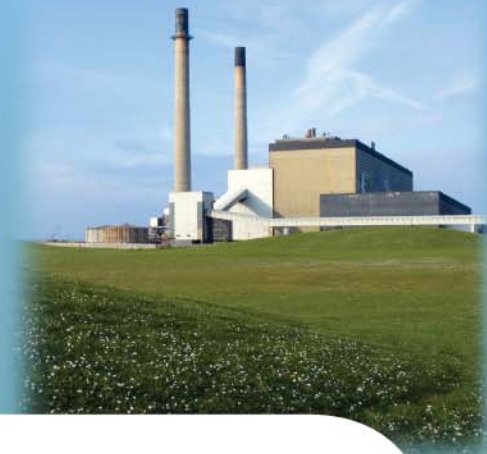




Electric Currents



Electric Generation Fact Sheet

- Electric utilities in Arkansas are obligated to provide their customers with reliable electricity at the lowest possible cost.
- Having a diverse fuel mix in a generation portfolio maximizes reliability and minimizes cost.
- AECC's generation portfolio is approximately 70 percent coal, 9 percent hydro, 6 percent oil/natural gas and 15 percent market purchases.
- Over the next 12 years, AECC needs to build or buy approximately 1,000 megawatts of additional base-load generation for its members.
- "Base-load" generation, which provides a utility's year-round level of electricity demand, is provided by nuclear, coal, oil or gas-fired plants. Although not base-load generation, hydropower plants generate when there is available water flow due to its lower energy cost, but have variable output.
- Renewable energy resources and energy efficiency are important and complementary resources for electric utilities, but they cannot replace the need for base-load fuel sources to ensure reliability.
- New nuclear plants are in the planning and licensing stages; however, it will likely be the end of the next decade (2018 to 2020, perhaps longer) before those plants become operational.
- Natural gas prices are currently five times higher than the price of coal, and they have been 10 to 12 times higher in recent years.
- The natural gas market is the most volatile commodity market in the world; current U.S. demand exceeds domestic supply; and our nation is becoming increasingly dependent on Middle Eastern, Russian and other foreign imports of liquefied natural gas.
- The United States has several hundred years' worth of domestic coal, contributing to our goal of energy independence.
- Research is under way to find the best way to capture and store the carbon produced from coal and gas combustion; however, it will likely take until 2020 or longer (same time as new nuclear plants) before such technology is commercially available.
- In the meantime—over the next 12 years—many new base-load plants will need to be built to meet increasing levels of energy demand, in a reliable and cost-effective manner.
- The solution needs to be multi-faceted—more energy efficiency efforts; the construction of more coal plants; continued efforts to bring on new nuclear plants; significant research and development expenditures for technology that will take years to develop; and the use of renewable energy when it can complement other fuels in a reliable and cost-effective manner.



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