



Electric
Reliability
Coordinating
Council

2000 K Street, NW – Suite 500
Washington, DC 20006
(202) 828.5800

ERCC Answers Seven Questions You Should Have About EPA's Proposed Rule on Carbon Emissions from Existing Power Plants

On Monday, June 2, 2014, EPA Administrator Gina McCarthy will announce a proposed rule to address carbon emissions from the fleet of existing power plants. As the proposal is read and interpreted, we offer the following questions as a way to place the proposed rule in perspective.

The Electric Reliability Coordinating Council (ERCC) is a group of energy companies that provide reliable and affordable power to millions of consumers across the US. ERCC members have long supported commonsense interpretation of the Clean Air Act and responsible efforts to enhance efficiency.

Question One: EPA says they have listened carefully to views expressed by the regulated community, the states, and public interest groups and have produced a highly flexible proposal. Will that be enough to make a good rule?

Answer: Flexibility needs to be demonstrated in practice, not just in promises, and it is definitely in the eye of the beholder. However, EPA can be a little inconsistent when it comes to flexibility in implementing rules or working with states.

Recently, EPA has rejected state proposals on regional haze even before those proposals were submitted to the Agency for review. **Not flexible.**

Recently, the Agency disrupted a flexible air permit program it had previously approved, forcing industrial facilities to coin a whole new word to describe EPA's behavior - to "de-flex". Ultimately, a federal court set aside EPA's action. **Not flexible.**

Recently, Gina McCarthy's EPA went all the way to the Supreme Court to defend the Agency's right to superimpose a federal program in place of state controls. The Administrator called it one of the most important cases on her watch and indicated her intention to follow its guidance on carbon. **Not flexible.**

But it is also fair to ask what EPA means when it claims to be flexible in this case. The Agency may attempt to use its alleged authority under Section 111(d) of the Clean Air Act to **create a cap and trade system without legislative authorization**. It may attempt to force states to adopt policies that **restrict energy use for households, from when you can run the air conditioner to when you can wash your clothes**. It may force small businesses and factories to agree to **temporary shutdowns or rationing** in order to facilitate energy savings or intermittent renewable sources. It has even been suggested that EPA might use Section 111(d) to **establish new taxes on energy**. While Section 111(d) might be used to pursue a broad variety of goals, that is not the kind of flexibility most Americans are likely expecting or want.

For the roadmap that leads from a 111(d) rule to cap and trade and new taxes, see <http://www.brookings.edu/research/presentations/2013/11/07-carbon-pollution-epa-recommendations-morris>

Remember, even if EPA allows some flexibility, it doesn't address the real concern – whether EPA's requirements are realistic and justifiable. If EPA imposes unrealistic emission reduction requirements, they will be very costly for consumers and businesses, regardless of whether states have flexibility in meeting them.

Question Two: How much will the rule cost American families and businesses?

Answer: Of course, the answer to this question depends on what the rule actually requires. In downplaying the costs, EPA and the environmental community have made highly unrealistic assumptions regarding energy efficiency programs. **Environmental activists have also not made it clear to the public that a central goal of this regulatory effort, according to the documents produced by groups like NRDC, is to have the EPA force states to reduce electric generation by controlling (through restrictions known as “direct load control” and higher prices) how individual households use electricity in basic tasks like washing clothes, or heating and cooling their homes**. In essence, they assume that people and businesses can get by with much less electricity than they use today.

If you look at the emission reduction targets being proposed, and use more realistic assumptions about renewables and efficiency, the cost of carbon regulation for existing power plants will likely be in the range of **\$50 billion in annual economic losses and 224,000 Americans will lose their jobs annually**, between implementation of the rule and 2030 according to a new report conducted by the **internationally respected energy economists at IHS**. See the full report here, <http://www.energyxxi.org/epa-regs#>

Another industry assessment conducted by an impressive team at **NERA Economic Consulting**, revealed that environmentalist proposals upon which EPA apparently based their power-plant effort will carry a high price tag of 2.85 million lost jobs and \$13

to \$17 billion in added costs to consumers each year from 2018-2033. See <http://www.americaspower.org/nera>

Further, Heritage Foundation analysts modeled the effects of what a phase out of coal-fired generation would do to our economy. Using the **Heritage Foundation Energy Model**, a derivative of the National Energy Model System (NEMS), and analyzing a phase-out of coal between 2015 and 2038, the analysis showed that by the end of 2023:

- * Employment falls by nearly 600,000 jobs.
- * Manufacturing loses over 270,000 jobs.
- * Coal-mining jobs drop 30 percent.
- * A family of four's annual income drops more than \$1,200 per year, and its total income drops by nearly \$24,400 over the entire period of analysis.
- * Aggregate gross domestic product (GDP) decreases by \$2.23 trillion over the entire period of the analysis. See <http://www.heritage.org/research/reports/2013/12/epa-power-plant-regulations-a-backdoor-energy-tax>

A good chart with estimated economic impacts for **households in individual states** can be found here: <http://www.americaspower.org/federal-issues/state-energy-cost-for-families>

With 30,000 megawatts of additional retirements, some 14 million households will face higher bills. And **studies have shown that the lowest 10 percent of earners pay three times the amount of their monthly income than the most affluent consumers do. That's not fair.**

Some have suggested that regulatory cost is frequently overestimated by industry. But carbon is different. There are no off-the-shelf technologies to address carbon, only fuel switching regardless of expense or energy rationing.

Question Three: EPA and some environmental groups say the carbon rule will actually save money and create jobs. Can this be true?

Answer: **You can't regulate your way to prosperity.** EPA and its allies argue that the rule will create jobs by pointing to people that would be hired to install insulation and build more renewable power plants. But they ignore the many jobs that will be destroyed by closing down existing power plants and mines. And more importantly, they ignore the jobs that would be lost due to higher energy costs for industrial users.

EPA and environmental groups acknowledge that electricity rates will increase, but they claim that people and businesses will be able to get by with much less electricity. There is no doubt that our economy is becoming more energy efficient, but EPA's claims about future improvements are **simply wishful thinking**. We are not aware of any serious

analysis showing, as EPA claims, that it will save you money by increasing your electricity rates.

The efficiency promises made by environmentalist groups such as the NRDC [who have lead the call for this regulatory proposal] are beyond what any state, no matter how green, has achieved and are wholly unrealistic. Further, the economy remains in doldrums, with growth stunted over the last five years. **If economic recovery picks up - which the Administration believes is likely - counting on appreciably less energy use will not be an option.** What happens if policies rely on energy efficiency beyond what is viable given economic conditions? The result is **energy rationing.**

David Montgomery, a private sector economist who taught environmental economics at the California Institute of Technology and economic theory at Caltech and Stanford University, testified before the Senate and cited extensive data from Europe:

"Claims that regulations that raise the cost of doing business will create new jobs are, at best, a sideshow. Such claims only distract attention from the difficult tradeoffs that must be made between costs and benefits. 'Green jobs' is not a subject that leading economists have usually taken seriously enough to criticize in professional journals....**The experience of the past decade has proven that environmental standards or clean energy mandates will not create industries in the United States that will export clean technology to the rest of the world.** To the contrary, the cost of such mandates is borne where they are imposed, but the equipment may well be produced by workers in other countries."

For more, see <http://www.epw.senate.gov/> and go to the March 17, 2011 Green Jobs hearing.

Question Four: Will the proposed carbon rule actually reduce the threat of global warming?

Answer: No. Based on EPA's approach for analyzing the temperature and sea level effects of reducing CO₂ emissions, a complete shutdown of U.S. coal-fired power plants is projected to reduce the average global temperature by about 1/20th of a degree F; and to reduce sea level by about 1/25th of an inch. This assumes that any power generation built to replace these plants would be carbon free – an assumption that is obviously unrealistic.

If the Administration's proposal is to reduce carbon emissions from power plants by 25 percent, the effects on temperature and sea level would obviously be much less – perhaps **1/80th of a degree F and 1/100th of an inch.** It will be interesting to see whether EPA provides any of these estimates on Monday when it releases the proposal.

But, even this almost undetectable reduction in global warming is unlikely to occur given that **other nations are unlikely to follow our lead in reducing carbon emissions.**

US carbon emissions have been stable or declined over the last decade. By contrast, Chinese emissions have increased over 170 percent while Indian emissions have increased over 90 percent. There is little evidence that our trade competitors will "follow our lead" on carbon regulation when the competitive advantage of their industries hang in the balance. Indeed, as manufacturing moves overseas in search of more optimal regulatory conditions, **even more carbon will be released** as less efficient factories churn out goods that must then be transported thousands of miles back to US customers. **Our trading partners with measurably worse environmental records may be the real winners when the US goes it alone with unilateral carbon regulations.**

Question Five: I am confused. I thought this rule was about climate change, and it doesn't do much about that. And yet, EPA and the President are doing all sorts of media events regarding the impact of the rule on conventional air pollution. Greenhouse gasses don't cause asthma, do they?

Answer: **No, they certainly do not.** Because the rule produces little if any benefits, the Administration appears to be confusing the rule with one designed to address conventional air pollution. The fact is that EPA admits that conventional air pollution has been on decline for years and the Agency has adopted a number of recent rules to address the very sort of emissions it now claims to be reducing with the carbon rule. Put another way, the Agency continues to pile on new costs but claims the same old benefits it has used before to justify other costly rules. **This is called double accounting, and frankly it got some folks in serious trouble a few years ago at Enron and in the home mortgage industry.**

The last time EPA tried to pull this public health bait and switch was with respect to one of its last expensive power plant rules (called MATS). They were called on it then too. Susan Dudley, a professor of regulatory studies at George Washington University, and a former senior OMB official, put it this way:

"To a large extent the EPA gets its huge benefits by assigning high dollar values to reductions in emissions of fine particles that it models will occur as a side-effect of the required controls. These **fine particles are already regulated through other EPA mandates**, including standards the EPA updates regularly based solely on public health considerations. Yet, through what is essentially an accounting trick, the EPA calculates almost all of its monetary benefits for this rule from particle reductions well below the levels it has established as safe...Contrary to the EPA's claim that the rule will provide particular benefits to children, the premature deaths the EPA says will be averted are modeled to accrue to people with an average age of 80 years, who would live weeks or months longer, if at all, as a result of the regulations. This modeling is also suspect, because the EPA assumes causality where none can be explained, and makes other assumptions that **overstate effects.**"

See <http://thehill.com/blogs/congress-blog/energy-a-environment/200539-epas-risks-outweigh-rewards-for-new-mercury-rule>

In fact, **by increasing energy costs, the proposed rule could make public health worse.** This is true in two ways: by increasing the cost of medical care and treatment; and by imposing real threats on human health by suppressing economic growth and the improved health it brings.

With respect to treatment costs, U.S. hospitals spend \$8.5 billion annually on energy, often equaling between one and three percent of a hospital's operating budget. Furthermore, EPA estimates, in the U.S., the health sector is the second most energy-intensive commercial sector overall. Hospital administrators will have no choice but to pay attention to the cost of energy as surging energy costs will squeeze hospital budgets like never before. **Without an adequate supply of affordable power, the healthcare sector and the American public can expect increasing costs that consumers can ill-afford.**

Undermining economic recovery and job creation is detrimental to public health.

A report to Congress' Joint Economic Committee by Dr. Harvey Brenner showed the impacts of unemployment on public health. Brenner found that a one percent increase in the unemployment rate was associated with a two percent increase in premature deaths. In 2004, Brenner used his econometric models to estimate the public health results from reducing coal-generated electricity. **For example, with a substantial reduction in coal-fired power, Brenner found the result would be between 170,000 and 300,000 premature deaths.**

For more, see http://www.electricreliability.org/sites/default/files/media_files/ERCC_-_Comments_on_GHG_NSPS_%28May_9_2014%29_0.pdf

Question Six: Could the proposed carbon rule pose a threat to reliable electric power in the United States?

Answer: Unfortunately, yes. As a result of the combination of EPA's regulations, including the proposed rule for new and existing power plants, the country may experience **a shortage of electricity, and electric reliability will face substantial risks.** The loss of future coal-fired generation, investment in current coal-fired generation, and closures of existing coal-fired generation capacity that may result from the combination of the proposed rule and other EPA regulatory actions risk a variety of reliability problems. In most cases, coal-fired plants cannot be replaced overnight because of the infrastructure necessary to convert an old plant or to construct a new one is considerable.

The cold weather this winter made it clear that coal-fired generation, much of which is currently scheduled to be retired as a result of EPA rules, is vital to the reliability of our electricity supply. In some areas, coal-fired plants thought to be obsolete were

discovered to be essential to reliability, and one of the nation's largest electricity generators reported that 89 percent of the coal-fired generation slated for retirement by 2015 as a result of EPA rules was needed to supply electricity during the cold weather. These events were not isolated, as electricity generators in Texas and the Southeast faced extreme demands and had to take measures to ensure that coal-fired generation was available, even as those plants faced retirement in the coming years.

EPA's estimates of plant closures in the context of other recent power-plant rules has proven unreliable and its consultation with reliability experts elsewhere in the federal government has been spotty at best. EPA needs to carefully consider the consequences of policies that may not allow for a flexible and reliable supply of electricity, because the impacts of reliability problems can be devastating. The downside impacts of reduced electric reliability are substantial and must be taken into account in any responsible analysis of the proposed rule. As ISO New England has stated:

"A reliable supply of electricity is a foundation of our prosperity and quality of life. Without it, our world literally grinds to a halt—businesses cannot plan and operate productively, hospitals and schools cannot provide their essential services, and residents cannot depend on the electricity they need simply to live their daily lives. Without reliable electricity, the financial and societal costs would be enormous."

For more, see http://www.electricreliability.org/sites/default/files/media_files/ERCC_--_Comments_on_GHG_NSPS_%28May_9_2014%29_0.pdf

Question Seven: Some say the EPA rule may be illegal, but didn't the Supreme Court say EPA could do whatever it wants on carbon?

Answer: Not exactly. The Supreme Court said that EPA could regulate greenhouse gas emissions from automobiles if it made appropriate findings to justify such regulation. The EPA effort to stretch from this decision to regulating power plants under a seldom used provision of the Clean Air Act is unprecedented.

Even if the EPA may address carbon emissions from power plants in some reasonable fashion, the way it does it can still be illegal. The EPA proposes a carbon reduction number not based on what an improved power plant might do, but rather on a whole range of changes in the way families and businesses can consume energy. **All of this is based on a section of the Clean Air Act (section 111(d)) that is a few hundred words and doesn't mention demand-side reductions or carbon or even power plants.** And in 40 years, this provision has never been interpreted in a way that would allow the EPA rule.

On May 23, 2014, a federal court struck down another federal agency's attempt to move beyond its regulatory mandate and to require direct reductions in energy use. The court said that the federal agency's "rationale, however, has no limiting principle. Without

boundaries [the federal agency could] regulate any number of areas, including the steel, fuel, and labor markets." The court said such regulatory "authority must be cabined by something sturdier than creative characterizations." These words apply just as well or better to EPA, who has made little if any effort to "cabin" its authority. *EPSCA v. FERC*, No. 11-1486.

Even proponents of the President's climate initiative have their doubts. Jody Freeman, a Harvard law professor and President Obama's climate advisor in 2009-10, generally supported the basis for the carbon proposal. But she warned:

"It is always risky legally to adapt old laws to new problems. The Clean Air Act was passed in 1970 primarily to address conventional pollutants like smog and soot and was subsequently amended, but before climate change was a prominent issue. Although the act is flexible and allows regulators substantial discretion, even the EPA would concede that it is not perfectly designed to address greenhouse gases like carbon dioxide...Still, every case is unique. No court has ever determined what a performance standard means in this context. And **the EPA has never before adopted such an expansive reading** of 111(d). It is entirely possible that some judges would balk at an ambitious approach."

NYT, May 30, 2014, at http://www.nytimes.com/2014/05/30/opinion/teaching-an-old-law-new-tricks.html?_r=0

For more information, please contact ERCC Director Scott Segal at scott.segal@policyres.com or at (202) 828-5845.