

Report} Utilities in Kentucky

An increasingly competitive business environment compels companies to examine the long-term costs of production and distribution and to focus on regional differences in the net cost of doing business. Among the more significant factors having a direct influence on bottom-line costs is the annual capital that must be committed to utility consumption.

Kentucky has long enjoyed a competitive advantage in the provision of energy, natural gas, and water supply. The state's large coal reserves and proximity to coal-burning utility plants, a direct location on the interstate natural gas pipeline



corridor and an abundant natural water supply derived from an extensive network of rivers, streams, and lakes keep Kentucky's utility costs among the lowest in the nation. Kentucky's utility providers, with oversight by the Kentucky Public Service Commission (PSC), ensure competitive rates for the consumer. Average annual utility costs and tariff rates for individual providers are available from the PSC at www.psc.ky.gov.

Kentucky is the nation's third largest producer of coal, with rich deposits of low-sulfur coal in the Appalachian mountains of Eastern Kentucky and deposits of Illinois Basin coal in Western Kentucky. The Commonwealth also produces natural gas, a limited amount of crude oil, and is home to a 212,000 barrel per day petroleum refinery and two ethanol production facilities.



Kentucky is also a leading consumer of energy with the 8th highest per capita energy consumption in the United States. In 2009, Kentucky consumed a total of 41 million tons of coal, 125 million barrels of petroleum products, and 206 billion cubic feet of natural gas. The majority of this energy was consumed by large manufacturing facilities, which have located in Kentucky in part because of low and stable energy costs.

Kentucky has long enjoyed a competitive advantage in the provision of energy, natural gas, and water supply.

Did You Know...?

- ✓ **Kentucky Ranked #1 in competitive utility rates during a 2011 survey of site location consultants.**
- ✓ **Kentucky's industrial power costs are lower than any other state east of the Mississippi River and are over 25 percent lower than the U.S. average.**
- ✓ **Kentucky's average retail price, for the combined cost of commercial, industrial, and residential utilities is the 4th lowest in the nation.**

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Electric Power

In 2010, Kentucky’s industrial sector electric power costs ranked 4th lowest in the nation, while the state’s average retail price for all sectors is also 4th lowest in the nation. With an average industrial price of 5.05 cents per kilowatt hour, the state’s industrial electric costs are over 25 percent lower than the national average. Recent average annual sector costs (cents per KWH) for Kentucky and selected states are shown below.

Electric Power Cost – Cents Per Kilowatt-hour

State	Industrial	Commercial	Residential	All Sectors
Kentucky	5.05	7.88	8.57	6.73
Alabama	6.01	10.18	10.67	8.89
Arkansas	5.44	7.31	8.86	7.28
Georgia	6.22	9.06	10.07	8.87
Illinois	6.82	8.88	11.52	9.13
Indiana	5.87	8.38	9.56	7.67
Michigan	7.08	9.81	12.46	9.88
Mississippi	6.32	9.32	9.87	8.59
Missouri	5.50	7.50	9.08	7.78
N. Carolina	6.17	8.16	10.12	8.67
Ohio	6.40	9.73	11.32	9.14
S. Carolina	5.74	8.90	10.50	8.49
Tennessee	6.58	9.66	9.23	8.61
Virginia	6.66	7.65	10.45	8.69
W. Virginia	5.86	7.66	8.79	7.45
United States	6.77	10.19	11.54	9.83

Source: Energy Information Administration/Electric Power Annual 2010 (www.eia.gov/electricity/data.cfm#sales) – Form EIA-861.

Electric power in Kentucky is distributed by four investor-owned electric utilities, 30 municipal electric systems, the TVA (www.tva.gov) and 21 rural electric cooperatives, whose service areas can be obtained from the Kentucky Association of Electric Cooperatives (www.kaec.org/coops) These power distributors are allowed to negotiate lower economic incentive rate contracts with large industrial and commercial customers. Significant discount rates can be granted for up to five years for both new and expanding operations. The investor-owned utilities, which account for nearly 50 percent of all sales in the state, are:

- AEP Kentucky Power (www.kentuckypower.com/info/facts/ServiceTerritory.aspx) in Ashland, Kentucky – serves all, or parts, of 20 counties along the eastern edge of the state.
- Kentucky Utilities Company (www.lgeenergy.com/ku/ku_territory.asp) in Lexington, Kentucky – serves cities and rural areas across 77 of the state’s 120 counties. Kentucky Utilities Company is a subsidiary of LG&E Energy Corporation.
- Louisville Gas and Electric Co. (www.lgeenergy.com) in Louisville, Kentucky – serves metropolitan Louisville and areas in six adjoining Kentucky counties. Louisville Gas and Electric Company is a subsidiary of LG&E Energy Corporation.
- Duke Energy (www.duke-energy.com) in Newport, Kentucky – serves portions of five counties in Northern Kentucky, immediately south of Cincinnati, Ohio.

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Natural Gas

Kentucky natural gas costs, in the industrial, residential and commercial sectors are highly competitive, particularly within the Midwest and Southeast regions of the nation. In 2010, Kentucky's industrial sector natural gas prices ranked 8th lowest in the United States, and ranked 2nd lowest when compared with states in the eastern United States.

Natural gas in Kentucky is available from 28 gas distribution companies, 49 intrastate pipeline gas companies, and 172 municipal, college, or housing authority providers. Total consumption of natural gas in Kentucky equaled over 232 billion cubic feet in 2010. The large majority of this volume is obtained from the interstate pipeline system between the Gulf States and the Northeast, which passes directly through Kentucky, thus ensuring a competitive and readily available supply of natural gas. The remainder of the natural gas consumed in the state is produced by wells in the eastern and western Kentucky coalfields and in the south central part of the state.

The costs of natural gas vary across Kentucky, depending upon the source of the gas, the local distributor, the volume of gas used, and the type of service contracts (firm vs. interruptible service). All gas distribution and intrastate gas transmission companies in Kentucky, except municipal systems, are regulated by the PSC, including approval of rates charged to customers.

Kentucky's industrial sector natural gas prices are currently at a seven-year low.

Regulated gas companies can offer economic incentive rates for certain large industrial and commercial customers for up to five years, for both new and expanding operations. Gas companies also can offer a discount or waiver of gas main extension costs. The specific discount terms for individual customers are set by contracts negotiated with the gas companies, subject to approval by the PSC.

Industries consistently using large quantities of natural gas may negotiate for transport gas service at costs substantially below normal gas service costs. The company buys gas from the producer through contracts with the local gas distributor. The minimum level of usage required for transport gas service varies with the gas distributor.

The Kentucky state sales tax rate (6.0%) applies to gas services for non-residential use. According to state statutes, all utility services, including gas, in excess of 3 percent of the cost of production annually for a manufacturer are exempt.

Did You Know...?

- ✓ *Kentucky's industrial sector natural gas prices ranked 8th lowest in the U.S. and 2nd lowest when compared with states in the eastern U.S.*

Industrial Sector Natural Gas Cost in Dollars Per Thousand Cubic Feet

State	Price
Kentucky	5.57
Alabama	6.67
Arkansas	7.28
Georgia	6.25
Illinois	7.13
Indiana	5.65
Michigan	9.25
Mississippi	6.19
Missouri	8.70
N. Carolina	8.24
Ohio	7.40
S. Carolina	6.11
Tennessee	6.64
Virginia	6.68
W. Virginia	5.40
United States	5.49

Source: Energy Information Administration, Natural Gas Prices, 2010

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Water

An extensive surface water network of rivers, streams, and lakes, complemented by ground water supplies that are very pronounced in certain regions of the state, guarantee Kentucky an ample supply of water for industrial and commercial use. Treated water is distributed in communities by eight investor-owned water companies, 22 water associations, 117 water districts, and 94 municipal water utilities. The types of services and rates charged by water districts, water associations, and investor owned water companies are regulated by the PSC.

Many industries in the state withdraw water directly from Kentucky's extensive network of major rivers, man-made lakes, and ground water supplies. Concentrations of chemical and primary metals industries and electric power plants have developed in Kentucky along the Ohio River to profit from the abundant supplies of surface and ground water and from lower cost barge transportation. Industries withdrawing over 10,000 gallons of water daily from surface or ground water sources must obtain a permit from the Kentucky Department for Environmental Protection, Division of Water. For additional information about permitting, visit <http://water.ky.gov/permitting/Pages/WaterWithdrawalPermitting.aspx>.

The cost of commercial and industrial water use in Kentucky varies by provider. Costs charged by specific providers are available from the PSC; visit <http://psc.ky.gov/> for additional information. The Kentucky state sales tax rate (6.0%) applies to water consumption for non-residential use.

Sewer

Over 90 municipally operated sewer systems and over 70 sewer utilities provide wastewater and sewerage treatment services in Kentucky. Municipal sewer services are available to most industrial areas of the state, except for sites in underdeveloped or remote areas. Some industrial effluents may require pretreatment before discharge into sewer systems.

Privately operated wastewater treatment plants may be approved by Kentucky's Department for Environmental Protection for industries not having access to a municipal sewer system. Generally, package plants can be allowed only when the treated effluent will be discharged into a stream with continuous flow all year long. Such streams are shown as "blue line" streams on official U.S. Geological Survey 7.5 minute topographic maps.

Construction permits for package wastewater plants must be obtained from the Kentucky Department for Environmental Protection before construction begins. The Department administers the National Pollution Discharge Elimination System (NPDES) in Kentucky, under authority granted by the U.S. EPA. A single application to the Department serves for both state and federal approvals.

The costs of sewer services vary by provider, but frequently parallel the local costs of water service. The Kentucky state sales tax rate (6.0%) applies to sewer services for non-residential use. For one-stop information and details on application for environmental permits contact:

Department for Environmental Protection
Kentucky Pollutant Discharge Elimination System
200 Fair Oaks Lane, Fourth Floor
Frankfort, Kentucky 40601
Telephone: (502) 564-3410 Fax: (502) 564-0111

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