

## IMPACTS OF EPA'S CARBON PROPOSAL ON OKLAHOMA

### BACKGROUND

- In 2013, coal provided 41% of Oklahoma's electricity, natural gas 41%, hydroelectric power 3%, and other renewables 15%.<sup>i</sup> Oklahoma's average electricity price of 7.81 cents/kWh last year was 22% below the national average.<sup>ii</sup>
- Currently, coal is responsible for almost 4,400 direct and indirect jobs in Oklahoma.<sup>iii</sup>
- Despite below-average electricity prices, many Oklahoma families are struggling with high energy costs. The 797,000 low-income and middle-income families in Oklahoma -- 55% of the state's households -- spend 20% of their after-tax income on energy.<sup>iv</sup> In addition, almost one-third of Oklahoma 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>
- Oklahoma utilities have announced the retirement or conversion of three coal units (totaling 1,464 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 Oklahoma. EPA plans to finalize the proposal in June of next year.

- Under the EPA proposal, Oklahoma will be required to reduce the CO<sub>2</sub> emissions rate of its electric generating fleet by 35%.<sup>viii</sup> EPA's proposal will force Oklahoma to change the way the state produces electricity, reduce the amount of electricity used by Oklahoma consumers, and significantly increase the price of electricity.
- EPA *assumed* the following in setting Oklahoma'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 65%;<sup>x</sup>
  - Electricity from coal can be reduced by 52%;<sup>xi</sup>
  - Electricity from renewable energy sources can be increased by 83%;<sup>xii</sup> and
  - Oklahoma consumers can reduce electricity use by almost 11%.<sup>xiii</sup>
- The Oklahoma legislature passed Concurrent Resolution No. 39 this year which supports CO<sub>2</sub> standards based on measures that can be implemented at fossil-fueled power plants ("inside-the-fence" measures). EPA's proposal conflicts with this resolution. Last year, the Oklahoma Attorney General signed a "white paper" opposing the approach that EPA proposed.<sup>xiv</sup> In addition, the Governor of Oklahoma signed a letter in September to President Obama stating that EPA does not have the authority to regulate coal plants under section 111(d) of the Clean Air Act.<sup>xv</sup> Also, Oklahoma is also one of 13 states that have joined in litigation challenging EPA's proposal.<sup>xvi</sup> In total, officials from over 30 states have expressed opposition to the approach EPA included in its proposal.

## SERIOUS ECONOMIC AND RELIABILITY IMPACTS

- Modeling by NERA Economic Consulting projects that the CPP will cause an 18% increase in retail electricity prices for Oklahoma consumers, with a peak year increase of 21%. Under another scenario (what will happen if Oklahoma consumers do not significantly

reduce their electricity use), electricity prices in Oklahoma could increase by 22%, with a peak year increase of 25%.<sup>xvii</sup>

- Another independent study conducted for the National Mining Association estimates similar impacts, including a peak year wholesale electricity price increase of 20.4% for Oklahoma 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 threats of EPA's proposal to electric reliability. This includes the Southwest Power Pool, which is responsible for grid reliability in a nine-state region that includes Oklahoma.<sup>xx</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>xxi</sup>
- Analysis based on another EPA rulemaking shows that 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>xxii</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>xxiii</sup>

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<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 Oklahoma Families*, December 2013.

<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 Oklahoma 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, *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>xiv</sup> *Perspective of 18 States on Greenhouse Gas Emission Performance Standards for Existing Sources under § 111(d) of the Clean Air Act*, signed by 17 Attorneys General and the Commissioner of the Indiana Department of Environmental Management, September 11, 2013.

<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 18% means that electricity prices are projected to be 18% higher each year, on

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

<sup>xxiii</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/>