



The Consumer Case for Greenhouse Gas Rules

The cost of coal

- Coal's harmful health and environmental costs are not reflected in the current price, so the fuel source is artificially cheap. When full health, environmental and carbon costs for coal are calculated, the cost of electricity generation from coal is 170 percent higher.
- The EPA has concluded that consumers will **not** experience rate increases as a result of its proposed rule for new power plants,¹ because market dynamics have rendered new coal-fired power plants cost-prohibitive with or without the rule.
- As a result of the rule, no new coal power plants could be built unless expensive carbon capture and sequestration (CCS) technology is applied. But because new coal-fired generation is more expensive than competing sources like natural gas and renewables even *before* the application of CCS, the EPA's rule will only ratify what the market has already determined: New energy generation will not be provided by coal-fired plants. The rule will therefore not impose any additional costs on consumers, even in the short term.
- Electricity is a significant cost for American consumers, especially lower-income consumers. Each year, the average American spends about \$760 purchasing electricity, representing 3.2% of all goods and services expenditures,² with proportional costs much higher for low-income consumers.
- Electricity costs can be reduced through energy efficiency and solar power.

Evidence that market dynamics have displaced coal for new power generation: A new 600 megawatt combined cycle natural gas plant features capital costs of roughly \$760 million – compared to capital costs for a similar pulverized coal power plant *without CCS as mandated by the proposed rule* of at least \$3 billion.³ When you include the operating and fuel, a combined cycle natural gas power plant costs roughly \$50/megawatt hour—compared to roughly \$88/megawatt hour for pulverized coal.⁴

¹ www.gpo.gov/fdsys/pkg/FR-2014-01-08/pdf/2013-28668.pdf at page 1,433.

² www.nrel.gov/docs/legosti/fy97/20505.pdf

³ Public Citizen estimates taken from EIA and RMI data.

⁴ *Lazard's Levelized Cost of Energy Analysis*

The cost of alternative technologies

- A recent ruling by an administrative law judge with the Minnesota Public Utilities Commission concluded that a proposed solar generation project was more cost-effective than building a similar sized natural gas power plant in the state.⁵
- Solar photovoltaic costs continue to plummet, from \$3.80/watt in 2008 to \$0.86/watt in mid-2012.⁶
- New solar additions to the grid outpaced new coal additions in 2013. New solar represented 21% of all new generation in 2013, while coal represented less than 11%.⁷
- In March, the city of Austin signed a 20-year power purchase agreement with Recurrent Energy to supply electricity to the city from a 150MW solar photovoltaic array for less than 5¢/kw—a rate less than the city’s prevailing rate, meaning electric rates for households will *decline* under the solar deal.⁸

Consumers will benefit from greenhouse gas rules

- Low-income consumers will be hit worst by climate change impacts, and have the most at stake in the adoption of policies to avert catastrophic climate change. On May 6, the Obama administration released the Third U.S. National Climate Assessment, detailing the \$100 billion in climate- and weather-related damages to the U.S. economy in 2012.⁹ Social and individual costs will continue to rise – rapidly – in the absence of meaningful action.
- Reducing America’s carbon pollution must be part of a global strategy to limit emissions of greenhouse gases by shifting to renewables and investing in efficiency.

History as a guide

- The actual financial cost of reducing greenhouse gas pollution is almost certain to be dramatically less than estimated by industry. In fact, the industry has been forecasting economic doom as a result of Clean Air Act regulations since the policy was adopted more than 40 years ago.
- Air pollutions targeted by the Clean Air Act have plummeted, while our national GDP has risen by 207 percent. The total benefits of the Clean Air Act amount to more

⁵ www.startribune.com/business/238322571.html

⁶ www.eei.org/ourissues/finance/documents/disruptivechallenges.pdf

⁷ www.ferc.gov/legal/staff-reports/2013/dec-energy-infrastructure.pdf

⁸ <http://www.greentechmedia.com/articles/read/Austin-Energy-Switches-From-SunEdison-to-Recurrent-For-5-Cent-Solar>

⁹ www.whitehouse.gov/climate-change

than 40 times the costs of regulation. For every one dollar we have spent, we get more than \$40 of benefits in return.

Industry obfuscation

- Some coal companies have deliberately produced misinformation to blame the closing of coal-fired power plants on EPA rules when in reality the plants were closed due to market dynamics. For example, coal utility American Electric Power (AEP) recently blamed the shutdown of a quarter of its coal-fueled generating capacity on the EPA proposals. But a week before issuing that press release, AEP chairman and CEO Mike Morris told Wall Street investors that the shutting down of the coal power plants was a win-win for both shareholders and customers because “[a]s you know, those are high-cost plants and dispatch infrequently.”¹⁰
- The Congressional Research Service recently dismissed the so-called “war on coal,” concluding that market conditions, and not EPA rules, were to blame for coal’s decline as a fuel for power: “The primary impacts of many of the [EPA] rules will largely be on coal-fired plants more than 40 years old that have not, until now, installed state-of-the-art pollution controls. Many of these plants are inefficient and are being replaced by more efficient combined cycle natural gas plants, a development likely to be encouraged if the price of competing fuel—natural gas—continues to be low, almost regardless of EPA rules.”¹¹

Several recent coal power plants closings are the result of coal being uncompetitive with the combination of natural gas, renewables and energy efficiency. They include NRG's Huntley coal-fired power plant in New York state, Rochester Public Utilities' Silver Lake coal plant and the Brayton Point coal power plant in Massachusetts. In that case, the private equity owners closed the plant as part of a capacity withholding market manipulation scheme.¹²

¹⁰ www.nationaljournal.com/daily/power-company-contradicts-itself-on-epa-rules-20110615

¹¹ James E. McCarthy & Claudia Copeland, *EPA's Regulation of Coal-Fired Power: Is a "Train Wreck" Coming?* August 8, 2011 www.lawandenvironment.com/uploads/file/CRS-EPA.pdf

¹² FERC Docket No. ER14-1409, <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13527062>