The Cost of Excessive Regulation in the Coal Industry

Exploring the Economic and Human Costs

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Economic and Human Costs of Excessive Regulation

• Direct Costs- Borne By Industry
  • 9 Obama era-regulations that imposed excessive burdens on the coal industry.

• Human Costs are Indirect Costs- Borne By Consumers
  • Higher Electricity Prices.
  • Fewer Jobs- Especially in Manufacturing.
  • Loss of Opportunity.
What is “Excessive” Regulation?

• “Excessive” is a subjective word.
• Performing a cost/benefit analysis can make this more objective.
• If the costs outweigh the benefits, it is excessive.
• Of course, this analysis can be manipulated as well.
Nine Obama -Era Regulations on Coal

- Clean Power Plan,
- Carbon Pollution Standards for New Plants:
  - Mercury Air and Toxics Standards (MATS),
  - New Source Review Standards (NSR),
  - Cross-State Air Pollution Rule (CSAPR),
- Coal Combustion and Residual (CCR) Rule,
- Effluent Limitations Guidelines (ELG),
- National Ambient Air Quality Standards for Ozone (NAAQS-Ozone),
- Stream Protection Rule (SPR).

- **Cost more than $100 billion per year.**
What Does $100 Billion Mean?
Clean Power Plan

This regulation was developed to reduce CO2 emissions from power plants by 32 percent from 2005 levels by 2030:

• Costs:
  • $8 billion-$39 billion in compliance costs per year.
  • 11-14 percent increase in electricity prices per year.

• Benefits?
  • Obama EPA climate models predicted a reduction of 0.018 Degrees C in temperatures by 2100, an amount too small to be accurately measured.
Retrofit or Retire

• More than 250 coal plants have retired since 2010.
  • Approximately half of the coal fleet.
  • 88 percent were smaller plants, but that trend is changing.
  • Clean Power Plan a factor in utility planning.
  • Utilities have focused on natural gas and renewables, which are more expensive than existing coal plants.

• What are the human costs of coal-plant closures?
  • Higher Electricity Prices.
  • Fewer Job Opportunities.
Human Costs - Higher Electricity Prices

- On average, existing coal is:
  - 38.6 percent less than new natural gas.
  - 2.5x cheaper than wind.
  - 3.5 times cheaper than PV solar.
Human Costs in Coal States
Electric Bills - Set to Skyrocket

- California has largely eliminated coal from its resource mix, at high cost.

High Energy Prices Hurt Manufacturing

California MFG job growth continues to lag the country
Percent change since 2010

Human Costs in Coal States
Manufacturing Growth By State

Manufacturing Growth By State, 2009-2016

2009 - 2016 % Change
-14% to -28%
-8% to -13%
-4% to -7%
-1% to -3%
4% to 7%
8% to 13%
14% to 28%
By the Numbers

Manufacturing Growth, 2009-2016

- Michigan: 28%
- Indiana: 18%
- Idaho: 16%
- Kentucky: 15%
- Oregon: 13%
- Montana: 12%
- Colorado: 12%
- South Carolina: 12%
- Utah: 11%
- South Dakota: 10%
- Tennessee: 10%
- Ohio: 10%
- Washington: 9%
- Florida: 8%
- Georgia: 8%
- Wisconsin: 8%
- Minnesota: 6%
- Nevada: 6%
- Iowa: 5%
- North Dakota: 4%
- Alaska: 4%
- Alabama: 4%
- Arizona: 4%
- Nation: 4%

Source: EMSI Employment Data, 2016.2
Rising Prices Hurt Low-Income Households

- EIA estimates the typical U.S. residential customer will spend $1,350 for electricity in 2017.
- The premature retirement of nuclear and coal-fired power plants will increase power prices by 27 percent.
- As a result, the annual electricity bill paid by consumers will grow to $1,714.
What Does $364 Mean?

• 50 hours of work at the federal minimum wage ($7.25/hour).
• This is time people could be spending with their kids:
  • Studies have shown that reading aloud to children at an early age is the single most important activity for future reading and educational success.
  • Obesity rates are higher among low-income households.
• Christmas Spending- 2015:
  • 14% will spend between $250 and $499,
  • 19% will spend less than $250,
  • Entire Christmas Budget for approximately 33 percent of Americans.
First-Hand Experience
Costs Coal-Mining Communities

• Between 2011 and September 2016, increased regulation, low-natural gas prices, mechanization, and a shift to western coal resulted in a loss of 36,000 coal mining jobs, of which nearly 90 percent were in Appalachia.

• The loss of these jobs is significant because jobs in the coal industry have an average salary of $82,000 per year.
Cost to Coal-Mining Communities
What Can Be Done?

- Clean Power Plan, Trump EPA rollback has begun,
- Carbon Pollution Standards for New Plants - ???
- Mercury Air and Toxics Standards (MATS), -Implemented,
- New Source Review Standards (NSR), -Task force created to reform these regulations,
- Cross-State Air Pollution Rule (CSAPR),
- Coal Combustion and Residual (CCR) Rule, Reformed under Obama
- Effluent Limitations Guidelines (ELG), Implementation Delayed,
- National Ambient Air Quality Standards for Ozone (NAAQS-Ozone), - Trump EPA Attempted Delay- Overruled by Courts,
- Stream Protection Rule (SPR).- CRA
Conclusions

• The Obama administration imposed a series of excessive regulations on the coal industry.
• The costs of excessive regulations are borne by everyone.
  • Manufacturers, low income families, and coal communities hit the hardest.
• The Trump administration has done a good job rolling back these regulations, how long lasting these reforms are depends on the appetite of the administration to overturn the Endangerment Finding.