



May 28, 2014

Honorable Mike Beebe  
Governor, State of Arkansas  
State Capitol, Room 250  
Little Rock, AR 72201

Dear Governor Beebe,

As you know, the U.S. Environmental Protection Agency is expected to announce early next week its draft guideline for regulating carbon emissions from the existing electric power sector under Section 111(d) of the Clean Air Act. Under the timeframe announced by President Obama, the EPA guideline will become final in June 2015, and states will have until June 2016 to develop and submit their plans for compliance.

It is clear that under the leadership of the Arkansas Public Service Commission (APSC) and the Arkansas Department of Environmental Quality (ADEQ), your Administration is appropriately thinking about how Arkansas will meet the federal guideline for emissions reduction.

As a stakeholder in the state's early implementation process, the Arkansas Advanced Energy Association (AAEA) believes that this new obligation to reduce emissions represents an opportunity to modernize the state and national electric power system, making it higher performing and more consumer-focused. This is an opportunity to be embraced in Arkansas, and as the business voice for advanced energy technologies we 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 20<sup>th</sup> century, the U.S. electric power system needs upgrading to meet the need for secure, clean, affordable energy in the 21<sup>st</sup> century. The plan for compliance with EPA's regulation under Section 111(d) can be the vehicle for modernizing Arkansas's electric power system for the benefit of the households and businesses that depend on it.

All indications are that EPA will give states broad flexibility in determining how to meet the federal guideline. We submit that the wide range of technologies and services provided by businesses represented by AAEA offer many solutions for meeting the federal guideline while providing myriad economic and service quality benefits. We respectfully request that you and the agencies under your direction consider making full

use of these technologies and services in Arkansas's plan to comply with the EPA guidelines and make needed improvements in the way we generate, deliver, and use electricity in our state.

The enclosed report, *Advanced Energy Technologies for Greenhouse Gas Reduction*, produced by our national partner, Advanced Energy Economy (AEE), details 40 specific technologies and services that, separately and together, can contribute to reducing emissions from the electric power sector. These descriptions provide information on the role of each technology or service in electricity generation and use, how it is contributing to the electric power sector today, and its considerable potential to deliver additional benefits in the future. These solutions do not constitute a comprehensive list, but rather demonstrate the breadth of options that states have at their disposal today. We believe many, if not all, of these advanced energy solutions merit inclusion in Arkansas's plan for emissions reduction and system modernization.

These technologies and services are, for the most part, well established in the marketplace and in use in Arkansas and around the country and throughout the world. AAEA is the business voice for a wide range of advanced energy technologies in Arkansas including energy efficiency, demand response, natural gas electric generation, solar, wind, hydro, nuclear, electric vehicles, alternative fuels and smart grid. These are innovations that make our energy supply more secure, clean and affordable. An employment study released by the Arkansas Advanced Energy Foundation (AAEF) in 2012 conservatively documented 11,337 jobs across 22 advanced energy industry segments in Arkansas as of 2010, nearly equal to employment in the accommodation services segment (i.e., hotels and motels) of the hospitality and leisure industry. More than half of these workers (6,500) are employed in the energy efficiency sector. Here and around the country, advanced energy technologies are already providing value to customers, to the electricity system as a whole, and to the local economy.

Indeed, we have already begun to put these technologies to work in Arkansas and many recent policy improvements have the state on the cusp of rapid expansion of energy efficiency-related jobs.

The Public Utility Energy Efficiency Programs authorized since 2007 by the APSC represent the single-most important public policy to drive energy efficiency job creation and innovation in the state. Operated by all of the regulated electric and natural gas utilities not including the electric cooperatives, the energy savings and carbon reduction capabilities of these programs are now documented over years of performance and verification by the utilities in filings at the APSC. A potential study authorized by the APSC is now underway to evaluate further enhancements to the state's utility EE programs. Also, a large barrier to private financing of energy savings improvements by Arkansas property owners was removed by the Arkansas General Assembly with your support last year through enactment of the Property Assessed Clean Energy Act. Similarly, barriers to financing of energy savings improvements within the state's massive inventory of 2,500 buildings were removed through creation of the soon-to-be-

launched Arkansas Energy Performance Contracting program administered by the Arkansas Energy Office. .

Though significantly behind energy efficiency's evolution in Arkansas, renewable energy technology once fully enabled and supported by the electric utilities and the Legislature can rapidly achieve employment numbers similar to EE and contribute to carbon reductions. Arkansas has had a taste of renewable energy through its hydropower facilities on the Arkansas, White, and Ouachita River systems but more energy could be produced at existing hydropower facilities. Combined Heat and Power technology has only scratched the surface of its potential both as a renewable energy resource and as a way to use energy more efficiently. Recent policy improvements by the General Assembly and APSC in the net metering law and rules have set us on the right path to increased deployment of renewable energy facilities in Arkansas – particularly solar power - but the state still needs the commitment and a plan by the electric utilities to incorporate utility- and distributed-scale renewable energy into their generation portfolios. This can be done in a measured and careful manner through use of another Arkansas tool, the Integrated Resource Plan (IRP), which is filed by the four electric utilities and electric cooperatives every three years at the APSC.

IRP is perhaps the most under- utilized and under-appreciated asset Arkansas has for planning carbon reductions, power generation including renewable energy, energy efficiency, and grid reliability. Unfortunately, the plans are rarely used by the utilities and the APSC to guide decisions during the interim between filings. The IRP process offers the state the ability to strategically plan for a carbon-reduced future that will reduce costs, maintain and improve grid reliability, and create investment and jobs. Each IRP should be an integral component of Arkansas's 111(d) Statewide Implementation Plan or SIP.

The location of two Regional Power Organizations (RTOs) in Arkansas, Southwest Power Pool and Midcontinent Independent System Operator (MISO), and the membership of our electric utilities in one or the other RTO provides a remarkable opportunity for Arkansas to conduct regional carbon reduction planning and to share energy resources with other states and utilities.

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 the present is yet another underutilized advanced energy technology that could reduce carbon emissions in Arkansas by half.

By utilizing existing advanced energy technologies and services that are available within our borders, Arkansas's plan to meet EPA's upcoming emission standards can be a vehicle for creating a higher performing electric power system for all. Deploying advanced energy will create jobs and stimulate economic growth from investments in modernizing the electric power system. New consumer value will be created in a long-stagnant 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.

We look forward to working with you on this important initiative, because we know that a 21<sup>st</sup> Century electricity system is vital to our future as a state and as a nation.

Sincerely,



Stephen Patterson, Executive Director  
Arkansas Advanced Energy Association

- Enclosure (1) – *Advanced Energy Technologies for Greenhouse Gas Reductions - 40 Solutions for Cutting Carbon Emissions from Electricity Generation*, a report by Advanced Energy Economy

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