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Pennsylvania Coal Alliance Comments on Compliance with EPA's "Clean Power Plan"

The Pennsylvania Coal Alliance (PCA) appreciates the opportunity to provide comments to the Pennsylvania Department of Environmental Protection (DEP) on its plan for "Pennsylvania's Path to Compliance with EPA's Final Rule for Carbon Pollution Emissions Guidelines for Existing Sources: EGUs (Clean Power Plan)."

PCA is the principal trade organization representing underground and surface bituminous coal operators in Pennsylvania, as well as other associated companies whose businesses rely on coal mining and a strong coal economy. PCA represents the interests of more than 300 member companies statewide which produce almost 90 percent of the bituminous coal mined annually, with over 59 million tons mined in 2014. The Commonwealth ranks fourth nationally in coal production and exports almost 15 million tons annually to 20 states and internationally.

The steam coal market represents the largest market by far for Pennsylvania-mined coal. Accordingly, PCA's members have an immediate and significant interest in how Pennsylvania plans to comply with the Environmental Protection Agency's (EPA) regulation on carbon emissions, commonly referred to as the Clean Power Plan (CPP).

PCA believes that the CPP represents a dramatic overstepping of EPA's legal authority under the Clean Air Act (CAA), and will have detrimental effects on Pennsylvania's economy, price and reliability of electricity and the Commonwealth's ability to maintain its position as an energy leader. PCA does not support compliance with what we believe is illegal overreach into our state energy policy. Given DEP's aggressive timeframe for compliance, PCA believes it is in the best interest of all stakeholders for DEP to apply for and take advantage of the available two-year extension.

REMEDIATING LEGACY EFFECTS

The coal industry in Pennsylvania is viewed as a leader in reclamation efforts, addressing environmental impacts from the crude mining practices of generations past. The industry pays a per ton tax that goes into a federally administered fund under the 1977 Surface Mining Conservation and Reclamation Act that is then returned to the states under a statutorily-designed formula.

Since the inception of this tax, Pennsylvania coal operators alone have paid almost \$600 million into the fund and the total dollar amount Pennsylvania has received from the fund within this time span exceeds \$1.1 billion. This money is used toward returning previously mined lands back to sound natural habitats; in many cases to an even healthier state than they began.

From this program alone, to date, 67,211 acres of previously abandoned mine lands have been fully recovered in Pennsylvania at no cost to the Commonwealth or its taxpayers.

COAL JOBS AND ECONOMY

Because of coal's historical role in our national energy portfolio, it has long been established as an economic contributor and is deeply embedded in entire regions and communities of Pennsylvania. The Pennsylvania Economy League reports that the Commonwealth's coal mining industry supports more than 36,000 jobs and adds over \$4 billion annually to the state economy. On the local level, taxes from the industry support infrastructure updates, community programs, schools and more, preserving the quality of life for many Pennsylvanians.

Coal is a job creator. For every direct job, another 1.6 are necessary to support operations. From railroad and construction jobs to environmental surveyors and engineers, these industries all benefit from long term, predictable work, and the counties in which they operate benefit from the stable job and company taxes that they can depend and rely on for county planning.

These supporting industries have already felt the tightening belt from the over regulation of the coal industry. At a DEP listening session in Dubois, a representative from the RJ Corman Railroad Group stated, "Federal regulations on coal have already caused RJ Corman Railroad a 43 percent decrease in revenue and a 33 percent dip in employment." The impact on supporting industries is palpable and the CPP is the harshest regulation to date.

Unfortunately, direct coal jobs in Pennsylvania have also dropped over 10 percent between 2013 and 2014. During President Obama's announcement of the final CPP, he claimed that they are finding coal workers, impacted by this regulation even better jobs. However, in the Commonwealth, direct coal jobs pay an average salary of \$79,127. These are not replaceable jobs.

Moreover, the POWER grants the President referenced total \$35 million to be dispersed nationally. To put that number in perspective, the total direct labor income for the coal industry in Pennsylvania alone is over \$1 billion. While many economic development groups in Western Pennsylvania are applying for these grants, there is not work available in these regions comparable to what the coal industry provides.

While the Obama Administration also touts the upswing in renewable jobs, these are primarily short-term, one-time jobs that disappear when the subsidies run dry, whereas coal jobs are for the duration of the mine. Additionally, the Pennsylvania Manufacturers Association estimates that the cost to Pennsylvania taxpayers to fund the subsidies necessary to make them viable within the market is \$300,000 per green energy job created, effectively increasing unemployment while further burdening taxpayers for those subsidies.

COAL AND PENNSYLVANIA'S ELECTRIC MARKET

Roughly 80 percent of the bituminous coal produced in Pennsylvania is used in the steam coal market and coal accounts for about 36 percent of the electricity consumed in Pennsylvania. Any law or regulation that deliberately or unintentionally impedes coal usage by electric generators not only threatens the

affordability and reliability of electricity to ratepayers but will also cause severe economic consequences to coal production, jobs and livelihoods, local tax bases and the overall state economy.

EPA has taken advantage of the cyclical market conditions created by the influx of cheap natural gas and a decrease in electric demand to introduce the harshest regulation on the coal industry to date. While the price of natural gas is sure to fluctuate and the demand for electricity to rise as the economy strengthens, the CPP will be the cheap shot that cripples the industry from rebounding as the demand market returns.

As the number one source of fuel for domestic electricity generation both nationally and in Pennsylvania, the coal industry is the most significant energy-related sector in the United States. Its importance reaches well beyond the power grid. Across the country, nearly 100,000 people are employed directly in coal mining operations, and 2.1 million are employed in positions tied to the coal industry.

The coal industry accounts for nearly a \$250 billion impact to the U.S. economy. Coal has long been among the cheapest and most abundant sources of energy, giving consumers access to reliable, affordable electricity at a time when other energy sources have increased, or will likely dramatically increase, in price. Further, the coal industry and its utility customers have been actively developing advancements in generation efficiencies and pollution reductions, particularly with the development of state-of-the-art clean coal technologies in recent years.

In short, not only has the coal industry been the historic backbone of American energy, it is now a cutting-edge pioneer that can power America into the future with the largest recoverable coal reserves in the world. Coal and avoiding an overdependence on one source of energy has positioned Pennsylvania to become one of the nation's energy powerhouses.

Pennsylvania ranks second in energy generation and third in electricity exports while maintaining rates at the national average and safeguarding customers against spikes in demand and rapid price increases. This allows energy-intensive industries such as manufacturing to be able to forecast pricing and do business in Pennsylvania because of the predictable and reliable market.

While DEP has touted that Pennsylvania is on a "glide" path for achieving the 2022 goals and promised to maintain coal's presence, it has not taken into consideration that 25 percent of the bituminous coal mined in Pennsylvania is exported. Much of the market will depend on other state plans. Additionally, the 2022 goals will require reductions that pale in comparison to the commitment DEP is forcing Pennsylvania to uphold in 2030.

LEADING IN CARBON EMISSIONS REDUCTIONS

While the debate on the role carbon emissions have on a changing climate continues, Pennsylvania and the United States are already leaders in reductions. According to DEP, CO₂ emissions from Pennsylvania's electric generating fleet declined by 12 percent from 2005-2012. In PCA's comments submitted to the EPA, we asked for clarification on how its plan credits states like Pennsylvania that have made cuts to carbon emissions before 2012.

States should not be punished for taking the lead in developing long-term and sustainable energy programs that include a true all of the above strategy and promote growth in newer energy sources while

maintaining access to reliable and low-cost sources of baseload energy such as coal, nuclear and natural gas.

These reductions were accomplished without the need for federal oversight into state energy policy and while Pennsylvania has maintained a stable and reliable supply of electricity at competitively-priced rates. This can be attributed to the fact that about 95 percent of its generation mix comes from lower cost and indigenous energy sources – coal, natural gas and nuclear power.

Additionally, Pennsylvania also has an energy efficiency law (Act 129) on the books and a law that requires its electric distribution companies to adopt plans to reduce energy demand and consumption within their service territories (AEPS).

COST OF COMPLIANCE

The National Economic Research Associates found that energy sector expenditures would increase \$29 to \$39 billion annually as a result of electricity generation costs, energy efficiency costs, and increased natural gas costs for non-electric consumers. However these expenditures do not include potential increased costs for electricity transmission and distribution and natural gas infrastructure.

The Institute for Energy Research conducted a study on the cost of prematurely shifting the generation of power from existing sources to new sources and found that to transition from coal to wind increased the cost per MWh by 212 percent and coal to a new natural gas plant increased 91 percent per MWh.

Energy Ventures Analysis (EVA) found that in just eight years, from 2022 to 2030, consumers will have paid \$9.1 billion more for wholesale electricity compared to the cost without the rule. Pennsylvania will be sidled with a 13 percent increase by 2022 and 26 percent spike in costs by 2030, plus an average annual tab of \$7,888 for increases in wholesale industrial electricity costs over an eight-year span.

EVA shows that by 2030, Americans will have paid \$214 billion more for wholesale electricity than they would pay without this regulation. By 2022, consumers will shell out an additional \$15 billion per year, and by 2030 pay \$31 billion a year more – overall a 21 percent cost increase.

While the EPA admits the rule will disproportionately impact low-income families, it vastly underestimates the impacts. There are 2.4 million middle to low-income families -- 48 percent of Pennsylvania's households -- earning less than \$50,000 that spend 20 percent of their after-tax income on energy. These families cannot afford a 21 percent increase in their electric bills.

According to the Pennsylvania Public Utility Commission's annual Cold Weather Survey released in December 2014, 23,213 households statewide had no heat-related utility service compared to 19,653 in 2013 – a 15 percent increase in one year. Shut-offs by utilities because of nonpayment have risen sharply in the past few years leaving many out in the cold.

A study by the 60 Plus Association, a national group that advocates for seniors on fixed incomes found that high energy prices already have forced more than 40 percent of low-income seniors to go without needed medical care and even to skip meals and shut off heat on cold days. Air conditioning, lighting, and heating are essential to American daily life, and are critical for the survival of elderly and infirm citizen and

high energy prices disproportionately impact these ratepayers. The 60 Plus Association's report found EPA's rule will further strain the budgets of low- and fixed-income seniors who are among the most vulnerable to electric rate and other energy price increases.

Additionally, the National Black Chamber of Commerce conducted a study on the effects of the rule on minorities and found that the EPA regulation will increase Hispanic poverty by more than 26 percent and African American poverty by more than 23 percent.

This is why matters of state energy policy fall under legislative review, so that all constituents are represented and costs versus benefits are determined.

Even worse, as states scramble to find ways to comply and look to the proposed Federal Implementation Plan, cap-and-trade schemes have become a topic of discussion. In 2014, Pennsylvania's electric rates were 40 percent less than states in the cap-and-trade system, RGGI.

Because of the sheer number of federal regulations that have fallen on coal-fired power plants in the last 10 years, cap-and-trade schemes are not an option for Pennsylvania's power plants that have already been hit with multiple regulations, spending millions on retrofits and upgrades. Additionally, the technology for coal-fired power plants to affordably comply with such a trading scheme has yet to be commercially tested and proven.

Pennsylvania is one of 19 states with a deregulated or partially deregulated electric market. As the EPA keeps changing the rules with multi-million dollar price tags on investments, electric generators are hesitant to make plant upgrades without some assurance of a return on their investment.

In addition to economic ramifications and a rise in the cost of electricity, grid operators, utilities and state regulators are worried about the reliability of our electric grid under this proposal, given the rule's focus to shift the sources of our generation mix to more volatile and intermittent fuels. While the EPA claims that alternate sources such as natural gas and nuclear will be able to meet demand, the actual grid operators, utilities and public utility commissions nationwide have publicly opposed the rule, citing lack of infrastructure and a source that can supply the same baseload electricity that coal provides.

Grid operators witnessed historically unprecedented power demands during the severe winter season in 2014. For example, the PJM Interconnection grid, providing power to over 60 million consumers with a capacity of 142 GW, experienced demand of 141 GW on January 7, 2014 – over a 99% grid utilization rate. System failure was avoided only through the sustained peak generation of several coal-fired power plants. Instead of substituting a method of power generation that is unproven at capacities needed to fulfill grid demands, EPA should recognize the already-proven reliability of coal-fired EGUs as the preferred method of power generation.

In April 2015, Washington D.C. experienced a blackout because a coal-fired power plant in Alexandria that provided back-up power was closed prematurely. As the only energy source that can be stockpiled at a plant for immediate demand response, coal is key to electric reliability. It is clear that the electric grids have sustained huge losses in baseload coal-fired power from previous regulations and that the buffer capacity has been limited.

This rule forces the aggressive adoption of energy sources that cannot operate on their own and cannot be built or maintain a share of the market without grants and taxpayer subsidies. Additionally, the Pennsylvania Sunshine Solar Rebate Program which allocated \$180 million in state dollars to incentivize projects dried up in 2012 along with many of the jobs it created.

To continue to subsidize the expensive development of renewable energy sources and artificially make them viable within the electric market will require billions in additional funds from taxpayers who will already be hit with a double digit increase to their electric bill.

CLEAN POWER PLAN ASSUMPTIONS

EPA promotes this plan as providing maximum flexibility to the states in charting their compliance plans. However, there is flexibility only if a state is willing to transform its source of electricity away from coal. Pennsylvania and other coal-dependent states cannot comply with this plan and maintain their robust supply of coal-fired electric generation. The regulation is written so that these are mutually exclusive pathways.

In Pennsylvania alone, at least eight power plants (Hatfield's Ferry, Mitchell, Elrama, Armstrong, New Castle, Portland, Titus and Shawville) have already been deactivated or designated for retirement because of previous, pending, and in many cases legally questionable, air quality rules. These units total over 5,000MW of electricity or about ten percent of Pennsylvania's currently-installed electric capacity. The impacts of these closures are and will be felt by local communities and electric ratepayers while undermining the stability of the electric grid.

The EPA proposal further identifies three options or "building blocks" that it considers to be the best strategies for emission reductions that states could deploy in a mix-and-match fashion to meet their target reductions. However, much of these are assumptions that have not been tested in a sustained environment and have costly price tags and unrealistic projections.

The CPP's reliance on these building blocks is contrary to Section 111 of the Clean Air Act (CAA) since they do not represent a "system of emission reduction." In particular, these building blocks represent state- or grid-wide energy policy measures, as opposed to a discrete "system" which can be installed, controlled or implemented by existing sources to reduce emissions.

EPA also fails to appreciate the magnitude of upfront capital costs to retrofit equipment upon which EPA bases its heat rate improvement figure. This oversight renders the CPP patently unreasonable and unattainable for older coal-fired EGUs that may be approaching retirement. This presupposes that such coal-fired EGUs will be able to be kept in operation long enough to reap these benefits. However, when considered in conjunction with retrofit demands imposed by other EPA programs, including the onerous MATS rule, the high upfront costs of installing heat rate improvement equipment are all-the-more unreasonable in a regulatory setting that is highly inhospitable for coal-fired EGUs.

- 1) Building Block 1: Coal unit process efficiency improvements of 4.3%
 - a. Energy Information Administration found that the average feasible heat rate efficiency improvements across the fleet of coal-fired electric generators was less than 2%.

- 2) Building Block 2: Regional interconnect gas re-dispatching based upon 75% capacity of summer capacity
 - a. This option assumes natural gas combined cycle units can increase to a 75 percent capacity factor when in reality, most plants have never run at this capacity and it is unsustainable.
 - b. The current pipeline and grid infrastructure will not support that level of operation, particularly during times of peak usage. Major investments and aggressive build outs will be necessary to direct that level of capacity, yet the EPA has not addressed this obstacle.
 - i. According to the PUC, there will be significant regulatory delays in federal approval of interstate natural gas pipelines and concerns on permitting.
- 3) Building Block 3: Additional clean energy production (renewables)
 - a. Even doubling the amount of wind and solar in Pennsylvania would only account for 3 percent of total power generation and there are also strong subsidies to support growth and mandates in the Alternative Energy Portfolio Standard (AEPS) that supports forced consumption.
 - b. According to the PUC, this will cause conflict with state authority over renewable resources and energy efficiency programs and push early adopters before it is economically viable.
 - i. The AEPS already requires that by 2021, utilities purchase 8 percent of their overall power from renewables.
 - c. EPA calculated projections for renewable capacity were based on 2012 additions, which were made possible by the availability of robust taxpayer funded subsidies and government credits. To sustain that kind of development will require additional funding.
 - i. In 2012, wind capacity increased 13,000 MW nationwide due to the federal Production Tax Credit. In 2013, when the credit expired, new installation dropped to 1,000 MW.

Essentially, these options would turn our electric generating profile away from coal. For energy-producing states like Pennsylvania, this shift would be severe. The EPA modestly estimates a decrease in coal production 5-7 percent by 2020 and 24-35 percent by 2030. However, a study conducted Energy Ventures Analysis found that coal demand nationwide is expected to decline 24 percent under a mass-based plans and 58 percent under a rate-based plan by 2030.

GLOBAL IMPLICATIONS

In 2012, the U.S. accounted for 28 percent of the world's recoverable coal reserves at over 237 billion tonnes. According to the EIA, global coal consumption grew 14 percent from 2008 to 2012, faster than other fossil fuel. This is an obvious indication that other countries are embracing, not turning away from coal.

According to testimony from the Institute for 21st Century Energy, the Energy Information Administration reports non-U.S. carbon emissions — which already represent 82 percent of global emissions — are projected to grow by 41 percent between 2010 and 2030. The EPA's rule will offset the equivalent of 13.5 days of Chinese emissions in 2030, based on U.S. Department of Energy projections.

The EIA reports that the U.S. reduced carbon emissions from coal consumption by 23 percent between 2008 and 2012, while China simultaneously increased emissions by 30 percent and India by 29 percent. Emissions from the U.S. and India combined and doubled are less than China's output. In November 2015, the New York Times brought to light that China had quietly released data that their statistical agency had misreported carbon emissions, adding about 600 million tons to China's coal consumption in 2012 — an amount equivalent to more than 70 percent of the total coal used annually by the U.S., and in addition to the EIA's reported numbers above.

Using the EPA's own modeling, and assuming every state will meet their goal by 2030, it will lower the global temperature by 0.01°F.

As we pay dearly for the cost of reducing our consumption of fossil fuels, developing countries will be strengthening their economies on the back of coal. Even more disconcerting is that as we are forced to divest from coal and watch electric rates increase, jobs in energy intensive trade-exposed industries such as steel, manufacturing and chemicals that Pennsylvania relies on will go overseas where electricity from coal-fired power plants is cheaper, but the process is far less environmentally friendly than the U.S. We will essentially be moving the emissions globally, losing the economic benefit and adding more carbon emissions to the same air. The U.S. Chamber of Commerce estimates the cost of compliance will be \$51 billion in lost gross domestic product annually.

PCA opposes any attempt to artificially and prematurely alter the energy market. PCA recommends allowing the market to determine energy supply based solely on price and availability under the current PJM economic dispatch model.

Under the CPP new source emission rules, it will be nearly impossible to build a new coal-fired power plant without carbon capture and storage/utilization technologies that continue to evolve and improve, but are not yet tested on a broad commercial scale. The extremity of not only this regulation, but others specifically targeting the coal industry, have caused uncertainty with the economic future of the industry and investment in research and development for carbon technologies has been very difficult to secure.

LEGAL UNCERTAINTY

EPA is blatantly circumventing Congress and state's rights by mandating energy policies disguised as environmental regulation. Under the CPP, the EPA is exercising primacy over a sector that has historically been regulated by states. In concurrence with the Pennsylvania Public Utility's comments on this matter, this conflicts with the Federal Energy Regulatory Commission's responsibility under the Federal Power Act to regulate wholesale electricity markets that meet their unique needs and utilizes their unique resources.

The PCA believes that the CPP represents a fundamentally impermissible attempt to legislate the composition and structure of the power grid. At the expense of the hundreds of thousands of employees working in positions associated with the coal industry and the hundreds of millions of consumers who rely on reliable and affordable sources of electricity, EPA has grossly overstepped its regulatory authority under the CAA. In particular, the CPP's requirement for state plans to implement "outside the fence" measures, including redispatching energy generation from coal-fired EGUs to NGCC and renewable energy sources.

That EPA cannot, and should not, attempt to choose who may contribute to the power grid and the means by which they do so, is plainly stated in the CAA, which unambiguously indicates Congress' intent to prevent EPA from engaging in rulemaking with such far-reaching and dire implications. Not only does the legislative history of Section 111 of the CAA establish that Congress intended to allow EPA to promulgate standards of performance based only on measures that could be implemented within an affected facility, but in light of EPA's onerous restrictions on coal-based energy generation under Section 112, EPA is clearly barred from simultaneously regulating such coal-based sources under Section 111(d).

This regulation has brought together bipartisan opposition at every level of government and every sector of industry and economy. With this rule, the EPA is attempting to transform itself from an environmental regulator to a central planning agency for states' energy economies. The EPA's brazen governmental overreach is a prime example of governmental bureaucracy run rampant. This power grab by the EPA will be challenged in the courts and there is a good chance that it will be found wanting.

As a result, it has forced our Congressional and state representatives to spend time and resources reigning in this rogue agency through introducing legislation that inserts them, and the taxpayers they represent, back into the process of policy-making. Within the last 15 years, federal agencies have finalized and proposed just over 30 high impact rules with compliance price tags of more than \$1 billion. The EPA alone introduced 19 of these with costs over \$90 billion dollars.

The CPP by EPA's own modest estimate will cost \$8.4 billion annually by 2030.

As of November 10, 2015, the EPA faces serious legal opposition from 27 states who have filed lawsuits to block implementation of the CPP. These states represent over 60 percent of the nation's energy supply. In addition, 24 national trade associations — including the U.S. Chamber of Commerce and the National Association of Manufacturers— are suing EPA. The members of these associations represent more than 80% of the U.S. economy.

EPA's legal basis for the CPP is dubious, and being unable to attain Congressional approval to limit carbon emissions it has turned to Section 111 of the Federal Clean Air Act in an attempt to transform the way America generates and uses electricity.

The United States Supreme Court was clear in its *Util. Air Reg. Grp. v. EPA*, 134 S. Ct. 2427, 2444 (2014) ("*UARG v. EPA*") decision that EPA may not interpret from a "long-extant statute an unheralded power to regulate 'a significant portion of the American economy.'"

The EPA's recent track record on rules it has promulgated should give DEP serious concern about aggressively advancing a plan to comply with the CPP. These recent decisions demonstrate that the EPA continues to overreach in its authority and interpretation of Federal environmental laws. The decisions include:

- 1) A June 2015 decision by the United States Supreme Court that remanded the EPA's Mercury and Air Toxics Standards (MATS) Rule back to the D.C. Courts saying that the EPA should have taken into account the costs to utilities and others in the power sector before even deciding whether to set limits for the toxic air pollutants it regulated in 2011.

- 2) An October 2015 decision by the Sixth Circuit of the U.S. Court of Appeals mandating a stay of the EPA's "Clean Water Rule" pending conclusive determination of the legality of the rule.

MATS was the most expensive EPA rule for power plants prior to the CPP, responsible for the closure of more than 400 coal units in 36 states. Unfortunately, in the MATS case the ruling by the United States Supreme Court came too late. Citing the cost of compliance, several of Pennsylvania's power plants were closed and hundreds of jobs shuttered.

The Clean Power Plan will face similar legal scrutiny, and the cost of developing a compliance plan to meet the carbon emissions standard will be much higher, as this is not just retrofitting existing plants with available technologies, but taking offline existing power-producing plants, and replacing them with less reliable and more costly new sources, and building out the transmission infrastructure statewide.

Summarized below are the legal arguments facing the CPP under the CAA. Given the significant role that future legal decisions will play in determining the final provisions of the CPP, it is imperative that Pennsylvania submit an initial plan with a request for a two-year compliance extension.

- 1) The CPP is based upon purported emissions reduction measures that cannot be deemed as a Best System of Emissions Reduction (BSER).
 - a) Building Blocks 2 and 3 of the CPP reflect "beyond-the-fenceline" measures as part of the BSER, reflecting steps that cannot be implemented within an individual facility. Such measures cannot properly be deemed as a "system" as the term is used in Clean Air Act (CAA) Section 111(a)(1). The CPP's BSER determination, therefore, exceeds the scope of EPA's authority under the CAA.
- 2) EPA's interpretation of a BSER is indefensible considering the Supreme Court's holding in *UARG v. EPA*
 - a) Under *UARG v. EPA*, Congress must "speak clearly if it wishes to assign to an agency decisions of vast economic and political significance." Congress has hardly "spoken clearly" to the question of whether "beyond-the-fence line" measures may be part of a BSER. Since the effect of Building Blocks 2 and 3 of the CPP transform the landscape of electricity generation and usurp authority generally reserved to state and regional utility agencies and FERC, and would dramatically affect the affordability of electricity and the viability of a large industrial sector, the CPP reflects the same interpretive fallacy that was involved in *UARG* and that cannot be sustained in considering the more limited scope of authority granted by the CAA.
- 3) The BSER that EPA determined as part of the CPP is not "adequately demonstrated"
 - a) Under Section 111(a)(1), valid standards of performance must be based upon a BSER that is "adequately demonstrated." However, the heat rate reductions and generation targets for natural gas combined cycle (NGCC) and renewable sources have yet to be adequately demonstrated at the scale necessary to realistically achieve the state goals within the CPP. In particular, the heat rate assumptions fail to take

into account source-specific characteristics that impact whether further heat rate reductions can indeed be achieved. In addition, there has yet to be a demonstration that NGCC generation targets have ever been achieved, especially during times of peak demand. The lack of achievability of these Building Blocks is all the more clear when considering that the final state goals would translate to emissions standards that are more stringent for existing power plants, than for state-of-the-art new coal-fired power plants (e.g., supercritical pulverized coal-fired plants) as regulated under the new source performance standard (NSPS) rule.

- 4) Sources that are regulated under CAA Section 112 cannot also be regulated under Section 111(d)
 - a) Under Section 111(d), EPA clearly and unambiguously cannot regulate “any air pollutant” emitted from a “source category which is regulated under section [112].” However, coal-fired power plants are currently subject to the (MATS) Rule, a regulation which is based upon CAA Section 112. Any interpretation to the contrary is inconsistent with the DC Circuit’s prior holding in *New Jersey v. EPA*, where EPA’s attempt to regulate power plants under 111(d) was met with disapproval. Therefore, any regulation of coal-fired power plants under the CPP exceeds the scope of EPA’s authority under CAA Section 111(d).

FALSE HEALTH CLAIMS

In an attempt to justify the cost of compliance, and make the issue relevant and relatable across the country, President Obama and the EPA have spun a public relations campaign linking climate change to an issue that hits many Americans close to home; asthma.

Section 111(d) of the Clean Air Act, cleverly promoted as the “Clean Power Plan” regulates carbon emissions from existing electric generating units. The problem is that carbon dioxide—which the rule regulates – does not cause asthma.

The Institute for Energy Research, which used data from the EPA’s National Emissions Inventory, the Center for Disease Control’s National Surveillance for Asthma and the National Health Interview Survey, found that the six “criteria pollutants” that the agency regulates have declined by 62 percent since 1980. Meanwhile, the prevalence of asthma has increased steadily, with child asthma increasing 131 percent in that same time period.

A recent Johns Hopkins study demonstrated that poverty is more likely to cause asthma than geography and pollutants. In Pennsylvania there are 2.4 million middle to low-income families that spend almost 20 percent of their take-home pay on energy costs. In this scenario, EPA fails to recognize the health-wealth connection it has pointed to in the past.

In addition to falsely linking asthma rates to carbon emissions, the EPA has amplified the projected health benefits by double-counting the proposed benefits of these high-impact regulations using benefits already realized by previously implemented regulations such as the National Ambient Air Quality Standards and MATS.

In section 4.3 of EPA's Regulatory Impact Analysis (RIA) which accompanies the CPP it states, "it is possible that some costs and benefits estimated in this RIA may account for the same air quality improvements as estimated in the illustrative [National Ambient Air Quality Standards] RIAs."

The EPA also states in the same section, "Because EPA rarely has the time or resources to perform new research to measure directly, either health outcomes or their values for regulatory analyses, our estimates are based on the best available methods of benefits transfer, which is the science and art of adapting primary research from similar contexts to estimate benefits for the environmental quality change under analysis." As the study is not performed on the specific regulation, but on the best available methods of benefits, it should not be taken at face value.

ALLOW THE INDUSTRY TO EVOLVE

Interim and achievable goals are a vital part of any industry evolution. Carbon emissions from the transportation industry are not far behind those emitted from the production of electricity, but the transportation sector has been granted incremental fuel economy standards to meet that are attainable and provide the industry time to develop the necessary technology. The coal industry is requesting similar treatment to allow carbon capture technologies to be further developed at the commercial level. The EPA lists U.S. sources of carbon dioxide emissions as 37 percent from the generation of electricity and 31 percent from the transportation industry.

Domestic consumption from increasingly clean coal has risen 163 percent since 1970. During that same time period, coal-fired power plants have decreased other emissions from coal by 85 percent per electric unit – meeting and exceeding the EPA's regulated air quality emissions mandated by the National Ambient Air Quality Standards.

Carbon was classified as a pollutant in 2007 and CPP is the first rulemaking to regulate carbon emissions. However, the bar was intentionally set so high and the timeframe intentionally cut so short that achievability is impossible.

The statistics prove that given the appropriate amount of time and regulatory structure, technologies for burning coal cleaner have been developed and do work. Regrettably, the CPP underestimates the role of coal in ensuring the reliability and price stability of power, and also ignores the advances made in clean coal technology over the last two decades.

The extremity of this regulation and others targeting the coal industry, such as the MATS rule that was remanded, the Water of the U.S. Rule that was issued a nationwide stay in October, and the federally proposed Stream Protection Rule which is so overreaching that it will also inevitably face legal challenges, have caused uncertainty with the economic future of industry, making investment in research and development for carbon technologies more difficult to secure. As a result, the lack of available funding and technology makes achieving this regulation impossible in the timeframe mandated.

CONCLUSION

This rule will dictate the makeup of each state's electric generation mix in 2022 and beyond. As such, the proposal is as much an energy policy with broad economic and social impacts, as an environmental rule.

Pennsylvania needs to take its time to determine all impacts of compliance, encourage potential paths forward through the use of commercially tested technology, and to let legal challenges to the rule be decided. Just as the now unnecessary compliance with the MATS rule, compliance with the CPP will cost the Commonwealth good jobs and real economic benefits.

Given the affordability and reliability of coal as a source of electricity, this regulatory attempt to displace coal will have profound and sweeping consequences, not just on the coal industry and its workers but also on those communities that host coal-fired power plants, those employed at these facilities, all energy-intensive industries and every ratepayer who depends upon the reliable provisioning of electricity at competitive rates.