

## IMPACTS OF EPA'S CARBON PROPOSAL ON MISSISSIPPI

### BACKGROUND

- In 2013, coal provided 16% of Mississippi's electricity, natural gas 60%, nuclear 21%, with renewables providing the remaining 3%.<sup>i</sup> Mississippi's average electricity price of 9.15 cents/kWh last year was almost 10% below the national average.<sup>ii</sup>
- Currently, coal is responsible for almost 3,400 direct and indirect jobs in Mississippi.<sup>iii</sup>
- Despite below-average electricity prices, many Mississippi families are struggling with energy costs. The 677,000 low-income and middle-income families in Mississippi -- 62% of the state's households -- spend 22% of their after-tax income on energy.<sup>iv</sup> In addition, one-third of Mississippi households receive Social Security.<sup>v</sup> Lower income families and Social Security recipients are especially vulnerable to increases in energy prices.<sup>vi</sup>
- Mississippi utilities have announced the conversion of two coal units (totaling 706 MW) due to EPA policies. Nationwide, utilities have announced the retirement or conversion of 381 coal units (totaling 60,104 MW) in 36 states due to EPA policies.<sup>vii</sup>

### EPA'S CARBON PROPOSAL

- In June, EPA proposed its "Clean Power Plan" (CPP) to reduce carbon dioxide (CO<sub>2</sub>) emissions from existing coal-fired and natural gas-fired power plants in 49 states, including Mississippi. EPA plans to finalize the proposal in June of next year.

- Under the EPA proposal, Mississippi will be required to reduce the CO<sub>2</sub> emissions rate of its electric generating fleet by 37%.<sup>viii</sup> EPA's proposal will force Mississippi to change the way the state produces electricity, reduce the amount of electricity used by Mississippi consumers, and significantly increase the price of electricity.
- EPA *assumed* the following in setting Mississippi's emissions rate:
  - The efficiency of existing coal-fired units can be improved by 6%.<sup>ix</sup>
  - Electricity from natural gas can be increased by 37%;<sup>x</sup>
  - Electricity from coal can be eliminated;<sup>xi</sup>
  - Electricity from renewable energy sources can be increased by more than 260%;<sup>xii</sup>
  - None of the state's nuclear capacity will retire;<sup>xiii</sup> and
  - Mississippi consumers can reduce electricity use by more than 10%.<sup>xiv</sup>
- The Governor of Mississippi signed a letter stating that EPA does not have the legal authority to regulate carbon emissions from power plants.<sup>xv</sup> In total, officials from 30 states, including Mississippi, have expressed opposition to the approach EPA has included in its proposal. In addition, 13 states have joined in litigation challenging EPA's proposal.<sup>xvi</sup>

## SERIOUS ECONOMIC AND RELIABILITY IMPACTS

- Modeling by NERA Economic Consulting projects that the CPP will cause a 14% increase in retail electricity prices for Mississippi consumers, with a peak year increase of 16%. Under another scenario (what will happen if Mississippi consumers do not significantly reduce their electricity use), electricity prices in Mississippi could increase by 18%, with a peak year increase of 19%.<sup>xvii</sup>
- Another independent study conducted for the National Mining

Association estimates similar impacts, including a peak year wholesale electricity price increase of 15.5% for Mississippi consumers.<sup>xviii</sup>

- NERA also projects double digit electricity price increases in 42 other states, as well as nationwide costs averaging \$41 billion to \$73 billion per year. NERA's projections include \$560 billion that consumers nationwide will have to spend to reduce their electricity use.<sup>xix</sup>
- Grid operators and electric utilities in many parts of the country are expressing serious concerns about the threat of EPA's proposal to electric reliability.<sup>xx</sup> Those concerned include the Midcontinent Independent System Operator (MISO), which is responsible for grid reliability in a 15-state region that includes the western part of Mississippi.<sup>xxi</sup>

## NO BENEFITS

- In 2013 the U.S. electric sector emitted 2.05 billion metric tons of CO<sub>2</sub>, representing approximately 4% of global anthropogenic greenhouse gas emissions.<sup>xxii</sup>
- Analysis based on another EPA rulemaking shows the climate effects of the EPA proposal are meaningless. For example, the atmospheric CO<sub>2</sub> concentration would be reduced by less than 0.5%; global average temperature increase would be reduced by less than 2/100<sup>ths</sup> of a degree Fahrenheit; and sea level rise would be reduced by 1/100<sup>th</sup> of an inch (the thickness of three sheets of paper).<sup>xxiii</sup>
- To justify the EPA proposal, its supporters argue the U.S. must show global leadership in reducing CO<sub>2</sub> emissions. However, other countries are abandoning pledges to reduce emissions or increasing emissions regardless of their pledges. According to the *Washington Post*, many industrialized countries are not expected to meet their

commitments to reduce CO<sub>2</sub> emissions.<sup>xxiv</sup>

November 4, 2014

---

<sup>i</sup> U.S. Energy Information Administration, *Electric Power Monthly*, February 2014.

<sup>ii</sup> *Ibid.*

<sup>iii</sup> National Mining Association, <http://www.countoncoal.org/states/>.

<sup>iv</sup> Eugene M. Trisko, *Energy Cost Impacts on Mississippi Families*, January 2014.

<sup>v</sup> *Ibid.*

<sup>vi</sup> *Ibid* and The 60 Plus Association, *Energy Bills Challenge America's Fixed-Income Seniors*, 2014.

<sup>vii</sup> ACCCE, *Coal Unit Shutdowns as of October 23, 2014*. Retirements and conversions are based on public announcements by the coal unit owners.

<sup>viii</sup> The percentage reduction is relative to emission rates in 2012. The Mississippi emissions rate goal is from Table 8, pages 346 – 348, of EPA's proposal, and 2012 emission rates are found in EPA's *Goal Computation Technical Support Document*, June 2014. <http://www2.epa.gov/sites/production/files/2014-05/documents/20140602tsd-goal-computation.pdf>.

<sup>ix</sup> EPA, *GHG Abatement Measures* technical support document, June 2014. EPA assumes the heat rate of every coal-fired electric generating unit can be improved by 6%.

<sup>x</sup> EPA, *Technical Support Document (TSD) for the CAA Section 111(d) Emission Guidelines for Existing Power Plants: Goal Computation Technical Support Document*, June 2014, Appendix 1.

<sup>xi</sup> *Ibid.*

<sup>xii</sup> EPA, *Technical Support Document (TSD) for the CAA Section 111(d) Emission Guidelines for Existing Power Plants: GHG Abatement Measures*, June 2014, Table 4.9.

<sup>xiii</sup> EPA, *Technical Support Document (TSD) for the CAA Section 111(d) Emission Guidelines for Existing Power Plants: Goal Computation Technical Support Document*, June 2014, page 14.

<sup>xiv</sup> EPA, *Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants*, June 2014, Table 3.3.

<sup>xv</sup> September, 9, 2014, letter signed by 15 Governors to President Obama.

<sup>xvi</sup> Petition for Review, *West Virginia v. EPA*, Case No 14-1146 (D.C. Cir. filed Aug. 1, 2014); Brief of the States of West Virginia, Alabama, Alaska, Kentucky, Nebraska, Ohio, Oklahoma, South Carolina, and Wyoming as *Amici Curiae* in Support of the Petitioner, *In Re: Murray Energy Corporation v. EPA*, Case No. 14-1112, (D.C. Cir. filed June 25, 2014).

<sup>xvii</sup> NERA Economic Consulting, *Potential Impacts of the EPA Clean Power Plan*. An annual average increase of 14% means that electricity prices are projected to be 14% higher each year, on average, under EPA's proposal than electricity prices would be in the absence of the proposal.

<sup>xviii</sup> *EPA Clean Power Plan: Costs and Impacts on U.S. Energy Markets*, Energy Ventures Analysis, August 2014 <http://www.countoncoal.org/states/>

<sup>xix</sup> NERA Economic Consulting, *Potential Impacts of the EPA Clean Power Plan*.

<sup>xx</sup> Southwest Power Pool, *Grid Reliability and Transmission Buildout Issues*, presentation to Arkansas DEQ Stakeholder Meeting, October 1, 2014; Midwest Independent System Operator, *Clean Power Plan: MISO Analysis Update for ADEQ/APSC Stakeholder Meeting*, October 1, 2014; and

---

American Electric Power, *Transmission Challenges with the Clean Power Plan*, September 2014.

<sup>xxi</sup> Southwest Power Pool, *Grid Reliability and Transmission Buildout Issues*, presentation to Arkansas DEQ Stakeholder Meeting, October 1, 2014; Midwest Independent System Operator, *Clean Power Plan: MISO Analysis Update for ADEQ/APSC Stakeholder Meeting*, October 1, 2014; and American Electric Power, *Transmission Challenges with the Clean Power Plan*, September 2014.

<sup>xxii</sup> IPCC, *Climate Change 2014: Mitigation of Climate Change: Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*; EIA, *Monthly Energy Review*, February 2014.

<sup>xxiii</sup> ACCCE, *Climate Effects of EPA's Proposed Carbon Regulations*, June 2014.

<sup>xxiv</sup> Steven Mufson, *All over the planet, countries are completely missing their emissions targets*, (September 23, 2014) <http://www.washingtonpost.com/blogs/wonkblog/wp/2014/09/23/all-over-the-planet-countries-are-completely-missing-their-emissions-targets/>