

## **Guest Opinion - Talk Business, July 2014**

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<http://talkbusiness.net/2014/07/steve-patterson-use-guidelines-update-electric-power-system/>

New federal guidelines to reduce carbon emissions from existing power plants can be a vehicle for modernizing Arkansas's electric power system for the benefit of residential and business customers that depend on it.

EPA Administrator Gina McCarthy said the guidelines are not set in stone, and she now expects "a lot of give and take with the states."

The Arkansas Public Service Commission (APSC) and the Arkansas Department of Environmental Quality (ADEQ), have started the state implementation planning process with a group of 21 stakeholder organizations ranging from power companies, consumer and advocacy groups and the AAEA. We believe that this new obligation to reduce emissions is an economic opportunity to be embraced in Arkansas. Advanced energy technologies already account for 11,000-plus jobs in the state and our businesses are prepared to help.

Nearly every aspect of America's technology infrastructure has been modernized other than the electric power system, which operates with infrastructure, technology, and a basic business model that dates to the early 1900s. Although an engineering marvel of the 20th century, the U.S. electric power system needs upgrading to meet the need for secure, clean, and more affordable energy in the 21st century.

Technologies like energy efficient heating and cooling systems for buildings, smart home electric systems, distributed and utility-scale solar power and high voltage DC electric transmission are just some of the long list of available technologies that are represented by advanced energy businesses that can be utilized to reduce carbon emissions in Arkansas.

Unfortunately, much of the hyperbole and dire warnings of economic catastrophe that greeted the EPA guidelines on the day of their release were based on incorrect assumptions formed before actual details were known. These arguments for the status quo vastly undervalued the capacity of energy efficiency to reduce carbon emissions and at least one study commissioned by the U.S. Chamber of Commerce assumed that EPA would require a national reduction of carbon emissions of 42% by 2030 when the actual target came in at 30%.

It is being proven in Arkansas and around the country that energy efficiency creates more jobs per dollars spent than any other resource and it is the least-cost energy resource because it can be deployed easier and faster than a new power plant. By including energy efficiency and other advanced energy technologies in its guidelines, the EPA has opened

the door for states to both add net jobs to the economy and lower electric bills for millions of consumers.

Arkansas is well prepared to choose energy efficiency as at least one tool to help achieve our carbon reduction target. The public utility energy efficiency programs authorized since 2007 by the APSC are popular among Arkansas customers and represent the single-most important public policy to drive energy efficiency job creation and technology innovation in the state.

An ongoing study by the Arkansas Advanced Energy Foundation on the economic impact of these programs has identified more than 700 Arkansas companies that are engaged by the utilities to deliver their incentive programs. These businesses range from small, Main Street plumbing businesses to large energy service companies of 150 workers or more. The study's comprehensive findings are due for release in July but we've already learned that many small companies of less than 10 employees say that utility EE programs comprise 50 percent or more of their business volume.

Though significantly behind energy efficiency's evolution in Arkansas, renewable energy technology once fully enabled and supported by the electric utilities and political leaders, can rapidly achieve employment numbers similar to EE and contribute mightily to carbon reductions.

Arkansas has had a taste of renewable energy through our hydropower facilities on the Arkansas, White, and Ouachita River systems, but these power plants can be improved to produce more energy. And Combined Heat and Power (CHP) technology has only scratched the surface of its potential both as a renewable energy resource and as a way to use energy more efficiently.

Finally, the state and region's natural gas supplies are considerable, and increasing the use of natural gas combined cycle plants for baseline generation beyond present levels is yet another underutilized advanced energy technology that could significantly reduce carbon emissions in Arkansas.

We don't doubt Arkansas's and America's exceptional ability to innovate new and better energy solutions. How many of us imagined five years ago that we could remotely manage our home's electrical system with a smart phone?

By utilizing existing advanced energy technologies and services that are available within our borders, Arkansas's plan to meet carbon reduction targets, due as early as June 2016, can be the vehicle for modernizing our electricity sector by introducing competition, choice, and innovation for new products and services both known today and not yet imagined.

This is the future we all want and expect for Arkansas.