



**Statement of the
Institute for 21st Century Energy
U.S. Chamber of Commerce**

ON: Environmental Protection Agency Clean Power Plan

**TO: Public Utility Commission of Texas
PUC Project No. 42636**

DATE: August 15, 2014

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PUC Project No. 42636**

**Workshop on Commission Comments on Proposed Environmental Protection Agency Rule on
Greenhouse Gas Emissions for Existing Generating Units**

**Statement of Heath Knakmuhs
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U.S. Chamber of Commerce
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Chairman Nelson, Commissioner Anderson, and Commissioner Marty [*and members of the Railroad Commission and the Texas Commission on Environmental Quality*], thank you for the opportunity to speak this afternoon, and for hosting this workshop on EPA's proposed carbon regulations for existing power plants.

My name is Heath Knakmuhs. I am senior director for policy at the Institute for 21st Century Energy, an affiliate of the U.S. Chamber of Commerce. The U.S. Chamber of Commerce is the world's largest business federation, representing the interests of more than three million businesses and organizations of every size, sector and region.

The mission of the Institute is to unify policymakers, regulators, business leaders, and the American public behind common sense energy strategy to help keep America secure, prosperous, and clean. In that regard we hope to be of service to this Commission and the state as it reviews and responds to EPA's greenhouse gas regulatory agenda.

America's abundance of affordable, reliable energy provides businesses a critical operating advantage in today's intensely competitive global economy. This is particularly true in Texas, which last year saw its GDP grow by 3.7% -- totaling \$1.5 trillion, which is the second highest of any

state in the country. The mining industry, which includes oil production, accounted for 13.5% -- or over \$200 billion – of this total.

Unfortunately, our national energy advantage is increasingly threatened by a flood of excessive and burdensome Environmental Protection Agency (EPA) regulations—including rules that precede and will no doubt follow the EPA’s recently released Clean Power Plan that is today’s topic of discussion. In a recent speech to the U.S. Chamber, FirstEnergy CEO Anthony Alexander (quoting economist Thomas Sowell) described this growing trend in energy policy as “replacing what worked with what sounded good.”¹ It is our fear that this mindset was unfortunately prevalent throughout the development of EPA’s new carbon rules, and that the ultimate result will be a more expensive, less reliable electricity system that reverberates negatively throughout the nation’s economy.

While review of EPA’s proposed rule remains ongoing, it is clear the proposal will significantly transform how electricity in America is generated, transmitted, distributed, and used. Robust and comprehensive study of the potential electricity sector and broader economic impacts of the rule is necessary, but it does not take such an analysis to understand that a regulation of this scope and magnitude will negatively impact American families and businesses. As the Wall Street Journal noted in a recent editorial, “it is impossible to raise the price of carbon energy without also raising costs across the economy. The costs will ultimately flow to consumers and businesses.”²

EPA’s own analysis of this rule projects that it will result in nationwide electricity price increases of between 6 and 7 percent in 2020. EPA estimates annual electric sector compliance costs between \$5.4 and \$7.4 billion in 2020, rising up to \$8.8 billion in 2030. A separate analysis

¹ April 2014 speech at U.S. Chamber of Commerce. Viewable at <https://www.youtube.com/watch?v=J5Hu9qkEqPs>

² <http://online.wsj.com/articles/carbon-income-inequality-1401752504>

of the rule based on EPA assumptions estimated electric sector compliance costs of \$13.4 billion in 2030, including \$935 million for Texas.³

EPA also projects that the proposed rule could result in the shutdown of up to 49 GW of coal-fired capacity by 2020. This would be in addition to approximately 54 GW of coal-fired shutdowns linked to prior EPA rules, and raises serious concerns regarding the potential impact of such shutdowns on the future reliability of the electric grid.⁴

Perhaps most troubling, more than two months after its release, the specific implications of EPA's proposal remain clouded by its complex and confusing structure, and the fact that the agency's proposed emissions limitations on individual states vary widely based on complex and detailed assumptions and formulas that may not reflect reality, what is practical, or even what is legal.

With this in mind, I would like to emphasize four key aspects of EPA's proposed rule that we believe warrant further attention:

1. Contrary to EPA claims, the "outside-the-fence" framework of the proposed rule does not maximize state compliance flexibility, but rather increases the stringency of emissions reductions targets. The resultant binding targets are likely to present many states with major compliance challenges.
2. EPA's complex design—with 49 different proposed state emissions rates based on four different emissions reduction building blocks—results in wide disparities between states. These

³ [http://www.synapse-energy.com/Downloads/SynapsePresentation.2014-06.0.111\(d\)-webinar.S0094.pdf](http://www.synapse-energy.com/Downloads/SynapsePresentation.2014-06.0.111(d)-webinar.S0094.pdf)

⁴ <http://www.eia.gov/todayinenergy/detail.cfm?id=15031>

disparities appear to disadvantage Texas, particularly with respect to renewable generation targets.

3. The rule's impact on global carbon emissions and potential future climate change will be negligible, effectively meaning that EPA's power plant rules will be "All Pain, No Gain."
4. The potential negative impacts of EPA's rule extend well beyond the utility sector.

1. Compliance Flexibility and State Target Achievability

In order to fully evaluate the impact of EPA's proposal on individual states, it is important to first understand EPA's assumptions and expectations with respect to overall state emissions targets as well as the reasonableness and achievability of various compliance options.

In short, EPA's national goal to reduce overall carbon emissions 30 percent below 2005 levels by 2030 is the product of 49 individual state goals to reduce emissions *rates*—the amount of carbon emitted per unit of electricity generated— a certain percentage below 2012 levels by 2030. For example, Figure 1 illustrates that the proposed rule would require Texas to reduce its carbon emissions associated with electricity generation by 42-percent below 2012 levels by 2030.⁵

These rate reduction targets are of limited use and do not necessarily reflect the compliance challenges facing individual states. Rather, the achievability of EPA's individual state emissions rate targets is more dependent on the reasonableness of EPA's assumptions regarding state

⁵ <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-goal-computation.pdf>

capabilities to meet the four “building blocks” it used to develop the individual targets, which are set forth in Figure 2. These building blocks are: (1) increase coal plant heat-rate efficiency by 6%; (2) re-dispatch coal generation to natural gas; (3) increase deployment of renewable energy and limit potential retirements of nuclear generation; and (4) reduce electricity demand by 1.5% annually.⁶

EPA has indicated that this building block design—particularly the “outside-the-fence” actions in building blocks 2-4—helps to maximize state compliance flexibility. In her speech announcing the rule, EPA Administrator Gina McCarthy emphasized that states can “pick from a portfolio of options” and “mix and match to get to their goal.”⁷ While many states and stakeholders sought maximum compliance flexibility, it is important to recognize that EPA's use of the “outside-the-fence” framework was not geared toward increasing flexibility but rather toward increasing the stringency of the rule.

By adding outside-the-fence building blocks and creating aggressive emissions reduction targets for each, EPA was able to tighten individual state targets substantially. While EPA’s “mix and match” messaging seems to imply otherwise, if the emissions reductions called for from one individual building block are not met, they must be made up for through even greater reductions in another building block or by alternative measures not specified by the EPA. EPA’s rule states that individual building block targets are based on “reasonably achievable rather than maximum performance levels.”⁸ However, it is clear that this is not the case. Thus, states will face major compliance challenges.

Energy Efficiency Building Block

⁶ Details available at <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-ghg-abatement-measures.pdf>

⁷ <http://yosemite.epa.gov/opa/admpress.nsf/8d49f7ad4bbcf4ef852573590040b7f6/c45baade030b640785257ceb003f3ac3!OpenDocument>

⁸ <https://www.federalregister.gov/articles/2014/06/18/2014-13726/carbon-pollution-emission-guidelines-for-existing-stationary-sources-electric-utility-generating#p-964>

To cite just one example, building block #4 assumes that each state can reduce electricity demand by 1.5 percent annually between 2017 and 2030 through the deployment of energy efficiency measures.⁹ However, as is shown in Figure 3, between 2006 and 2010, only one state (Vermont), sustained such a high energy efficiency rate.¹⁰ Most states achieved no better than 0.75 percent—half of EPA’s target. In contrast, during the 2011 legislative session, Texas adopted Senate Bill 1125, which requires utilities to eventually achieve energy efficiency savings of 0.4%. In 2011, Texas accomplished energy efficiency savings of .20% -- far short of EPA’s aspirational standards.

EPA’s own technical support documents filed with the proposed rule cite research data indicating that 1.5 percent annual electricity savings from efficiency measures is too aggressive. Specifically, EPA cites a 2014 study by the Electric Power Research Institute finding that average annual achievable energy efficiency potential is no more than 0.6%.¹¹ Despite this detailed evidence, the agency still concluded that it would be “reasonably achievable” for states to deliver 1.5% annual gains, and to sustain those gains for 13 straight years. It based this conclusion primarily on the fact that 11 states have energy efficiency *targets* of 1.5% or higher. We strongly believe that EPA’s building block targets should be based on a combination of what has actually been demonstrated and is considered reasonably achievable

Natural Gas Redispatch Building Block

Another issue regarding state target achievability that warrants further attention and consideration is building block number 2—redispatch from coal to gas. Essentially, EPA assumes that states can change

⁹ Chapter five of GHG Abatement Measures Technical Support Document, available at <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-ghg-abatement-measures.pdf>

¹⁰ Source: NERA Economic Consulting summary of American Council for an Energy Efficient Economy data, on behalf of the American Coalition for Clean Coal Electricity

<http://americaspower.org/sites/default/files/NERA%20NRDC%20March%202014.pdf>

¹¹ <http://www.epri.com/abstracts/Pages/ProductAbstract.aspx?ProductId=00000000001025477>

electricity dispatch orders, by instituting a price on carbon to force the electricity grid to utilize natural gas before dispatching coal units. EPA assumes that implementation of this building block can increase the natural gas electric generation capacity factor to 70%--a utilization rate that the agency notes was only achieved by 10% of power plants in 2012.¹²

This building block raises major legal, technical, practical, and economic issues for states and EPA that must be examined and discussed thoroughly before such a regime is in place. Additionally, however, it is important to note that EPA's selection of 2012 as the baseline year for this building block will add to state compliance challenges. This is because natural gas was relatively inexpensive in 2012, which resulted in a higher dispatch rate than in surrounding years. It is also important to recognize the impacts of EPA's decision to use 2012 as the baseline for initial state emissions rates. Because the use of natural gas generation was unusually high as compared to coal generation in 2012, EPA's adjusted emissions rates are likely artificially low relative to the historical norm.

2. Shortcomings in EPA's Renewable Generation Targets

Another area warranting attention and further review with respect to EPA's rule design concerns building block #3 and the agency's formula for calculating state renewable energy targets. For this building block, EPA grouped states into geographic regions, averaged the state renewable portfolio standards (RPSs) for those regions, and then calculated a regional annual growth factor through which the region would collectively achieve the RPS average by 2030.

¹² Chapter 3 of GHG Abatement Measures Technical Support Document, available at <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602tsd-ghg-abatement-measures.pdf>

There are numerous inherent problems in the formula itself, including how regions are selected, how smaller states (such as Delaware and D.C.) artificially inflate regional targets, and how EPA's decision to use 2012 as a baseline year penalizes states that have taken early action to expand renewables.

More significant, however, is EPA's decision to inconsistently apply its own formula in a way that greatly disadvantages states in the South Central region, particularly Texas. In the South Central region—which consists of Nebraska, Kansas, Oklahoma, Texas, Arkansas, and Louisiana—EPA sets the regional renewable generation target based on Kansas' 20% RPS, as such is shown in Figure 4.

But unlike the rest of the country, Kansas' RPS is capacity-based, not generation-based. Due to the obvious intermittency of most renewables (sun sets, wind stops blowing), there is a big difference between renewable energy capacity and actual renewable generation.

The implications of this decision are significant. Because there are no generation-based RPS's in the South Central region, a strict and consistent application of EPA's renewable target formula would result in no renewable target for the region.

In 2012, while renewable energy resources in Kansas comprised 19.4% of overall generation capacity, actual renewable generation was only 11.8%. Accordingly, a 20% capacity target is approximately proportional to a 12.2% generation target. Using EPA's formula, a 12.2% regional generation target results in a 4.3% annual growth factor for the South Central region, which would reduce the region's collective renewable goal by an incredible 49,081 GWh. Thus, the EPA's use of a capacity-based renewable target for the South Central region results in the agency overstating the region's renewable generation target by more than all of the 2012 wind generation in Texas and Iowa **combined**.

As can be seen in Figure 5, the use of the Kansas capacity target for the entire South Central region dramatically inflates the EPA’s estimation of Texas’ renewable generation potential.

3. Global Context and Rulemaking’s Negligible Impact on Potential Future Climate Change.

Beyond the design and technical concerns associated with this rule, beyond increased electricity rates, stranded assets, reliability concerns, state disparities and questions of fairness, EPA’s proposal suffers from an overarching and inescapable flaw: its failure to meaningfully address its underlying purpose: climate change. For example, EPA estimates that in 2030, its proposed rule would reduce global carbon dioxide emissions by 555 million metric tons (mmt).¹³ As shown in Figure 6, while this amount is 10 percent of total projected U.S. CO2 emissions, it represents only 1.3 percent of projected global emissions in 2030. This is because non-U.S. CO2 emissions—which already represent 82% of global emissions—are projected to grow by 41 percent between 2010 and 2030. Put another way, EPA’s proposed rule will offset the equivalent of 13.5 days of Chinese emissions in 2030, based on U.S. Department of Energy projections.¹⁴

EPA and the Obama Administration do not dispute the reality that unilateral U.S. efforts to regulate CO2 will be futile. Administrator McCarthy, Secretary of State Kerry, and even President Obama have emphasized that, in the absence of similar actions by other major economies, U.S. regulations to address carbon emissions will fail.¹⁵

¹³ <https://www.federalregister.gov/articles/2014/06/18/2014-13726/carbon-pollution-emission-guidelines-for-existing-stationary-sources-electric-utility-generating#p-1353>

¹⁴ www.eia.gov/forecasts/ieo/table21.cfm. DOE projects annual Chinese CO2 emissions in 2030 to be 14,028 mmt.

¹⁵ <http://www.whitehouse.gov/the-press-office/2013/06/25/remarks-president-climate-change>

To this end, EPA has said that the primary objective of its power plant rulemaking is not to mitigate the projected impacts of climate change, but rather to “prompt and leverage international discussions and action.”¹⁶ The EPA has also stated that the purpose of its rulemaking is to lead by example, but even the Administration recently acknowledged that the United States has reduced its total carbon emissions since 2005 by more than any other nation.¹⁷ Thus, we have been leading for quite some time, but other countries are not following.

The EPA appears set on moving forward with its rules *regardless* of the outcome of international negotiations. Such a circumstance would add insult to injury, as in many cases EPA’s rule would not reduce global carbon emissions at all, but simply *move* emissions to other countries that have not implemented similar restrictions. This problem would be particularly evident in energy intensive trade-exposed industries that are prevalent in Texas.

4. **Regulatory Context.**

There is a lingering misperception that EPA’s greenhouse gas agenda is limited to coal and coal-fired power plants. This is incorrect, both with respect to the proposed power plant rule as well as the agency’s broader agenda. First, the power plant rule will have a clear and direct ratepayer impact on all industries that are heavy energy consumers. Those same industries will likely be hit twice, when follow-on rules that EPA has committed to pursuing are promulgated. For example: EPA’s current budget proposal will consider new GHG regulations on six sources: refineries, pulp and paper, landfills, iron and steel production,

¹⁶ September 18, 2013 U.S. House of Representatives Energy and Commerce Committee hearing. Testimony exchange at https://www.youtube.com/watch?v=z1_O5jOCR6s&feature=youtu.be&t=2h16m4s

¹⁷ May 2014 Report from the Executive Office of the President entitled “The All-Of-The-Above Energy Strategy as a Path to Sustainable Economic Growth,” at p. 3.

livestock operations, and cement manufacturing.¹⁸ Additionally, in late March, the Obama Administration also announced a major strategy to reduce methane emissions from oil, gas, mining and agriculture operations.

Given the far-reaching nature of this agenda, in January the Chamber joined the National Association of Manufacturers to establish the Partnership for a Better Energy Future, a diverse coalition of over 160 organizations that advocates to ensure the administration's greenhouse gas agenda does not negatively impact the continued availability of reliable and affordable energy for American families and businesses.¹⁹

On the bright side, in late June the Supreme Court put a stop to EPA's plans to eventually ratchet down greenhouse gas permitting rules to require even the smallest emitters—including buildings, restaurants, schools, and hospitals—to get Federal approval prior to construction and operation. As the court concluded, "[w]hen an agency claims to discover in a long-extant statute an unheralded power to regulate 'a significant portion of the American economy,' we typically greet its announcement with a measure of skepticism." We hope this decision puts EPA on notice that the court will not tolerate a similar power grab with respect to its proposed rule on existing power plants.

It is important to emphasize that an undertaking of this magnitude demands to be accompanied by a robust and comprehensive public deliberation process. To that end, we believe the EPA's public involvement plan should be enhanced considerably. Specifically, we have asked the EPA to schedule additional public hearings and extend the comment period at least 60 days to allow states and stakeholders sufficient time to review and assess the agency's proposal. We believe

¹⁸ http://www2.epa.gov/sites/production/files/2014-03/documents/fy2015_congressional_justification.pdf

¹⁹ www.betterenergyfuture.org

these hearings should include a “workshop” component, similar to what you are holding here today, in which EPA makes senior officials available to answer questions and comment on feedback in an open and transparent manner.

The EPA’s Clean Air Act Section 111(d) rules are unprecedented in their scope and reach, and are likely to come at significant economic cost – both within the utility sector and in any sector of the economy that depend upon reliable, affordable electricity. As a result, it is important that states such as Texas seriously consider the ramifications of this proposed rule and what it could mean for Texas’ future economic development and growth.

I appreciate the opportunity to participate in today’s workshop, and look forward to answering any questions that you may have.