrina, 168
 Hutchinson, E.M., 99
 hydroelectric plants, 29

I

Iatan Plant, 119, 120, 122–23, 140
 IBM equipment, 80, 97
 IBM Florida Business Recovery Service, 143
 "Ice Issue" of Hi-Voltage magazine, 73
 ice storage systems, 141
 ice storms, 73–74, 115, 135, 149, 153, 171–73
 IEC (Interim Energy Charge), 160
 Industry and Power, 65
 insurance plans for employees, 50, 59
 integrated resource planning, 144–45
 Interim Energy Charge (IEC), 160

International Lineman's Rodeo, 163
 Internet service, 157
 Internet web site, 152

J

James, Millie, 97
 Jasper County, Missouri, 4
 Jasumback, Dale, 163
 Jayhawk chemical plant, 106–7
 Jefferson Elementary School, Joplin, 132
 Jester, Paul, 99
 John Q. Hammons Trade Center, 129
 Johnson, Freeman R., 95
 Johnston, Jim, 142
 Jones, Dan, 152
 Jones, Esther, 117
 Jones, J.T.
 and Asbury Power Plant, 109, 111
 overview, 90
 photographs of, 83, 99, 101, 117
 as president, 105, 111
 Jones, W. Alton, 76
 Joplin, Missouri
 corporate headquarters, 14–15
 economic strength, 128–29
 electric traffic signals, 31
 Empire booth at Electric Park, 3
 Empire corporate headquarters, 37–38
 expansion, 129
 incorporation of, 8
 Lee Mills' crew, 2
 Rabbits Foot Mine, 4
 scenic views, 21
 service trucks, 5
 special election, 42, 44
 street lighting, 42, 44, 167, 173–74
 transmissions lines to, 12
 Joplin and Pittsburg Railway Company, 12–13
 Joplin Area Chamber of Commerce, 164
 Joplin Call Center, 148
 Joplin Chamber of Commerce, 62
 Joplin.com, 157
 Joplin Electric Light and Power Company, 8
 Joplin From Mining Town to Urban Center (Renner), 20
 Joplin Furniture Company, 38
 Joplin Gas and Coke Company, 7
 Joplin Globe, 11
 The Joplin Globe, 42
 Joplin Legionnaires, 55
 Joplin Light, Power and Water Company, 14
 Joplin Light and Fuel Company, 10
 Joplin Museum Complex, 164
 Joplin News Herald, 14–15
 Joplin & Pittsburg Railway trolley line, 32–33
 Joplin Printing Company, 38
 Joplin Ronald McDonald House, 155
 Joplin Supply Company, 27
 July 4th storm, 167
 Jung, Tina, 161

K

Kansas City Power & Light Company, 120, 122–23
 Kansas City Times, 106
 Kansas Gas & Electric Company (KG & E), 36, 60, 64, 109
 Kansas Power and Light Company, 109
 Keller, Doyle, 129
 Kenyon, Bill, 115
 Kerschen, Ryan, 163
 Ketcherside, Keith, 159
 KG & E (Kansas Gas & Electric Company), 36, 60, 64, 109
 Kost, Henry, 136
 Krause, Terry, 159
 Kropf, Keith, 126

L

labor union contracts, 115, 133, 149
 Lafayette Grade School lighting experiment, 48
 Lake, Joseph F., Jr., 136