



POWERING ARKANSAS:

A PROFILE OF THE STATE'S GROWING ELECTRICITY DEMAND

Energy policy is one of the most important issues facing the United States. As new energy challenges arise and demand for electricity continues to steadily increase, identifying and promoting short-and long-term initiatives that will secure a dependable and efficient supply of electricity is critical for economic growth and job creation.

Right now, Arkansas is at a crossroads. Over the past several years, the state has been fortunate to attract businesses and industries in a number of sectors. The state government, regional economic development organizations, businesses, and a variety of other entities have placed renewed emphasis on attracting new businesses and industries to Arkansas in order to continue that economic growth.

And while these initiatives benefit our state and its residents, to support these efforts and foster an environment where businesses can thrive, Arkansas must invest in its energy future with smart planning and action.

ELECTRICITY DEMAND ON THE RISE

According to the U.S Department of Energy (DOE) Energy Information Administration (EIA), the growth in demand for electricity in the U.S. is estimated to be 1.1 percent each year, a 29 percent increase from 2006-2030.¹

In Arkansas however, the story is different. From 1980 through 2005, the U.S. Department of Energy reports that total electricity consumption increased at an average annual rate of 2.2 percent, 15 percent more than the U.S. average.² According to the Edison Electric Institute (EEI), American homes today use 21 percent more electricity than they did in 1978. As new technologies place additional demand on our electricity grid, the development of additional generation capacity and electricity transmission infrastructure, as well as the diversification of the state's energy supply mix, are more important than ever. In 2005, Arkansas residents on average consumed 6,181 kilowatt hours (kWh) compared to the national average of 4,594 kWh, putting Arkansas residents tenth highest in national per capita energy consumption.³ (One kilowatt-hour of electricity is equivalent to one kilowatt load running for one hour. 1,000 watts equal one kilowatt and a million watts is one megawatt).

¹ U.S. Energy Information Administration: <http://www.eia.doe.gov/oiaf/aeo/electricity.html>.

² U.S. Department of Energy: <http://apps1.eere.energy.gov/states/residential.cfm/state=AR#elec>.

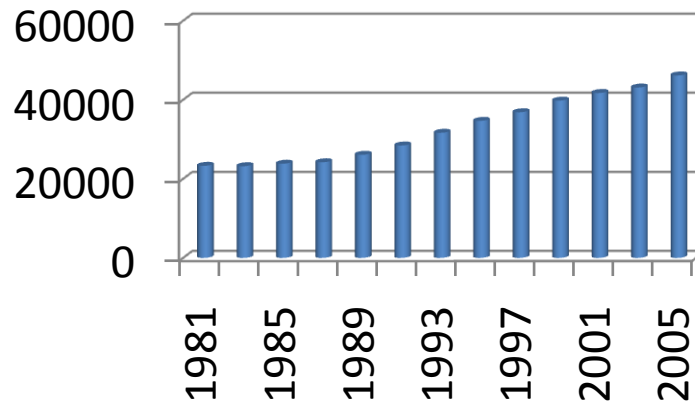
³ Ibid.

The chart below shows Arkansas' growing electricity demand from 1981 to 2005.

Arkansas State Electricity Consumption

(million kWh)

Source: U.S. Department of Energy



Additionally, Arkansas' population continues to grow, increasing 13.7 percent from 1990-2000.⁴ According to the U.S. Census Bureau, more than 100,000 people moved to Arkansas from 2000-2004.

And like residential demand, electricity demand from Arkansas' commercial and industrial sectors continues to grow. Commercial and industrial users need a reliable supply of electricity to meet their bottom line and remain competitive in a global marketplace.

Nationally, the industrial sector accounts for 28 percent of energy usage. In Arkansas, however, the industrial sector accounts for 38 percent of electricity usage. This indicates that Arkansas currently relies heavily on the industrial sector to provide jobs, and that continued economic development will depend on a steady supply of electricity in the future.

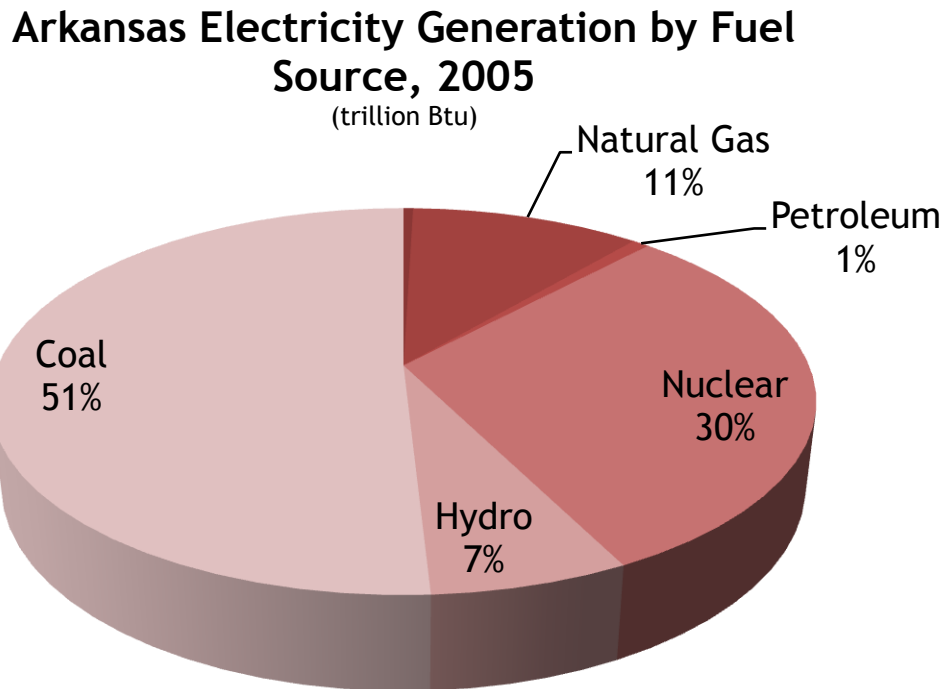
Not only does the industrial sector make up the largest portion of Arkansas' energy consumption portfolio, but, according to the U.S. Department of Energy, it has steadily grown since 1990. In fact, since 1990, industrial energy retail sales have increased by almost 80 percent. During the same period Arkansas' commercial energy consumption almost doubled from 6,075 megawatt hours (MWh) in 1990, to 11,581 MWh in 2006.⁵

⁴ "Population Change and Distribution - 2000 Census Brief. U.S. Census Bureau, April 2001.

⁵ A megawatt-hour is equal to one thousand kilowatt-hours.

ARKANSAS' ENERGY PORTFOLIO

The chart below shows the state's electricity supply by power source. Although half of Arkansas' power is generated by coal, nuclear power also plays a critical role. Coal and nuclear provide 80 percent of Arkansas' electricity.



Source: U.S. Energy Information Administration

CONCLUSION

There is no sign that the steady increase in energy demand will cease. In fact, Southwest Power Pool, which oversees the transport of electricity to significant portions of northern and western Arkansas, estimates that the peak demand within its service area will increase by over 2,000 megawatts by 2010.⁶ One thousand megawatts is enough electricity to power 800,000-1,000,000 average Arkansan homes. The good news for Arkansas is that the continued increase in energy consumption in the industrial, commercial, and residential sectors indicates the state is experiencing positive economic growth which can continue given the right environment to do so.

⁶ Peak Demand: Forecast vs. Actual. Building for the Future: Southwest Power Pool 2007 Annual Report.

Here are some initiatives that are critical to meet Arkansas' growing demand for electricity.

- ❖ **Promote Investment in Energy Generation and Transmission** - By fostering an environment that promotes the investment in new energy generation and infrastructure, we can ensure that Arkansas has an ample supply of dependable electricity well into the future.
- ❖ **Work to Diversify Arkansas' Energy Portfolio** - By diversifying the state's energy portfolio Arkansas can reduce exposure to electricity price spikes and encourage investment in new energy technologies.
- ❖ **Support Smart Energy Efficiency and Conservation Measures** - As part of a broad energy plan, energy efficiency and conservation initiatives can help reduce peak demand and encourage businesses and residential users to make the best use of electricity.
- ❖ **Promote renewable and/or environmental standards** to help diversify the state's energy supply and work to encourage the reduction of greenhouse gas emissions while maintaining economic growth.
- ❖ **Support the development of a long-term state energy plan** that includes all forms of energy to balance the state's energy portfolio and create opportunities for new energy investment and job creation.

There is no single solution to meet Arkansas' growing electricity demand and foster an environment where businesses can grow. By keeping all options on the table and selecting several policies to meet our energy challenges, Arkansas truly can have brighter days.

Progress Arkansas' mission is to build consensus and support for economic, energy, and environmental policies that will support growth and prosperity for the State of Arkansas. Our membership is comprised of business and community-based leaders dedicated to promoting key solutions that will benefit Arkansas. www.progressarkansas.com