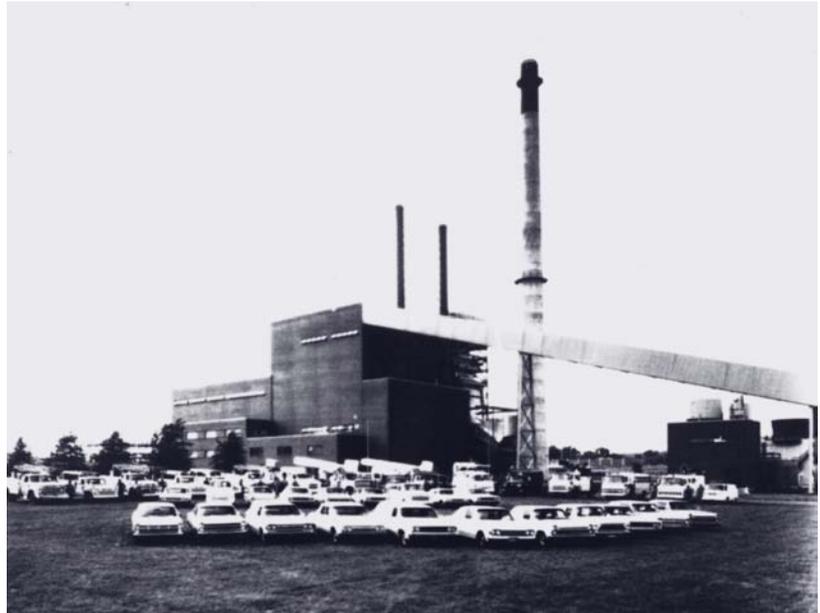


utility.

The Electric Light Board pointed out in 1953 that the utility provided free street lighting, free electricity for city buildings and sewage lift stations, and \$2,000 a month to pay half the city's garbage bill. In addition, the utility remitted half the monthly electric bill of community schools and transferred 10 percent of its revenues each month to the city's general fund.⁹

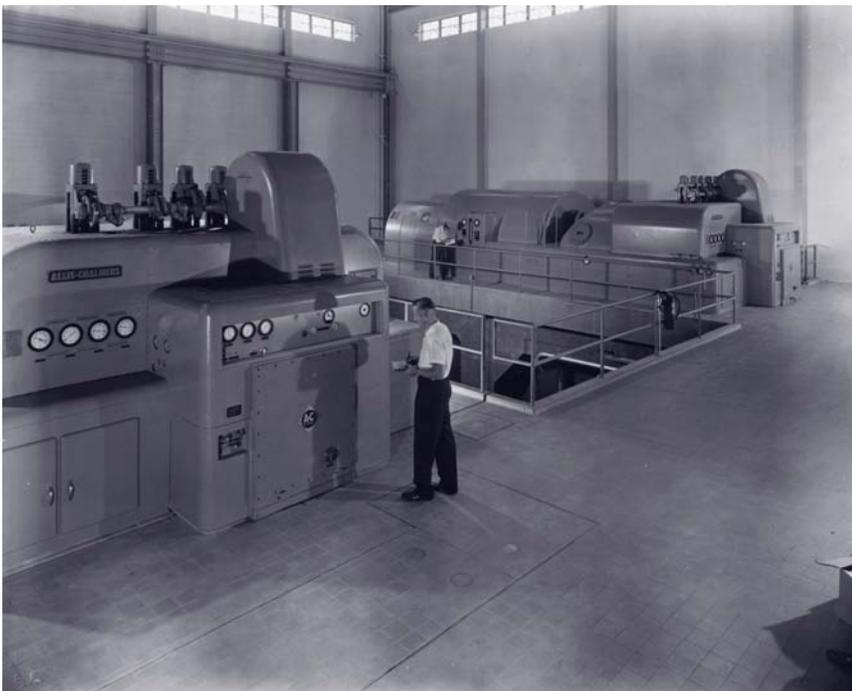
No sooner had the new 5,000-kilowatt generating unit been installed at the expanded Dodgion Street Plant in 1955 than the city announced a further major annexation. The utility was already under pressure to begin serving an additional 1,000 customers who would be transferred from Kansas City Power & Light in 1958 under the terms of an agreement signed 10 years before following the 1948 annexation.¹⁰ The city had agreed to pay KCP&L \$2.4 million for its lines and facilities in the annexed territory, and KCP&L had signed a contract to provide the city with wholesale electric power until Independence could meet its power demands internally.



Completed in 1958, the Blue Valley Power Station east of Independence would be IP&L's baseload generating station for most of the next four decades.

In 1955, Black & Veatch presented the city with a plan for construction of a 44,000-kilowatt coal-fired and natural gas-fired

power plant that would at first supplement and gradually replace the 19,000-kilowatt Dodgion Street Plant. Voters went to the polls in 1955 and again in 1956 to approve more than \$12.5 million in bonds to build the new plant, spurred on by the realization that a proposed 1956 annexation would again swell the city's land and population.¹¹



IP&L engineer Phil Hansen checks the output of one of the Allis-Chalmers turbine-generators at the Blue Valley Power Station, circa 1960.

Blue Valley Power Station

Originally, the Electric Light Board had envisioned building the new plant west of Independence to take advantage of cooling water from the Missouri River. But in 1956, the city condemned and purchased 73 acres in the Little Blue River Valley six miles east of the city at the intersection of Truman Road and Missouri Highway 78.¹² Construction work on what would become

known as the Blue Valley Power Station began in early 1957.¹³ Almost exactly 18 months later, in July 1958, Blue Valley Power Station began commercial operation.

Construction of Blue Valley Power Station was only part of an ambitious upgrade which would make the Independence electric utility energy independent for the next 40 years. Included in the construction project were provisions for building four new substations, 14 miles of 69,000-volt transmission lines and 23 miles of 13,200-volt lines.¹⁴ Completion of the Blue Valley Power Station meant that the 1960s were years of prosperity for the by then renamed Independence Power & Light Department. Superintendent Earl Rhodes reported late in 1963 that the Department would exceed \$5 million in revenues for the fiscal year ending March 31, 1964. "This income has almost doubled over the past four years due to the fantastic growth of the Department," Rhodes noted.¹⁵

The growth had indeed been stunning. By the end of fiscal year 1964, the Department served 29,317 customers, a more than 400 percent increase over the 6,835 customers served on December 31, 1955.¹⁶ Kilowatt-hour sales were up 28.5 percent from 1963, and net income of the utility had increased more than 75 percent from the previous year.¹⁷ The city established a record summer peak load of 54,000 kilowatts on July 23, 1963.¹⁸

In November 1963, the city awarded the first contracts for the 65,000-kilowatt expansion of Blue Valley Power Station.¹⁹ The near doubling of the system's capacity between 1963 and 1965 was the first of several expansions that would push system capacity five times higher in 1979 than it had been in 1960, including 100 megawatts of power generated in three steam

units and 163 megawatts of power generated in six combustion turbines.²⁰ The revenue windfall of the 1960s allowed the Department to modernize its fleet of line equipment, adding hydraulic boom trucks on an almost yearly basis through much of the decade. The Department also embarked on a five-year, \$1 million project during the 1960s to install street lights and traffic signals in Independence.²¹ By the beginning of the 1970s, the Independence Power & Light Department had become one of the most successful municipal utilities in the Midwest. In 1970, it reported revenues of \$8.6 million on sales of 350 million kilowatt-hours to nearly 38,000 customers. More than 180 employees generated, transmitted and distributed electric power from a generation base of 148,000 kilowatts. The average residential cost per kilowatt-hour was 2.47 cents, down almost 20 percent from the 3.04 cents per kilowatt-hour in 1960.²² Experience in 1970 would have suggested to Department managers that growth and inexpensive electric power would continue to characterize life in Independence for many years to come. That wasn't to be the case. The era of inexpensive fuel was about to come to an abrupt close. And that would pose new challenges for the Independence Power & Light Department during the 1970s and 1980s.

A Tour Through Blue Valley Power Station

The 1958 completion of Blue Valley Power Station marked the beginning of a new era for the Independence Power & Light Department. The 44,000-kilowatt station on Truman Road east of Independence promised to carry the electric power load for the city and its residents for many years to come.

At the heart of the Blue Valley Power Station were two 22,000-kilowatt Allis-Chalmers steam turbine-generators. Independence and Allis-Chalmers had been linked together for nearly 60 years. Two small Allis-Chalmers steam engine-driven units had powered the Dodgion Street Station back in 1901. By 1958, the Independence Works of the Allis-Chalmers Manufacturing Company was the Department's largest industrial customer.

Beneath the generator floor of the station were located the mammoth boilers that fed the turbine-generators with steam. Each of the two massive Combustion Engineering boilers towered 80-feet in the air and burned 12.4 tons of coal per hour. The miles of tubes in the boilers converted cooling water into steam at the rate of 220,000 pounds per hour. The plant consumed and recycled massive amounts of water. The huge pumps attached to the cooling towers outside the plant delivered as much as 22,000 gallons of cooling water to the steam condenser every minute.

Electricity from the turbine-generators flowed into the switching yard at 14,400 volts, which was then stepped up to 69,000 volts for transmission to the city, some seven miles distant. In Independence, at substations like Substation B at 23rd and Pleasant Streets, the power from Blue Valley Power Station was stepped down to 13,200 volts for distribution to local substations. From those local substations, the electricity was reduced to 4,160 volts for distribution to the factories, schools, homes and shops of a growing Independence.¹

¹ City of Independence Power and Light Department, "Blue Valley Power Station," 1958, pp. 1-8

¹ Foerster, *Independence, Missouri*, p.179

² "Beloved FDR Dies; Truman Steps In," *Chronicle of America Mt. Kisco, New York: Chronicle Publications*, 1989, p.723

³ "Dewey Defeats Truman," *Chicago Daily Tribune*, November 3, 1948

⁴ Foerster, *Independence, Missouri*, p.180

⁵ *Ibid.*, p.181

⁶ *Ibid.*, p.181

⁷ Minutes, Bond Advisory Committee Meeting, *Independence, Missouri*, November 10, 1953, p.2

⁸ City of Independence, *Missouri, Notice of Bond Sale and Official Statement*, December 1, 1956, p.4

⁹ "Story of the City's Light Plant Dates Back to Start of Century," *Independence Examiner*, January 6, 1953

¹⁰ 1956 Notice of Bond Sale, p.4

¹¹ "Power Bond Vote," *Kansas City Times*, June 1, 1955

¹² "Can Condemn For Site," *Kansas City Times*, February 23, 1956

¹³ "Progress On A New 44,000-Kilowatt Power Station," *Kansas City Star*, June 30, 1957

¹⁴ "Big Power Unit Goes Into Use," *Kansas City Star*, June 29, 1958

¹⁵ "City Power Looks Forward," *Independence Examiner*, January 3, 1964

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ Independence Power & Light Department, "The Year In Review," March 31, 1965, p.2

²⁰ Independence Power & Light Department, 1979 Annual Report, p.3

²¹ "Use of Electricity in Homes Up 9.5 Per Cent in 1965," *Independence Examiner*, March 1, 1966

²² A Report On Operations of the City Power and Light Department, 1970, p.1