

IMPACTS OF EPA'S CARBON PROPOSAL ON MONTANA

BACKGROUND

- In 2013, coal provided 53% of Montana's electricity, with hydroelectric power providing 36%, other renewables 6%, and other sources, including petroleum coke and natural gas, providing the remaining 5%.ⁱ Montana's electricity price of 8.58 cents/kWh last year was 15% below the national average.ⁱⁱ
- Currently, coal is responsible for almost 6,500 direct and indirect jobs in Montana.ⁱⁱⁱ
- Despite below-average electricity prices, many Montana families are struggling with high energy costs. The 223,000 low-income and middle-income families in Montana -- almost 55% of the state's households -- spend 19% of their after-tax income on energy.^{iv} In addition, almost one-third of Montana households receive Social Security.^v Lower income families and Social Security recipients are especially vulnerable to further increases in energy prices.^{vi}
- Montana utilities have announced the retirement of one coal unit (154 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.^{vii}

EPA'S CARBON PROPOSAL

- In June, EPA proposed its "Clean Power Plan" (CPP) to reduce carbon dioxide (CO₂) emissions from existing coal-fired and natural gas-fired power plants in 49 states, including Montana. EPA plans to

finalize the proposal in June of next year.

- Under the EPA proposal, Montana will be required to reduce the CO₂ emissions rate of its electric generating fleet by 21%.^{viii} EPA's proposal will force Montana to change the way the state produces electricity, reduce the amount of electricity used by Montana consumers, and significantly increase the price of electricity.
- EPA *assumed* the following in setting Montana's emissions rate:
 - The efficiency of existing coal-fired units can be improved by 6%;^{ix}
 - Electricity from renewable energy sources can be increased by 116%;^x and
 - Montana consumers can reduce their electricity use by 11%.^{xi}
- Last year, Montana's Attorney General signed a "white paper" opposing the approach EPA used to set its proposed standards.^{xii} In total, officials from 30 states, including Montana, have expressed opposition to the approach EPA included in its proposal. In addition, 13 states have joined in litigation challenging EPA's proposal.^{xiii}

SERIOUS ECONOMIC AND RELIABILITY IMPACTS

- Modeling by NERA Economic Consulting projects that the CPP will cause a 19% increase in retail electricity prices for Montana consumers, with a peak year increase of 20%. Under another scenario (what will happen if Montana consumers do not significantly reduce their electricity use), electricity prices in Montana would increase by 24%, with a peak year increase of 26%.^{xiv}
- Another independent study conducted for the National Mining Association estimates similar impacts, including a peak year wholesale electricity price increase of 25.7% for Montana

consumers.^{xv}

- 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 must spend to reduce electricity use.^{xvi}
- EPA acknowledges that electricity generation from coal will decline by nearly 30% nationwide.^{xvii} NERA also projects that electricity generation from coal will decline by at least 29%. As a result, domestic coal consumption will decline by 240 million tons or more by 2020.^{xviii} This will affect demand for Montana coal because about half of Montana's coal is used in other states.^{xix} EPA also estimates that coal prices will decline by as much as 18%.^{xx}
- Grid operators and electric utilities in many regions of the country are expressing serious concerns about the threats of EPA's proposal to electric reliability. Those concerned include the Midcontinent Independent System Operator (MISO), which is responsible for grid reliability in a 15-state region that includes part of Montana.^{xxi}

NO BENEFITS

- In 2013 the U.S. electric sector emitted 2.05 billion metric tons of CO₂, representing approximately 4% of global anthropogenic greenhouse gas emissions.^{xxii}
- Analysis based on another EPA rulemaking shows that the climate effects of the EPA proposal are meaningless. For example, the atmospheric CO₂ concentration would be reduced by less than 0.5%; global average temperature increase would be reduced by less than 2/100^{ths} of a degree Fahrenheit; and sea level rise would be reduced by 1/100th of an inch (the thickness of three sheets of paper).^{xxiii}

- To justify the EPA proposal, its supporters argue the U.S. must show global leadership in reducing CO₂ 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 CO₂ emissions.^{xxiv}

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ⁱ U.S. Energy Information Administration, *Electric Power Monthly*, February 2014.

ⁱⁱ *Ibid.*

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

^{iv} Eugene M. Trisko, *Energy Cost Impacts on Montana Families*, December 2013.

^v *Ibid.*

^{vi} *Ibid* and The 60 Plus Association, *Energy Bills Challenge America's Fixed-Income Seniors*, 2014.

^{vii} ACCCE, *Coal Unit Shutdowns as of October 23, 2014*. Retirements and conversions are based on public announcements by the coal unit owners.

^{viii} The percentage reduction is relative to emission rates in 2012. The Montana 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>.

^{ix} 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%. While EPA did not assume any change in the utilization of coal and natural gas units in Montana to *set* its emission targets, it does not mean that coal and natural gas generation in Montana would not need to change in order to *comply* with the EPA target.

^x 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.

^{xi} 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.

^{xii} *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.

^{xiii} 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).

^{xiv} NERA Economic Consulting, *Potential Impacts of the EPA Clean Power Plan*. An annual average increase of 19% means that electricity prices are projected to be 19% higher each year, on average, under EPA's proposal than electricity prices would be in the absence of the proposal.

^{xv} EPA Clean Power Plan: Costs and Impacts on U.S. Energy Markets, Energy Ventures Analysis, August 2014 <http://www.countoncoal.org/states/>

^{xvi} NERA Economic Consulting, *Potential Impacts of the EPA Clean Power Plan*.

^{xvii} 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.

^{xviii} NERA Economic Consulting, *Potential Impacts of the EPA Clean Power Plan*.

^{xix} EIA, *Montana State Profile and Energy Estimates*, <http://www.eia.gov/state/analysis.cfm?sid=MT>

^{xx} 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.

^{xxi} 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.

^{xxii} 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.

^{xxiii} ACCCE, *Climate Effects of EPA's Proposed Carbon Regulations*, June 2014.

^{xxiv} 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/>