

7 Golden Years

For Independence Power & Light, the 1990s were golden years, a time when the travails and troubles of the 1970s and 1980s were but a dim memory.

The power supply problems, inflation and political changes that had plagued the utility during the previous two decades were replaced by growth of the utility, stability and a reliable and inexpensive supply of electric power.

The reasons for the turnaround were both simple and complex. The construction of baseload coal-fired generation plants in the Midwest in the late 1970s and early 1980s left the region with abundant, low-cost power in the late 1980s and throughout the 1990s. Independence Power & Light was able to negotiate long-term power supply contracts in the mid-1980s that ensured low-cost power for its customers for two decades into the future.

Freed by the wholesale contracts from playing catch-up with its own generating resources, the Department was able to plan and implement a comprehensive rehabilitation of Blue Valley Power Station and other generating plants.

The growth during the 1990s was related to a stable political environment and the fact that the City Council worked together as a team throughout the decade. The result was a series of economic development accomplishments that included Bolger Square, Independence Commons, the WalMart/HQ shopping area, the development of the Little Blue Parkway, the establishment of Hartman Heritage as the first major hotel conference facility in Independence, and IP&L's role in the continuing rehabilitation of older areas in the city.

Strengthening the System

Electric power remained key to the growth of the city of Independence in the 1990s, much as it had during the 1920s. The availability of inexpensive, abundant electric power was no accident. Independence Power & Light had begun aggressively planning for growth the decade before.

In 1984, the city contracted with Burns & McDonnell Engineering Company to complete a thorough study of the Department's transmission system.² Limitations of the transmission system had caused a number of power outages between 1982 and 1984. Burns & McDonnell engineers recommended building new substations, upgrading existing substations and other general system improvements, and interconnecting city substations with 69,000- and 161,000-volt transmission lines.³



Throughout the 1990's and into the 21st Century, several major commercial/retail developments were undertaken in Independence, including the Independence Center renovation, Bolger Square, Independence Commons, Hartman Heritage and Eastland Center.

In addition, the utility determined that it would need to rehabilitate Blue Valley Power Station, both to make its boilers more efficient and to bring the power plant into compliance with increasingly stringent federal air emissions standards and to extend the life of the facility.⁴

Using the Burns & McDonnell study as a guide, the Department embarked in 1985 upon an ambitious 15-year plan to rehabilitate Blue Valley Power Station and completely upgrade the utility system.

That same year, Independence Power & Light negotiated long-term wholesale power supply contracts with Kansas City Power & Light (KCP&L) and Iowa Public Service (IPS). The contracts called for the delivery of 75 megawatts of power from KCP&L through 1996 and 60 megawatts of power from IPS through 2006.

The Department began construction of two 161,000-volt transmission interconnections with KCP&L and started a \$30 million rehabilitation of Blue Valley Power Station for an extended life project and sulfur emission controls. The Department targeted the extended life rehabilitation for a completion date of 1996, the time at which the KCP&L long-term contract expired.⁵

The Department reached its 1996 target, but the supply of power in the Midwest in the mid-1990s was still in a surplus situation. So in 1996, the city extended its contract with KCP&L through the turn of the century and renegotiated its contract with IPS (by then renamed Mid-American Energy).

“Now we’re thinking we shouldn’t have a rate increase until at least the year 2000,” George Morrow, Independence Power & Light director, told reporters.⁶ Morrow also noted that the last time that the Department had been forced to raise rates was in 1989.

Throughout the remainder of the 1990s, the Department continued to draw more than half its summertime peak demand from KCP&L and Mid-American. Morrow estimated the extension renegotiation of the long-term power supply contracts with the two investor-owned utilities saved Independence ratepayers more than \$2 million annually during the four-year lengthening of the original contract. The attractive wholesale rates obtained through the new arrangements contract were such that Independence Power & Light derived almost three fourths of its electric power needs from power supply contracts by the middle of the decade.

SCADA/EMS

Power generation and transmission weren’t the only facets of the utility’s system upgraded during the 1990s. Crews continued to underground distribution lines, especially in the new fast-growing residential subdivisions. And the all-important dispatch and control function came in for its share of modernization.

The addition of a Supervisory Control and Data Acquisition/Energy Management System (SCADA/EMS) during the early

Customer-Driven

In September 1997, Independence Power & Light, along with the city’s water and sewer departments, opened a brand new utilities customer services facility at the intersection of East Truman Road and Forest Avenue.¹ Open from 8 a.m. to 5 p.m., Monday through Friday, the utilities customer services center offered Independence residents a one-stop shopping experience.

As competition became a reality in the electric utility industry during the late 1990s, Independence Power & Light responded by focusing its attention on customer satisfaction. In the days of monopoly electric power, utilities prided themselves on providing reliable, inexpensive power. But as customers drew closer to the day when they would have a choice in their energy supplier, utilities discovered that getting to know their customers and learning how to serve them better was essential.

As a municipal utility, Independence Power & Light had an advantage over many investor-owned utilities when it came to knowing and understanding its customers. In the 1990s, the utility sharply increased its efforts to provide value to customers.

Independence Power & Light provided rebates to residential customers who purchased qualifying high-efficiency air conditioners, heat pumps and electric hot water heaters throughout the decade. Homeowners were provided with a wide variety of energy-saving information and services, many through its web site. Residents could go on-line to conduct an energy audit of their homes, and with a click of a mouse, receive a detailed analysis of energy use in their homes. Power & Light also began offering customers more convenience and more options, such as paying bills via the telephone using credit cards, and a 24-hour telephone line where customers could go to get information on their utility account.²

The utility instituted an innovative trouble call answering system which could handle hundreds of customer calls instantaneously and provide customers with updated status reports on power outages. The Department also offered customers a whole-house surge protection solution.³ But perhaps the best example of the utility’s customer-driven mentality was its low rates. In August 1997, Independence Power & Light purchased the electric distribution system in eastern Independence from KCP&L. The purchase brought with it nearly 1,450 residential and commercial customers, who were delighted to discover that residential rates from Independence Power & Light were 11 percent lower than KCP&L’s rates. Commercial rates for the new customers dropped an average of 18 percent from what they had been paying KCP&L.⁴

1 Advertisement, “Walk-in City of Independence Utility Customers,” *Independence Examiner*, August 30, 1997

2 *Independence Power & Light*, 1998 Annual Report, p.5

3 *Ibid.*, p.5

4 *Ibid.*, pp.6-7

1990s allowed system dispatchers to monitor and control the city's electric power system via computer from a central location. City crews installed Remote Terminal Units (RTUs) in all of the utility's substations and connected them to the SCADA/EMS through leased telephone lines, microwave and fiber optic links. With SCADA/EMS, the dispatcher was able to monitor power flows on the transmission system, current flow on the distribution system, substation alarms, and a host of other utility functions.⁸

With Supervisory Control and Data Acquisition, one dispatcher in the control center was able to perform the work formerly done by a number of employees, including opening and closing circuit breakers, starting and stopping combustion turbines at the substations, and changing the load on steam turbines. The city periodically updated the hardware and software it used for the SCADA/EMS during the 1990s.

Independence Power & Light exited the old century a totally different utility than it had been 10 years before. Its rates were low and stable, its power supply was abundant and secure, and its future was bright. But change wrought by competition and restructuring of the electric utility industry promised to test the ingenuity of the management and staff of the city's electric utility.

¹ "Independence by the numbers," *"Independence: A guide to living in the city," Independence Examiner, June 28, 1990*

² John Manning, "Power System Overview," *City Power & Light Department, Independence, Missouri, "History of City Power & Light Electric System," Presented to Independence City Council, September 1992, pp.3-4*

³ *Ibid.*, p.4

⁴ *Ibid.*, p.26

⁵ *Ibid.*, pp.27-28

⁶ Christopher Clark, "Rate decrease is likely soon," *Independence Examiner, March 13, 1996*

⁷ "Power Resources," *Independence Power & Light, 1998 Annual Report, p.4*

⁸ "Power System Operation," *City Power & Light Department, Independence, Missouri, "History of City Power & Light Electric System," Presented to Independence City Council, September 1992, p.13*