EPA Public Hearing on

"Proposed Carbon Pollution Standard for New Power Plants"

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Thank you for the opportunity to present comments today. I am Dan Byers, senior policy director at the Institute for 21st Century Energy, an affiliate of the U.S. Chamber of Commerce, the world's largest business federation representing the interests of more than three million businesses of all sizes, sectors and regions, as well as state and local chambers and industry associations, and dedicated to promoting, protecting, and defending America's free enterprise system.

The Chamber has long been clear in its view that the Clean Air Act (CAA) is not the appropriate vehicle to regulate greenhouse gases (GHG), and is poorly designed for such a task. Nonetheless, we appreciate this opportunity to communicate numerous practical considerations regarding EPA's GHG rulemakings.

First, it is important to note that the Environmental Protection Agency (EPA) power plant regulations discussed today represent only the first of many new rules that will extend to and impact nearly every sector of our economy.

EPA has asserted that it has the authority and the legal obligation to regulate GHG emissions from dozens of other industrial sources, and ultimately from more than six million buildings and small facilities that exceed the CAA's statutory emissions thresholds.¹ The agency has also indicated that it intends to proceed with these rules "as quickly as possible."²

¹ As described in EPA "Tailoring Rule," which details Prevention of Significant Deterioration (PSD) and Title V permitting plans for smaller facilities.

²http://www.chamberlitigation.com/sites/default/files/scotus/files/2013/Brief%20of%20the%20Respon dent%20--

 $[\]underline{\%20Chamber\%200f\%20Commerce,\%20et\%20al.\%20v.\%20EPA\%20(U.S.\%20Supreme\%20Court).pdf}$

Make no mistake, this agenda threatens to be economically devastating.

In December, over 75 state and local chambers of commerce filed an amicus brief with the Supreme Court detailing business community concerns with EPA's GHG agenda. The filing notes that increased energy costs resulting from regulations on power plants are "a direct and significant impact placed on all sectors of the American economy" and that "*every* source of GHG, no matter how inconsequential its emissions may be, is within EPA's regulatory reach and grasp."³

Just last week, the Chamber and the National Association of Manufacturers announced formation of the Partnership for a Better Energy Future, a diverse coalition that intends to engage in the greenhouse gas regulatory process to ensure the continued availability of reliable and affordable energy for American families and businesses. The Partnership comprises more than 80 trade associations and counting. We hope to work constructively with EPA and other stakeholders throughout the regulatory process and provide real-time input as to the impacts of the GHG rulemakings on a wide variety of industries.

The Partnership has united around six core principles for EPA's rulemakings that will help to ensure a better outcome. They are as follows:

- 1. EPA should ensure that any greenhouse gas regulations are cost effective, attainable and protect American jobs and the economy.
- 2. Regulations must be reasonable and technologically achievable, allowing for the continued affordability and reliability of electricity.
- 3. Regulations should allow for all of our domestic energy resources to play a role in a true "all-of-the-above" energy strategy.
- 4. The Administration should seek broad stakeholder input from the regulated community, energy consumers and other concerned citizens.
- 5. The Administration must perform a thorough analysis of costs and benefits, accounting for the cascading effects costly energy regulations will have on businesses, markets, employment and households.
- 6. Perhaps most important, EPA should take the time to get these regulations right. The agency should prioritize ensuring a robust, inclusive rulemaking process over meeting arbitrary and rushed deadlines.

Applying these principles to the proposed New Source Performance Standard (NSPS) for power plants, several areas of serious concern are evident. The greatest one is technological readiness.

^{3&}lt;u>http://www.chamberlitigation.com/sites/default/files/scotus/files/2013/State%20and%20Local%20Ch</u> ambers%20of%20Commerce%20and%20Other%20Business%20Associations%20amici%20brief%20---%20U.S.%20Chamber%20of%20Commerce,%20et%20al%20v.%20EPA%20(U.S.%20Supreme%20Court).pdf

The Clean Air Act provides very clear direction to EPA with respect to technological mandates, stating that regulatory performance standards should be based on what is achievable by the "best system of emission reduction" that has been "adequately demonstrated."⁴

It is here that the EPA has embarked on a fundamental overreach, mandating that new coal-fired power plants employ carbon capture and sequestration systems (CCS) as a prerequisite for their construction. As the Chamber stated in response to this proposal last fall, "EPA's designation of CCS as the best system for compliance under this rule amounts to little more than a regulatory euphemism for what is plainly a ban on the construction of new coal-fired power plants."⁵

This is because CCS as an integrated technology has never been demonstrated on a commercial power plant, and is nowhere near ready for broad deployment. EPA contends that CCS *components* have been demonstrated, but there are no examples of an aggregate *system* of these components working together successfully in a large-scale commercial setting, or even in a demonstration setting, for that matter. While it is true that an automobile can be built from disparate parts that have been shown to work, it does not follow that the resulting automobile will run. Not only do different CCS technologies have to work together, all of their regulatory systems have to work in harmony and on similar timelines. None of this has been adequately demonstrated and is not likely to be anytime soon.

The record in support of this conclusion is extensive. Consider, for example:

• Charles McConnell, the former head of the Department of Energy's Office of Fossil Energy—which is the Executive agency responsible for advancing the technology to commercialization—recently testified to Congress that "it is disingenuous to state that the technology is 'ready,'" and that CCS "is not available to meet EPA's proposed rule."⁶ His successor and current Acting Assistant Secretary for Fossil Energy Christopher Smith similarly testified that "there are myriad issues that need to be resolved" in order for CCS to be part of a new coal plant.⁷

^{4 42} U.S.C. § 7411(a)(1)

⁵http://www.energyxxi.org/sites/default/files/131111 Whitfield%20Manchin%20Draft%20on%20Green house%20Gas%20Rules Congress.pdf

⁶ <u>http://science.house.gov/sites/republicans.science.house.gov/files/documents/HHRG-113-SY18-WState-CMcConnell-20131029_0.pdf</u>

⁷ <u>http://science.house.gov/hearing/subcommittee-energy-future-coal-utilizing-america%E2%80%99s-abundant-energy-resources</u>

• Prior to releasing the current proposal, the White House Office of Management and Budget gave Federal agencies an opportunity to provide EPA with feedback on the draft NSPS. Numerous comments submitted through this process were highly critical of EPA's proposal, and in particular the readiness of CCS technology. For example, one agency commented that:

> "EPA's assertion of the technical feasibility of carbon capture relies heavily on literature reviews, pilot projects, and commercial facilities yet to operate. We believe this cannot form the basis of a finding that CCS on commercial-scale power plants is 'adequately demonstrated.'

...We are concerned that the unsupported assertions of technology as 'adequately demonstrated' in this rulemaking will form a precedent for future such determinations, even if the three CCS projects used as the basis for the determination fail or are never completed."⁸

• In its proposed rule, EPA cites four not yet completed projects in support of its conclusion that CCS has been adequately demonstrated. Federal agency commenters criticized this, noting that "[b]y only looking at a couple of examples, the EPA is understating the overwhelming cost and risk factors that have forced previous government-supported CCS projects to be de-scoped, tabled, or shut down."9

The Global CCS Institute, of which the U.S. Government is a member, keeps track of CCS projects worldwide. Its database shows that there are no active projects—not one—anywhere in the world that combine post-combustion carbon capture on a power generation plant with dedicated geologic sequestration. Likewise, there are no active projects—not one—that combine *pre-combustion* carbon capture on a power generation plant with dedicated geologic sequestration. (And there is only one of each type with sequestration used for enhanced hydrocarbon recovery, but it would be completely unrealistic to expect that every new coal-fired power plant in the United States would be built near a producing oil field.)

The Carbon Capture and Sequestration Technologies Program at the Massachusetts Institute of Technology maintains a similar database of CCS commercialization progress around the world.¹⁰ Of 55 CCS power projects tracked, none are operational, and only two have entered the construction phase. The remaining projects are in the planning stages (24), on hold or dormant (9),

[&]amp;http://www.regulations.gov/contentStreamer?objectId=09000064814f17c1&disposition=attachment&c
ontentType=pdf

⁹ Ibid.

¹⁰ <u>http://sequestration.mit.edu/tools/projects/index.html</u>

or have been cancelled (20). In light of the high failure rate and extremely limited progress among similar projects around the world, EPA's presumption that those planned and under construction will be successfully completed and commercialized is highly questionable.

As it reviews comments and considers modifications to the proposed rule, EPA should acknowledge the widely-held consensus that CCS has not been adequately demonstrated as required by the CAA, and revise the rule accordingly to ensure any technology mandates are achievable on a commercial scale and at a reasonable cost.

Another area of serious concern is EPA's assertion that the costs, benefits, and CO₂ emissions changes associated with this regulation are "negligible." Setting aside the obvious question of why the Agency would ever want to design a rule that has no benefits, EPA's conclusion that no costs are involved rests on the assumption that coal-fired power plants will not be built even in the absence of the rule.

Energy forecasting is a particularly perilous exercise, and if this projection proves to be wrong—which history tells us is certainly plausible—then the rule's cost would skyrocket because it would have prevented the construction of economical new coal-fired power plants.

In addition to the direct electricity affordability costs of such a situation, over time the increasing lack of baseload electricity diversity will threaten reliability and unnecessarily limit risk management tools available to power generators. As seen during recent winter cold snaps, coal plants slated for closure (at least in part due to EPA regulation) have been absolutely essential in meeting soaring demand. Forcing out a specific fuel source from the electricity generating mix, which is what EPA's proposal amounts to, will reduce the reliability of the electricity supply and carry with it real costs—both economic and societal.

These are not abstract scenarios. Reliability and affordability are growing concerns even absent the forthcoming rulemakings. Federal Energy Regulatory Commission (FERC) Commissioner Philip Moeller recently said he expects people will be "panicked" about grid reliability in 2015 due to coal plant shutdowns.¹¹ EPA should work with FERC and other appropriate experts to study how the proposed rule's ban on new coal-fired power generation could impact electricity affordability and reliability over the long-term. The agency should also examine additional plausible economic scenarios to better understand the potential costs of the rule in the event its forecasts are not accurate.

¹¹ <u>http://www.eenews.net/energywire/stories/1059993460/print</u>

In summary:

- EPA should recognize that, beginning with this rulemaking, its greenhouse gas regulatory agenda will reverberate throughout the economy. The broader business community is increasingly concerned about the potentially enormous harm from these rules. EPA should work cooperatively to ensure all of its GHG regulations are cost-effective, attainable, and avoid harm to American jobs and the economy. EPA's proposal to date fails to meet any of these criteria.
- The carbon capture and sequestration "systems" that would be mandated by EPA in this rulemaking are unproven, extremely expensive, and have never been adequately demonstrated. As a result, the proposal effectively bans the construction of new coal-fired power plants. EPA must revise the rule to make it technologically achievable on a commercial scale, and at reasonable costs.
- Taking a major energy source off the table with respect to meeting future electricity demand is extremely risky, and threatens affordability and reliability while reducing base-load electricity diversity. Before finalizing this rule, EPA should work with FERC and other experts to analyze the potential long-term impacts of the rule on reliability and affordability.
- EPA acknowledges the proposed regulation has no benefits, and its assertion that no costs are involved rests on often unreliable energy forecasting. EPA should incorporate additional plausible energy scenarios, including the value of a diverse mix of power generation fuels, into its cost-benefit analysis.

Addressing these straightforward concerns and priorities will go a long way toward ensuring a better outcome to this rule and those that will follow as part of the agency's greenhouse gas regulatory agenda.

Ultimately, EPA has an obligation to ensure that the technical and legal foundations of this rulemaking—and the process through which they are arrived at—are robust, transparent, fair, and set out in a reasonable timeframe. On behalf of the U.S. Chamber of Commerce, we stand ready to work with EPA to make sure these obligations are met.

Thank you.